Sound Directions
Best Practices for Audio Preservation

Appendix 5
Version 1.0

Harvard Sound Directions Toolkit Listing

addmarkers
Description:
Adds audio markers from a HCL-APS marker file (--input-marker-file) to an ADL (--input-file) and saves the result in a new ADL (--output-file). The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: addmarkers [OPTIONS]...

-h, --help	*Print program help.*
-iaf, --input-adl-file path	*input ADL file*
-imf, --input-marker-file path	*input marker file*
-it, --input-type type	*Specifies whether source media is permanent (perm) or temporary (temp).*
-of, --output-file path	*output file*
-ot, --output-type type	*Specifies whether destination media is permanent (perm) or temporary (temp).*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

addpanentries
Description:
Adds pan entries to an ADL (--input-file) by examining the destination channels (mono files are panned center, stereo files are panned left and right from lowest dest channel to highest) and saves the result in a new ADL (--output-file). The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: addpanentries [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-file ADL path	*Specifies the ADL file for input.*
-it, --input-type type	*Specifies whether source media is permanent (perm) or temporary (temp).*

-of, --output-file ADL path *Specifies the ADL file for output.*
-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

--version *Print program version number, then exit*
-wdc, --write-device-chain path *Specifies the device chain xml file for output.*
-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wpe, --write-process-event path Specifies the process event xml file for output.

addtoph
Description:
Adds process events (either a single process event using --add-process-event or an entire process history using --add-process-history) to a process history file (--input-file). If the media in the added process event or process history files have references to .wav files instead of the meta data, addtoph will try to find the associated audio object meta data in the same directory as the wav file and then in an optional search path (--search-path). The events can also be added after a specific event in the history file using the --insert-after-index option. Note that an index of 0 inserts before the first event.

Usage: addtoph [OPTIONS]...
-ape, --add-process-event path *Specifies the process event XML file to import.*
-aph, --add-process-history path *Specifies the process history XML file to import.*
-h, --help *Print program help.*
-if, --input-file path *Specifies the process history XML file.*
-idx, --insert-after-index integer *The index of the event to insert after in the process history.*

-of, --output-file path *output file*
-sp, --search-path path *directory to look for audio object metadata xml*
--version *Print program version number, then exit*

adldump
Description:
Displays cuts in the specified adl (--input-file) in samples (default), in normal play time (npt) or tcf (timecode character format) using the --time-format option.

Usage: adldump [OPTIONS]...
-h, --help *Print program help.*
-if, --input-file ADL path *Specifies the ADL file for input.*
-t, --time-format npt, tcf or samples *Specifies the time format.*
--version *Print program version number, then exit*

adlfix

Description:

Fixes the remarks (--fix-remarks) and/or source index (--fix-src-idx) in an ADL (--input-file) and saves the fixed copy in the file specified using --output-file. The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: adlfix [OPTIONS]...

-fr, --fix-remarks	*Fix remarks*
-fsi, --fix-src-idx	*Fix source index*
-h, --help	*Print program help.*
-if, --input-file ADL path	*Specifies the ADL file for input.*
-it, --input-type type (perm) or temporary (temp).	*Specifies whether source media is permanent*
-of, --output-file ADL path	*Specifies the ADL file for output.*
-ot, --output-type type (perm) or temporary (temp).	*Specifies whether destination media is permanent*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

adlinfo

Description:

Displays information about an ADL (--input-file) such as the number of destination channels (--get-number-of-dest-channels), the number of markers (--get-number-of-markers) or a list of source files (--list-source-files)

Usage: adlinfo [OPTIONS]...

--get-number-of-dest-channels	*Display number of destination channels.*
--get-number-of-markers	*Display number of markers.*
-h, --help	*Display program help.*
-if, --input-file ADL path	*Input ADL file*
--list-source-files	*Display source files.*
--version	*Display program version number, then exit*

adlinterleaver

Description:

Creates an interleaved ADL (--output-file) and a batch file (--output-batch-file) for interleaving all files in an ADL (--input-file). The batch can be automatically executed using (--auto-exec) or later used as input to the interleaver tool to interleave the files. The

tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: adlinterleaver [OPTIONS]...

-x, --auto-exec	*Automatically execute batch file.*
--bext path	*Specifies the xml file that contains BEXT chunk default values.*
-h, --help	*Print program help.*
-if, --input-file ADL path	*Input ADL file*
-it, --input-type type	*Specifies whether source ADL is permanent (perm) or temporary (temp).*
-obf, --output-batch-file path	*Output batch file*
-od, --output-dir path	*The output directory where interleaved files will be written.*
-of, --output-file ADL path	*Output ADL file*
-ot, --output-type type	*Specifies whether destination ADL is permanent (perm) or temporary (temp).*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

adlpathsub

Description:

Replaces part or all of a path (--replace) with a replacement string (--with) in an ADL (--input-file) and saves the resulting ADL in a new ADL (--output-file). The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: adlpathsub [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-file path	*Input ADL file*
-it, --input-type type	*Specifies whether source media is permanent (perm) or temporary (temp).*
-of, --output-file path	*Output ADL file*
-ot, --output-type type	*Specifies whether destination media is permanent (perm) or temporary (temp).*

--replace string	*Specifies the string to replace.*
--version	*Print program version number, then exit*
--with string	*Specifies the string to use for replace.*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

adlsrc

Description:

Sample rate converts one or more ADLs (--input-files) using a sample rate of 44.1KHz unless a different sample rate is specified using (--sample-rate). If the --output-files option is used, the resampled ADL files will be saved in this new list. The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: adlsrc [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-files ADL file(s)...	*Specifies the ADL files for input.*
-it, --input-type type	*Specifies whether source media is permanent (perm) or temporary (temp).*
-of, --output-files ADL file(s)...	*Specifies the ADL files for output.*
-ot, --output-type type	*Specifies whether destination media is permanent (perm) or temporary (temp).*
-sr, --sample-rate	*Specifies the new sample rate for the ADL.*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

adltosmil

Description:

Creates a SMIL file (--output-file) from an ADL (--input-adl-file) using an optional set of markers (--use-markers). If the --input-marker-file option is used, it will use markers from an external file instead of from the ADL. If the --multiple option is used, multiple SMIL files will be created using the base name from --output-file. The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: adltosmil [OPTIONS]...

--abstract string	*Specifies the abstract meta data for the SMIL file.*
-ap, --audio-prefix path	*Specifies the path where the Real Audio files are. You MUST have a trailing path separator at the end.*
--author string	*Specifies the author meta data for the SMIL file.*
--copyright string	*Specifies the copyright meta data for the SMIL file.*
-h, --help	*Print program help.*
-iaf, --input-adl-file ADL path	*Specifies the ADL file for input.*
-imf, --input-marker-file	*Specifies the marker xml file for input. This overrides markers in ADL.*
-m, --multiple	*Generate multiple SMIL files. One marked audio region per file.*
-of, --output-file path	*Specifies the name of the output file (or the base name of multiple files).*
-ts, --time-shift	*Time shift the output.*
--title string	*Specifies the title meta data for the SMIL file.*
-um, --use-markers	*Use markers from ADL or from marker file if specified.*
--version	*Print program version number, then exit*

adltoxml

Description:
Transcodes an AES31 ADL (--input-file) to an experimental XML Representation (--output-file).

Usage: adltoxml

-h, --help	*Print program help.*
-i, --input-file	*The Input ADL File.*
-o, --output-file	*The output XML File.*
--version	*Print program version number, then exit*

bwavcat

Description:
Concatenates multiple wav files (--input-files) into a single wav file (--output-file).

Usage: bwavcat [OPTIONS]...

--bdesc string	*Specifies the BEXT description string.*
--bext path	*Specifies the xml file that contains BEXT chunk default values.*

--fpb integer *Number of frames to read/write per block.*
-h, --help *Print program help.*
-if, --input-files path... *Input files*
-of, --output-file path *Output file*
--version *Print program version number, then exit*

bwavcut
Description:
Extracts a region of a wav file (--input-file) using the source in (--srcIn), destination in (--destIn) and destination out (--destOut) sample counts into a new wav file (--output-file).

Usage: bwavcut [OPTIONS]...
--bdesc string Specifies the BEXT description string.
--bext path Specifies the xml file that contains BEXT chunk default values.

-di, --destIn sample *Dest in*
-do, --destOut sample *Dest out*
-h, --help *Print program help.*
-if, --input-file path *Input file*
-of, --output-file path Output file
-si, --srcIn sample *Source in*
--version *Print program version number, then exit*

bwavedit
Description:
Modifies the BEXT chunk of a Broadcast WAVE file (--input-file) and saves the result in a new file (--output-file). The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: bwavedit [OPTIONS]...
-ach, --add-event-to-coding-history string *Adds specified event to coding history.*
--fpb integer *Number of frames to read/write per block.*
-h, --help *Print program help.*
-if, --input-file path *Input file*
-it, --input-type type *Specifies whether source media is permanent (perm) or temporary (temp).*

-of, --output-file path *Output file*
-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

-sd, --set-description string *Specifies the BEXT description.*
-sot, --set-origination-timestamp string *Specifies the BEXT origination timestamp.*
-so, --set-originator string *Specifies the BEXT originator.*
-str, --set-time-reference number *Specifies the BEXT time reference.*
-sum, --set-umid string *Specifies 32 or 64 byte hex string representation of UMID.*
-sus, --set-usid string *Specifies 32 byte hex string representation of USID.*

-sv, --set-version number *Specifies the BEXT version.*
--version *Print program version number, then exit*
-wdc, --write-device-chain path *Specifies the device chain xml file for output.*

-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wpe, --write-process-event path *Specifies the process event xml file for output.*

bwavinfo
Description:
Displays various information about a Broadcast WAVE file (--info), a MD5 checksum (--md5), sample rate (--sample-rate) or the time reference (--time).

Usage: bwavinfo [OPTIONS]...
--bext ... *Display BEXT data chunk.*
--description ... *Display the BEXT description.*
--fpb integer *Number of frames to read per block.*
-h, --help *Print program help.*
--info ... *Display all information for specified files.*
--md5 ... *Display MD5 checksum of only the audio data chunk (not metadata) for specified files.*

-sr, --sample-rate ... *Display sample rate for specified files.*
--time ... *Display BEXT time reference for specified files.*
--version *Print program version number, then exit*

checksum
Description:
Calculates checksums for specified files using different algorithms.

Usage: checksum [OPTIONS]...
-b, --buffer-size *Sets the size of the data buffer.*
-h, --help *Displays help information.*
--md2 ... *Display MD2 checksum data for specified files.*
--md5 ... *Display MD5 checksum data for specified files.*

-q, --quiet	*Output only contains checksum value.*
--sha1 ...	*Display sha-1 checksum data for specified files.*
--sha256 ...	*Display sha-256 checksum data for specified files.*
--sha384 ...	*Display sha-384 checksum data for specified files.*
--sha512 ...	*Display sha-512 checksum data for specified files.*
-v, --version	*Prints the version number.*

cleanarchival
Description:
Cleans archival output to restore it to the pre-archival state.

Usage: cleanarchival [OPTIONS]...

-h, --help	*Display program help.*
-p, --path path	*Specifies the path to the project.*
--version	*Display program version number, then exit.*

cleandeliverable
Description:
Cleans deliverable output to restore it to the production state.

Usage: cleandeliverable [OPTIONS]...

-h, --help	*Display program help.*
-p, --path path	*Specifies the path to the project.*
--version	*Display program version number, then exit.*

cleandeposit
Description:
Cleans deposit output to restore it to the deliverable state.

Usage: cleandeposit [OPTIONS]...

-h, --help	*Display program help.*
-p, --path path	*Specifies the path to the project.*
--version	*Display program version number, then exit.*

cleanproduction
Description:
Cleans production output to restore it to the archival state.

Usage: cleanproduction [OPTIONS]...

-h, --help	*Display program help.*
-p, --path path	*Specifies the path to the project.*
--version	*Display program version number, then exit.*

cmpchksum
Description:
Compares the checksums of two files. The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: cmpchksum [OPTIONS]...

-ado, --audio-data-only	*When comparing BWAV files, only compare the data chunk and no other metadata.*
-ck1, --checksum-file-1 string	*Specifies the checksum of the first file to compare.*
-ck2, --checksum-file-2 string	*Specifies the checksum of the second file to compare.*
-h, --help	*Print program help.*
-if1, --input-file-1 path	*Specifies the first file to compare.*
-if2, --input-file-2 path	*Specifies the second file to compare.*
-it1, --input-type-1 type	*Specifies whether first file is permanent (perm) or temporary (temp).*
-it2, --input-type-2 type	*Specifies whether second file is permanent (perm) or temporary (temp).*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

convertmarkers
Description:
Converts marker file (--input-file) of specified type (--input-type) to a HCL-APS format file (--output-file).

Usage: convertmarkers [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-file path	*Input file*
-it, --input-type type	*Specifies the input type.*
Available input types:	*pyramix*
	nuendo
-of, --output-file path	*Output file*
--version	*Print program version number, then exit*

convertsmil
Description:
Converts audio references to use owner supplied name in SMIL files.

Usage: convertsmil [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-file path	*Input SMIL file*
-of, --output-file path	*Output SMIL file*
--version	*Print program version number, then exit*

deinterleaver
Description:
Deinterleaves a multi-channel WAVE file (--input-file) into individual single-channel WAVE files.

Usage: deinterleaver [OPTIONS]...

--bdesc string	*Specifies the BEXT description string.*
--bext path	*Specifies the xml file that contains BEXT chunk default values.*
-h, --help	*Print program help.*
-if, --input-file path	*Input file*
-of, --output-files path...	*Output file*
--output-format format	*Specifies the output format.*

Available output formats:
default (user specified output files)
pyramix (file.wav -> file_##00X##_.wav)
sonic (file.wav -> file.01.wav)
dash (file.wav -> file-1.wav)
digidesign (file.wav -> file.L.wav)

--version	*Print program version number, then exit*

editadlheader
Description:
Modifies various attributes of the header of an ADL (--input-file) and saves the ADL (--output-file). The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: editadlheader [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-file ADL path	*Input ADL Path.*

-it, --input-type type *Specifies whether source media is permanent (perm) or temporary (temp).*

-of, --output-file *Output ADL Path.*
-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

-spcd, --set-proj-client-data *Sets the proj client data for this adl.*
-spn, --set-proj-notes *Sets the proj notes for this adl.*
-spo, --set-proj-originator *Sets the proj originator for this adl.*
-spt, --set-proj-title *Sets the proj title for this adl.*
-ssd, --set-seq-descript *Sets the sequence description for this adl.*
-sst, --set-seq_title *Sets the sequence title for this adl.*
--version *Print program version number, then exit*
-wdc, --write-device-chain path *Specifies the device chain xml file for output.*
-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wpe, --write-process-event path *Specifies the process event xml file for output.*

gendbof
Description:
Generates a DMART Batch Override File file from a core audio object xml document.

Usage: gendbof [OPTIONS]...
-if, --input-file path *Specifies the path to audio object XML.*
-h, --help *Display program help.*
--version *Display program version number, then exit.*

genusid
Description:
Generates a USID (unique serial identifer).

Usage: genusid [OPTIONS]...
-h, --help *Print program help.*
-if, --input-file XML path *Specifies the USID defaults xml file.*
-scc, --set-country-code string *Specifies the country code.*
-sdt, --set-date-and-time string *Specifies the origination date and time of format yyyy-MM-dd HH:mm:ss*

-soc, --set-organization-code string *Specifies the organization code.*
-ssn, --set-serial-number string *Specifies the serial number.*
--version *Print program version number, then exit*

genuuid
Description:
Generates a UUID (universally unique identifer).

Usage: genuuid [OPTIONS]...

-h, --help	*Print program help.*
--version	*Print program version number, then exit*

getpanmaps
Description:
Displays pan maps for a Broadcast WAVE file (--source-file) in an ADL (--input-file).

Usage: getpanmaps [OPTIONS]...

-h, --help	*Print program help.*
-if, --input-file ADL path	*Specifies the ADL file for input.*
-sf, --source-file BWF Source	*Specifies the bwf to build pan maps for.*
--version	*Print program version number, then exit*

getprop
Description:
Gets the value of a key in the specified property file.

Usage: getprop [OPTIONS]...

-h, --help	*Display program help.*
-p, --path path	*Specifies the path to the property file.*
--version	*Display program version number, then exit.*
-k, --key string	*Specifies key to look up in property file.*

interleaver
Description:
Interleaves two or more mono WAVE files into a single WAVE file. If the --batch option is used, the tool will use a batch file as input as to which files to process. The tool can generate DigiProv metadata conforming to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: interleaver [OPTIONS]...

--batch path	*Specifies the batch file to use for batch interleaving.*
--bdesc string	*Specifies the BEXT description string.*
--bext path	*Specifies the xml file that contains BEXT chunk default values.*
-di, --destIn sample	*Dest in*
-do, --destOut sample	*Dest out*

-fpb, --frames-per-block integer *Number of frames to read/write per block.*
-h, --help *Print program help.*
-if, --input-files path... *Input files*
-it, --input-type type *Specifies whether source media is permanent (perm) or temporary (temp).*

-of, --output-file path *Output file*
-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

-si, --srcIn sample *Source in*
--verbose *Enable verbose messages.*
--version *Print program version number, then exit*
-wdc, --write-device-chain path *Specifies the device chain xml file for output.*
-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wph, --write-process-history path *Specifies the process history xml file for output.*

jhovemeta
Description:
Generates Audio Object metadata (--output-file) for the specified BWF audio file (--input-file).

Usage: jhovemeta [OPTIONS...
-ck, --checksum-kind Checksum algothim *Type of checksum-value. E.g. MD5*
-cv, --checksum-value File checksum *Value of a precomputed checksum for the audio file.*

-d, --disposition Disposition *Specifies the disposition of this audio object.*
-h, --help *Print program help.*
-if, --input-file Audio File path *Specifies the jhove supported audio file to generate audio object metadata for.*

-of, --output-file Metadata file path *Specifies the path to save metadata file to*
-pm, --pan-map Pan map1 Pan map2 *Specifies a series of paired values of channel numbers and pan location.*

-sn, --shelf-number Shelf number identifier Specifies the shelf number identifier for this audio object.

-sf, --sound-field Sound field *Specifies the sound field of this audio object.*

-t, --title Title of file's contents *Specifies the title of this audio object.*
-ut, --use-type Use type *Specifies the use type of audio object. Must be of type PRESERVATION_MASTER, PRODUCTION_MASTER, ORIGINAL_MASTER, SERVICE, PREVIEW*

--version *Print program version number, then exit*

makearchival
Description:
Takes input from pre-archival and generates archival data.

Usage: makearchival [OPTIONS]...
-h, --help *Display program help.*
-p, --path path *Specifies the path to the project.*
--version *Display program version number, then exit.*

makedeliverable
Description:
Takes input from production or pre-deliverable and generates deliverable data.

Usage: makedeliverable [OPTIONS]...
-h, --help *Display program help.*
-p, --path path *Specifies the path to the project.*
--version *Display program version number, then exit.*

makedeposit
Description:
Takes input from deliverable and generates deposit data.

Usage: makedeposit [OPTIONS]...
-h, --help *Display program help.*
-p, --path path *Specifies the path to the project.*
--version *Display program version number, then exit.*

makeproduction
Description:
Takes input from archival or pre-production and generates production data.

Usage: makeproduction [OPTIONS]...
-h, --help *Display program help.*
-p, --path path *Specifies the path to the project.*
--version *Display program version number, then exit.*

markerdump
Description:
Displays markers in a HCL-APS marker file (--input-file) in various time formats (--time-format).

Usage: markerdump [OPTIONS]...

-if, --input-file marker path	*Specifies the HCLAPS marker file for input.*
-t, --time-format npt, tcf or samples	*Specifies the time format.*
--version	*Print program version number, then exit*

metafileop

Description:

Generates DigiProv metadata for copy and rename file operations. The metadata conforms to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: metafileop [OPTIONS]...

--command command	*mv | cp*
--dst path	*Specifies the destination path.*
-h, --help	*Print program help.*
-it, --input-type type	*Specifies whether source media is permanent (perm) or temporary (temp).*
-ot, --output-type type	*Specifies whether destination media is permanent (perm) or temporary (temp).*
--src path	*Specifies the source path.*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

metambitplus

Description:

Generates DigiProv metadata for the iZotope MBIT+ ditherer. The metadata conforms to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: metambitplus [OPTIONS]...

-h, --help	*Print program help.*
-it, --input-type type	*Specifies whether source media is permanent (perm) or temporary (temp).*
-ot, --output-type type	*Specifies whether destination media is permanent (perm) or temporary (temp).*
--version	*Print program version number, then exit*
-wdc, --write-device-chain path	*Specifies the device chain xml file for output.*
-wmp, --write-media-pool path	*Specifies the media pool xml file for output.*
-wpe, --write-process-event path	*Specifies the process event xml file for output.*

-d, -bitdepth num *Bit depth, possible values [0 (8-bit) | 1 (12-bit) | 2 (16-bit) | 3 (20-bit) | 4 (24-bit)]*
-i, -input path *Input file*
-o, -output path *Output file*

metaproducer
Description:
Generates DigiProv metadata for the Real Producer encoder. The metadata conforms to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: metaproducer [OPTIONS]...
-h, --help *Print program help.*
-it, --input-type type *Specifies whether source media is permanent (perm) or temporary (temp).*

-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

--version *Print program version number, then exit*
-wdc, --write-device-chain path *Specifies the device chain xml file for output.*
-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wpe, --write-process-event path *Specifies the process event xml file for output.*
-ad name|file *Audience(s)*
-am voice|music *Audio Mode*
-arq string *Audio Resampling Quality*
-i path *Input file*
-o path *Output file*

metaresampler
Description:
Generates DigiProv metadata for the iZotope resampler. The metadata conforms to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: metaresampler [OPTIONS]...
-h, --help *Print program help.*
-it, --input-type type *Specifies whether source media is permanent (perm) or temporary (temp).*

-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

--version *Print program version number, then exit*

-wdc, --write-device-chain path *Specifies the device chain xml file for output.*
-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wpe, --write-process-event path *Specifies the process event xml file for output.*
-i, -input path *Input file*
-o, -output path *Output file*
-s, -samplerate rate *Sample rate to convert to.*

metarmeditor
Description:
Generates DigiProv metadata for the Real rmeditor. The metadata conforms to the prototype AES process history (X-98c) spec. The device chain, media pool and process event metadata represent the processing performed by this tool when executed.

Usage: metarmeditor [OPTIONS]...
-h, --help *Print program help.*
-it, --input-type type *Specifies whether source media is permanent (perm) or temporary (temp).*

-ot, --output-type type *Specifies whether destination media is permanent (perm) or temporary (temp).*

--version *Print program version number, then exit*
-wdc, --write-device-chain path *Specifies the device chain xml file for output.*
-wmp, --write-media-pool path *Specifies the media pool xml file for output.*
-wpe, --write-process-event path *Specifies the process event xml file for output.*
-i path *Input file*
-k 0|1 *Allow download.*
-o path *Output file*
-r 0|1 *Allow recording for RealPlayer Plus users.*

mirrorproject
Description:
Mirrors a project from the source directory (--source-dir) to the destination directory (--destination-dir).

Usage: mirrorproject [OPTIONS]...
-dd, --destination-dir *Specifies the destination directory to which to mirror the NTFS project files.*

-ep, --excludePyramix *Excludes proprietary Pyramix files from the mirroring process.*

-h, --help *Print program help.*

-sd, --source-dir *Specifies the project directory to mirror on the HFS partition.*

--version *Print program version number, then exit*

rameta
Description:
Generates meta data (--output-file) for a Real audio file (--input-file).

Usage: rameta [OPTIONS]...
-d, --disposition Disposition *Specifies the disposition of this audio object.*
-h, --help *Print program help.*
-if, --input-file Real audio path *Specifies the real audio file to generate metadata for.*

-ot, --origination-time-stamp *Specifies the location on a time-line for this real audio file in samples.*

-of, --output-file Metadata file path *Specifies the path to save the metadata to.*
-sr, --sample-rate Sample rate *Specifies the sample rate that the time stamp is given as.*
-sn, --shelf-number *Specifies the shelf number identifier for this audio object.*

-sf, --sound-field Sound field *Specifies the sound field of this audio object.*

-t, --title Title of file's contents *Specifies the title of this audio object.*
--version *Print program version number, then exit*

reverser
Description:
Reverses the audio in a WAVE file (--input-file) and writes it to a new file (--output-file).

Usage: reverser [OPTIONS]...
--bdesc string *Specifies the BEXT description string.*
--bext path *Specifies the xml file that contains BEXT chunk default values.*

--fpb integer *Number of frames to read/write per block.*
-h, --help *Print program help.*
-if, --input-file path *Input file*
-of, --output-file path Output file
--version *Print program version number, then exit*

smart
Description:
Creates a batchfile (--output) for a directory of SMIL files (--source-dir).

Usage: smart [OPTIONS]...

-a, --access P R or N	*Access permission for smil.*
-b, --billing	*Specifies the DRS billing code.*
-c, --config	*Specifies the configuration file.*
-h, --help	*Print program help.*
-l, --label	*Specifies the smil work label.*
-o, --output	*Specifies the Batch output path.*
-w, --owner-code	*Specifies the DRS owner code.*
-d, --source-dir	*The directory containing SMIL files.*
-u, --urn-mask	*Specifies the URN mask for assigning persistent identifiers.*
--version	*Print program version number, then exit*

tcfdump
Description:
Displays the components of the specified time code (--timecode).

Usage: tcfdump [OPTIONS]...

-h, --help	*Print program help.*
-tcf, --timecode long	*Dump specified TCF properties*
--version	*Print program version number, then exit*

tcfutil
Description:
Converts time to samples and vice versa.

Usage: tcfutil [OPTIONS]...

-df, --drop-frame boolean	*Specifies whether to use drop frame (true/false).*
-ff, --film-framing char	*Specifies the film framing (char).*
-fc, --frame-count int	*Specifies the frame count (int).*
-h, --help	*Print program help.*
-sr, --sample-rate double	*Specifies the sample rate (double).*
--samples-to-timecode long	*Convert specified sample count (long) to a TCF.*
-tb, --time-base float	*Specifies the time base (float).*
--timecode-to-samples long	*Convert specified TCF to a sample count (long).*
--version	*Print program version number, then exit*
-vf, --video-field int	*Specifies the video field (int).*