

AVxCAT



Audio/Video eXtended Conversion and Authoring Tool

v 1.2.6

© Rémy Dodin

I developped this interface using DRDIALOG and REXX which illustrates how rexx can be easy !

Original idea was ce2mp3 text mode to convert any file to mp3 with respect of ID3 tags.

Now, this idea was included and extended to any supported audio file as well as video file.

* GUI is (c) Rémy DODIN (freeware) <http://remydodin.levillage.org>

- Get AVxCAT from author site for correct package and updates

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Why creating a ffmpeg GUI to convert audio/video files ?

Most tools are able to do conversion but the target (ce2mp3 initial idea) was to preserve metadatas if possible and write ID3 tags into mp3 files or add accurate tags based on existing input file without use of a cddb link. An other target was to process any supported input file, or a list of files or a full directory with supported files in it.

To achive this target, additonal tool like id3v2 -id3 tags reader, updater and writer is required. This part is now fully implemented into ffmpeg with expanded possibilities like create a list with mixed files and directories. Of course, ffmpeg is able to do many great conversion and this is why AVxCAT was extented to support many kind of output format using any supported audi/video input file and not only « MP3 » like ce2mp3 does.

AVxCAT is not planned to manipulate input files like other great tools but it has great simple functions for all day use or more sophisticated processes like diaporamas, creating video chapter... Nice options mostly missing on other tools....

Why to stop on audio conversion only ?

Starting from build 0.7.0, Video conversion show some parts of futur development like crop/pad, extract part of a video, select stream to copy. AVxCAT is able to call an external video player (Kmpayer which is my prefered) or Mplayer bu this one has less usable options. KMP allow you to whatch multimedia files with displayed time which makes easy to determine the start frame and end frame for special video axtraction.

Here are some available function since V0.9.0:

1. Extract part of the input audio stream (low priority)
2. Extract part of the input video stream (high priority). **WARNING: use of slider and Start/end frame have a long respons time due to FFMPEG searching corresponding image.**
3. Crop/pad input video file to adjust video rendering
4. Crop input 16:9 video into 4:3 format to full 16:9
5. Multiple profiles (audio and video)
6. User can add/update its own profile
7. libtheora (ogv) and x264 (mp4 HQ) implemented
8. Switch from audio to Video and create video from audio file.
9. Create Video out of audio files
10. Create diaporama from a set of images + audio file (at least, a mute audio file is required)
11. Create Video chaptering (used with KMP player only) and add comment for each chapter.
Generated file is an XML file and can be saved as HTML nice rendering with or without chapter thumbnail or saved as SRT for subtitle
12. Play video from main page using chaptering start point if available

What are required tools to well use this GUI ?

- [eComStation V2](#) (Mensys) (should be ok under OS/2 V4 and previous eCS version – add a set home= into config.sys if none)
- [FFmpeg-r25157](#) or newer one on [hobbes](#)
- [ID3V2](#) by Andy Willis (on Hobbes) – **required as soon you write ID3tags**
- [RXU1A](#) (on Hobbes)
- OS/2 libvorbis package (**OGG** support) – should already be installed !
- « rxtnsion.dll » from Jan-Erik to support files above 4GiB limit (included)

What are optional tools used by this GUI ?

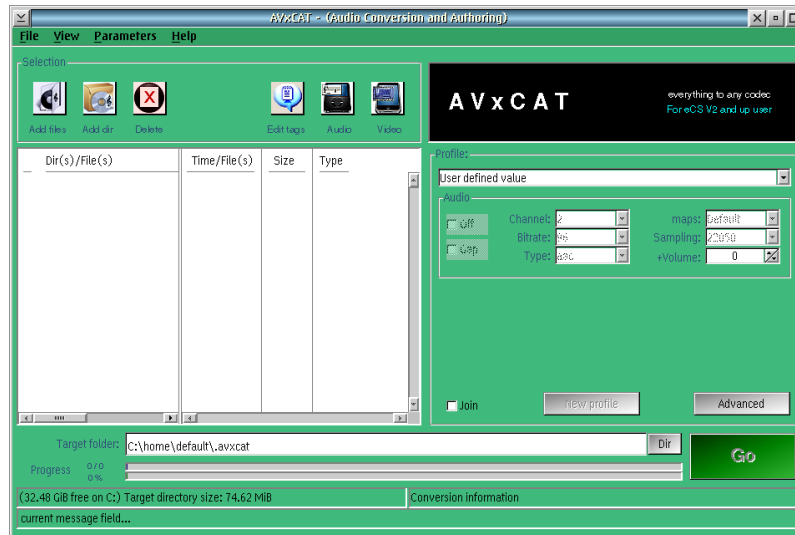
- [cdda2wav](#) from cddvdrttools 1.9 or cdrtools (available on [eCo Market](#)) for **CD-AUDIO** (cdda2wav2 not supported)
- **Priority** (from [FM2UTILS](#) package on Hobbes). This one is recommended to have better CPU sharing between other applications or FFMPEG may use most of it. **NEW (if missing, rexx priority can be used)**
- [KMPlayer](#) v 0.6.2 or up also named KMP (very nice player and strongly recommended) or Mplayer
- [Timidity](#) (on Alex web link) – Used to convert MIDI files
- [VoiX](#) to filter audio files (put the program under AVxCAT path to enable its function)
- [mp3gain](#) to normalize volume
(put the program under AVxCAT path to enable its function and set volume to « Auto ». Auto set ffmpeg volume to 256 which is no gain change and enables mp3gain for mp3 output files)

Despite the number of required or optional tools, it is very easy to install them (just unzip them into a target directory) and no user customization needed. The only parameters which have to be set are into AVxCAT which has to know tools path or, for some tools like VoiX or MP3GAIN, put them under AVxCAT path.

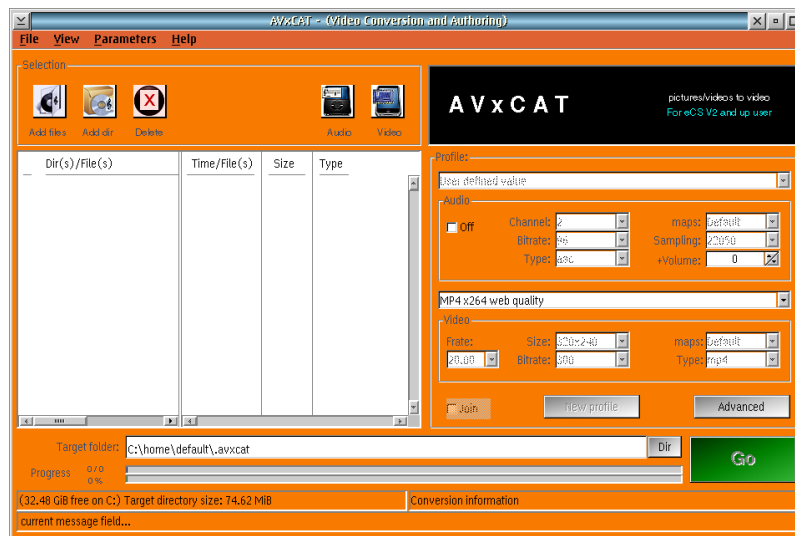
AVxCAT MENU

Use color drag/drop into background to change color. Color is changed after AVxCAT gets focus back

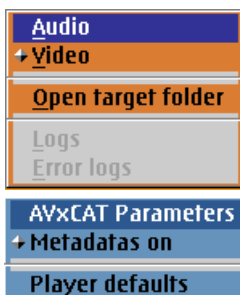
Audio mode



Video mode



Main menu bar options



View:

Switch between audio and video mode. Open target folder and of course, you can have a quick on logged errors or a full log under which you find many information about conversion execution and writted tags.

Parameters: Specify both AVxCAT and used Player default parameters. Writing Metadatas is enabled by default but can be disabled here.

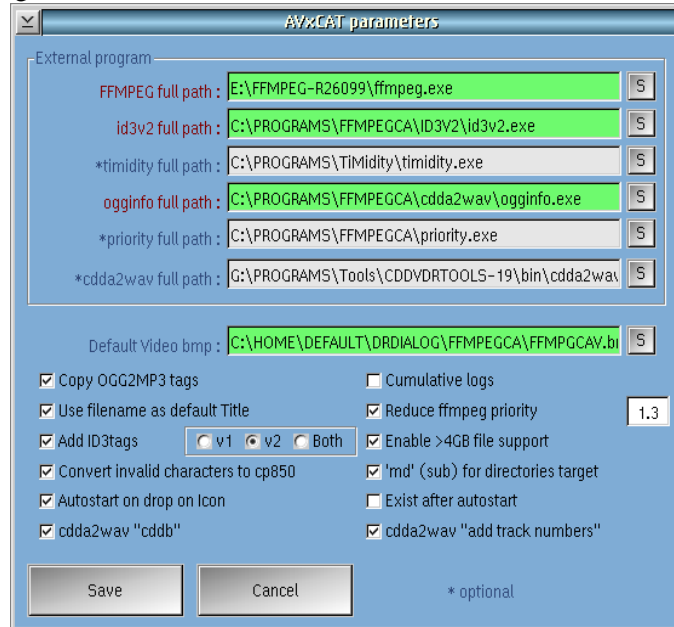
Installation

Product is a WPI package to use advantage of the great OS/2 – eCS installer

Download and install all required tools before installing AVxCAT (at least, before starting it)

Start installation

Run AVxCAT WPI package and follow instructions



After installation, start AVxCAT and customize using « Parameters » « FFMPEG parameters » link from main window. Update with correct value any required entries

Entries pre-fixed by a « * » are optional entries

Paths in red are required (mandatory)

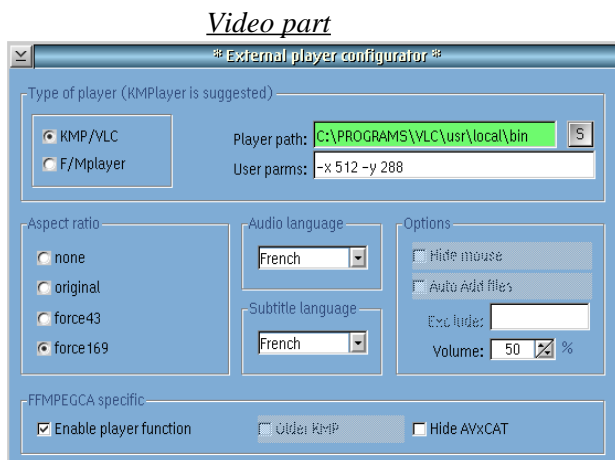
Select right program path using the [S] button.

- [x] **Copy OGG2MP3 tags** saves existing OGG tags into new resulting MP3 file
- [x] **Use filename as default Tile** allow to set missing audio file ID3 title using file name if possible
- [x] **Add ID3 tags** Write ID3 tags according selection which could be V1, V2 or both inot MP3 files.
- [x] **Convert invalid characters to cp850** translate some characters (e.g. French accent) to a more readable CP850 character.
- [x] **Autostart on drop on icon** dropping a file/folder onto the AVxCAT icon will autostart conversion using previous user setting
- [x] **Cumulative logs** Append all results into a unique logfile
- [x] **ffmpeg priority** (do not change this value except if you know what you do). This is used with « priority » tool or rexx dll. Do not change [1.3] or **[1.-31] (rexx dll)** except if you know what you do !
- [x] **Enable > 4GB file support** Show file size above 4GiB
- [x] **'md' (sub) for directories target** Created a sub-directory under current target directory with the same name as the input directory from the list to be processed (has no effect on files into the list)
- [x] **Exit after autostart** In condition « autostart » as described above, AVxCAT is closed at end of conversion
- [x] **cdda2wav « cddb »** enable cddb request (to use with a valid internet link)
- [x] **cdda2wav « add track numbers »** (add track number into track name

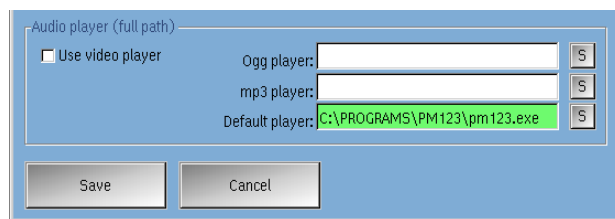
Click on Save to save AVxCAT parameters in owner INI file under .\OS2 (**INI can be moved under program path since v0.9.8)**)

Installation final step

From AVxCAT main window, follow « Parameters » « Player Defaults » link



Audio part (new since V1.0.0)



Select the type of player you would like use with AVxCAT (KMP or VLC strongly recommended for full enabled functions) and set required player path

Add User parms if needed. By default, KMPlayer will start with the size given into User parms which is « -x 512 -y 388 » the half size for full 16:9 DVD vob files. If KMP doesn't provide any audio during play, try adding "-audio dart" into user parms.

Adjust the KMPlayer aspect ratio and optional parameters like Hide mouse etc...

Adjust the Volume level to have a correct audio level and not too high which could damage your Eardrum.

Select the default (ISO) language and (ISO) subtitle code to select if available.

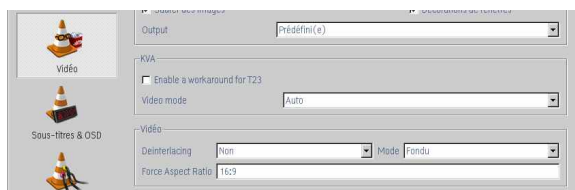
Once you set all parameters, you can enable or disable use of the Player through AVxCAT after uncheck [x] **Enable player function**

When the player is started, you can choice to make the main window invisible and only the player help window is remain visible but at end of play, you'll have to close the help window to get back the main window. To use this option, check [x] **Hide AVxCAT**

[x] **Hide AVxCAT** is disabled if chaptering with KMP is used and main window is hidden from chapter window.

[x] **Older KMP** removes '--autoexit' parameter from KMP command

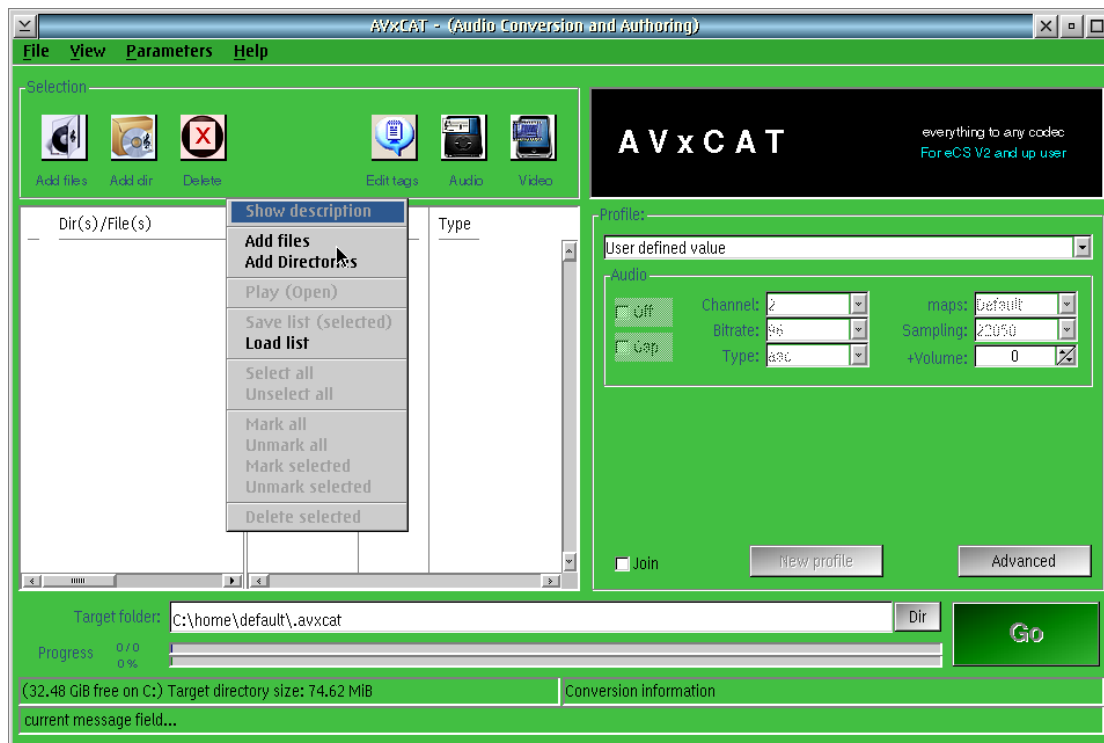
Using VLC player could result into a wrong used video size format with 16:9. This is due VLC doesn't correctly used the line parameter. To bypass the problem, add « 16:9 » into VLC Force Aspect Ratio parameter field under Tools – Preferences or switch manually to a different Video size and return to the correct value



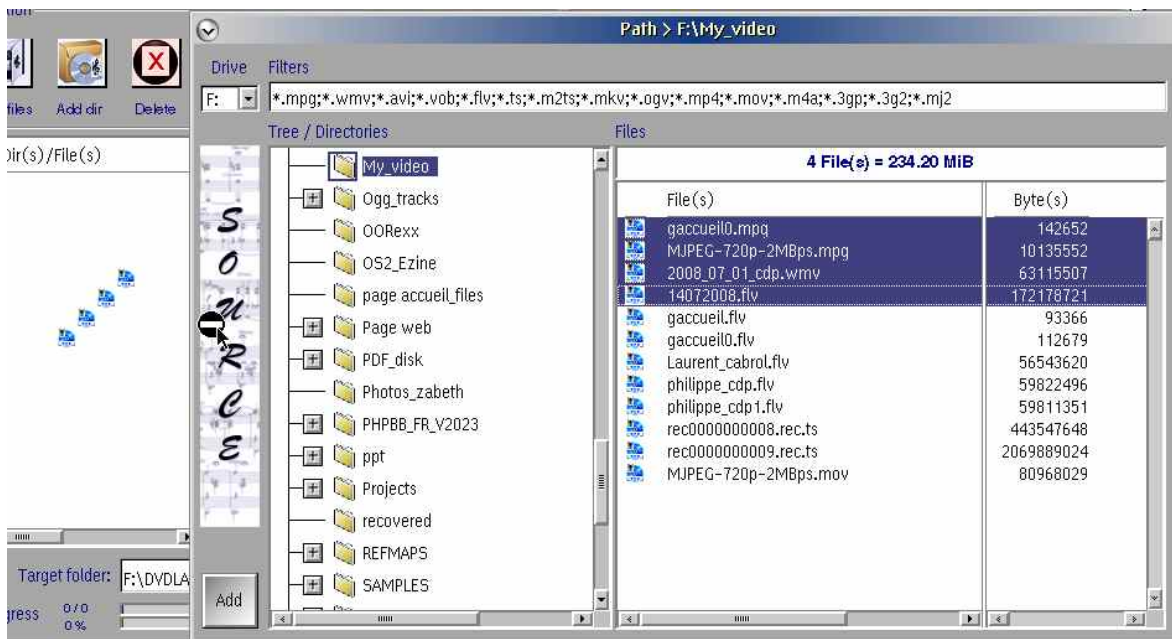
[x] Use video player allow play audio files using the video player. If this option isn't checked, update audio player paths with full path names and have, at least, the default player configured

Create a list of files to be converted

Start AvxCAT and click on [Add files] to add audio and/or video files only



From Opened internal filemanager, select the directory (single selection) or files (expended selection mode) to be added and click on ADD or use DROG/DROP into list container (see above picture with dir(s)/Files(s)) CD-audio tracks updates both Time/Size value and type is set to -CD(drive letter)- instead of real media type



Click 2 times on selected file(s) does the same. Adding directories is similar with the filemanager having file parts removed.

With cdda2wav enabled, add CD-audio tracks from any CD-ROM drives with [Add files] button

AUDIO conversion

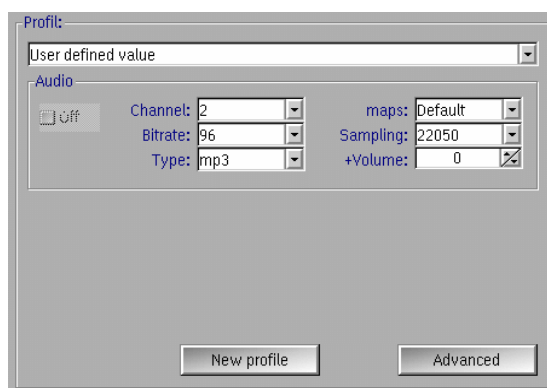
Important (Specify a [target folder] for the converted audio files) or [Go] remain disable

v0.9.8: Default target folder is set to « home »\AVxCAT if SET HOME exist into config.sys

v1.2.4: VBR (variable bitrate) checkbox is enabled for special use with mp3 audio format

Select a default audio profile or create your own audio profile

Create / Update your user audio profile



To create a new User profile, select profile [**User defined value**]

Change any audio setting as needed except volume which will not be saved into the profile

If the setting is a valid and like you expect have it, click on [**New profile**]. Enter a profile name into the entry field of opened dialog and then, click on [**Create**]

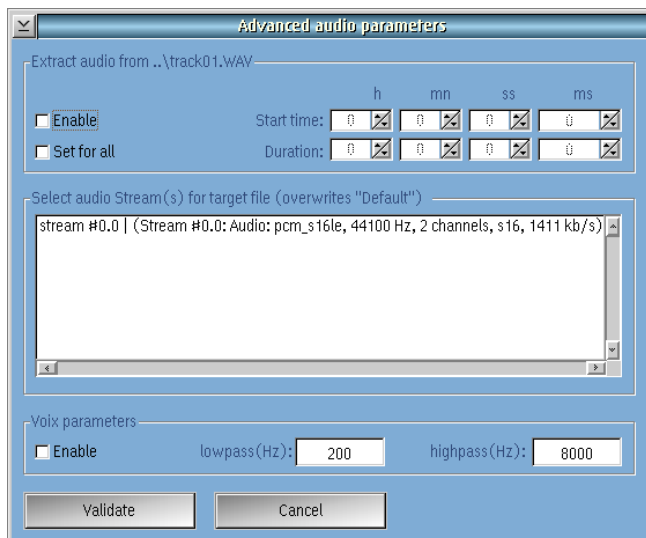
To update an existing user profile, select the user profile and click on [**New profile**]. Update the profile name into the entry field of opened dialog and then, click on [**Update**]

Audio advanced options

You can select a specific audio stream from the input file using the [**maps:**] selection. To view existing streams into the selected file (not allowed on directories), click on the file from the list and then RMB (right mouse button) and option « show description ».

But, you can use the [**Advance**] button (*enabled if only one file is selected*) which show you all audio stream and allow you to copy more than only one audio stream into output file.

To select only part of the input stream, set [**start time:**] and [**duration:**]



Note: New in V1.2.0

Voix.exe support is now fully supported (thank to Andy Willis). To have the corresponding entries enabled, be sure voix.exe available under AvxCAT path.

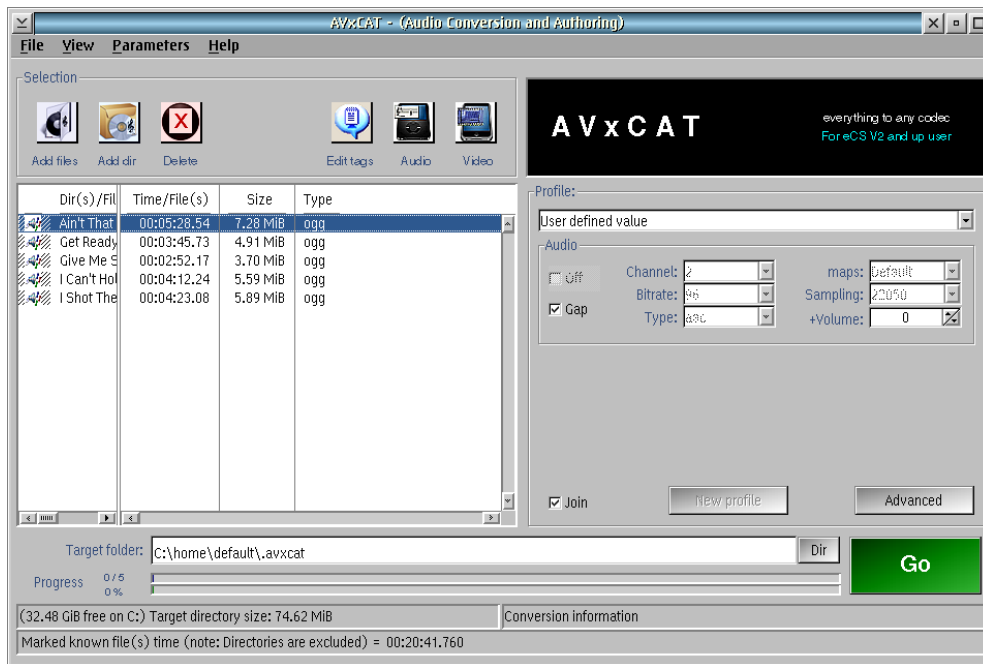
Like the cut option, you can decide to set VoiX parameters to all files (check on [all] (near [] Enable option which is enabled if VoiX enable checkbox is checked first.

Of course, as soon you remove this option, all files have the parms lost and you'll have to enable with specific parms each file.

[Enable] activates use of stream extraction and is valid for all list entry. Each file can have its own setting and those having the default setting of 0h0mn0ss0ms for Start time and Duration are processed like if **[Enable]** was off.

Sometimes, it could be interesting to create samples from a list of audio files (e.g. First 10s as demonstration). Set both **[Enable]** and **[Set for all]** on and specify the Start time and Duration. You only have to do it one time because **[Set for all]** is on. At process time, all file from the list or under directories are cut using this setting.

Join Audio files



- Verify temporary path disk has enough free size
- Add audio/video files into process list
- Use advanced option to cut part of selected audio/video files if needed
- Select output audio codec using defined profiles or not e.g. Mp3, ogg ...
- Set ☒ Join checkbox on
- Check ☒ Gap if you would like have a 2 seconds gap between each audio file like CDs
- Click on [GO] Button

Process will cut (if defined) input audio file and convert it into a FLAC codec (lossless) temporary file. At end of single converted file, process starts a second step which appends all files and final step will correctly convert to the specified codec output file.

The resulting JOIN file always named « ~FFJOIN. XXX » with XXX = your selected coded file extension e.g. Mp3, ogg, ac3...

To add ID3TAGs on mp3 or add WPS EA's, add the new created file into the process list and click on edit tag button. Update entries and click on [Write tags]

Note: 2s-gap.flac is a required file under program path to enable 2s gap option

Create / Update IDTAGs, WPS and or « Prepare Metadatas »

Click on Edit tags button with these function available on OGG, WAV, MP3 and FLAC CWMM supported format.

Here is how the opened window looks like:

The screenshot shows the 'Id-tags' window with two main sections: 'OGG or ID3V1 tags' and 'ID3V2 tags'. The 'OGG or ID3V1 tags' section includes fields for *Artist (William Sheller), *Album (Ailleurs), *Title (Le Temoir Magnifique), *Comments (Playback time: 00'01'58.639), *Date (1989), *Genre (Unknown), and *Track n° (empty). The 'ID3V2 tags' section includes fields for *Soloist(s) (William Sheller), *Album (Ailleurs), *content (empty), *Title (Le Temoir Magnifique (Prelude a tempo dun jogger)), *Comments (Playback time: 00'01'58.639), *Encoder (empty), *Band (empty), *Composer (empty), *Genre (Unknown), *Text writer (empty), *Part of a set (empty), *Track n° (0), and *Year (1989). Below these sections are buttons for 'Write tags' and 'Prepare Metadata'. At the bottom right, there are buttons for 'Sys_cp' and 'cp1252'.

Field	Value
*Artist	William Sheller
*Album	Ailleurs
*Title	Le Temoir Magnifique
*Comments	Playback time: 00'01'58.639
*Date	1989
*Genre	Unknown
*Track n°	

Field	Value
*Soloist(s)	William Sheller
*Album	Ailleurs
*content	
*Title	Le Temoir Magnifique (Prelude a tempo dun jogger)
*Comments	Playback time: 00'01'58.639
*Encoder	
*Band	
*Composer	
*Genre	Unknown
*Text writer	
*Part of a set	
*Track n°	0
*Year	1989

Existing entries have a comment text into purple color while suggested entries have original dark blue color.

A click on **[Fn]** will change Title entry from current displayed value to the track filename. If REXXUNI.DLL is installed, Both button **[Sys_cp]** and **[cp1252]** are made available. If your displayed fields have unrecognized characters (e.g. file created under windows), you can try convert them using Sys_cp which is the best approach of the character set used into ID3 tags. If you would like **[Write tags]** into cp1252 instead of system code page, click on cp1252 before writing tags.

Of course, you can click on **[Prepare Metadata]** to save all updated eligible fields into a variable used during FFMPEG conversion to add all specified Metadatas. According audio file format, some metadatas may not be supported. Review log file to check which metadatas are well recorded into the audio file. [Prepare Metadata] is personalized per audio entry into the list. Each entry has its own variable used at processing time.

For MP3 files, the **[Write tags]** writes ID3V1 or ID3V2 or both Idtags with value from eligible entries while OGG, WAV and FLAC have the corresponding CWMM class entries updated with eligible value. To view CWMM entries, Click RMB (Right Mouse Button) on the audio file and check properties.

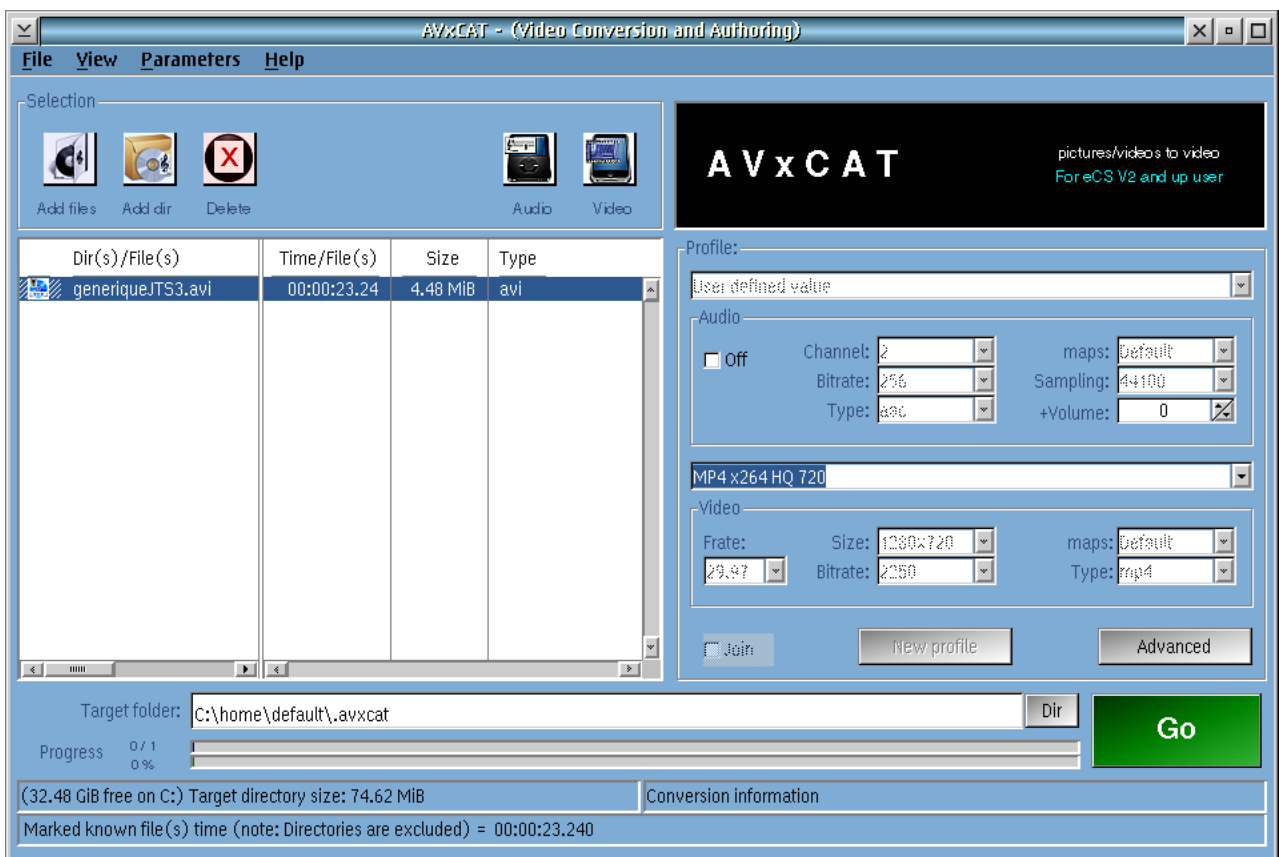
For fast « Genre » selection, enter first genre character e.g. **R** and repeat the operation until the correct genre is listed e.g. **Rock**

VIDEO conversion

Switch to video mode, click on « View » « Video » (to return to audio, click on « View » « Audio » useful to select audio stream)

Video Menu

An additional set of parameters appears for video processing. The [Advanced] button is now usable for additional video options



Of course, video profile selection allow user video profile like audio profile does, following the same rules except that video profiles contrôles both audio and video options.

Well, select you video profile and if you would like change one of its value, select user profile and do needed changes. Options from previous profile are kept under user profile until you change them.

Video Advanced options:

(The advanced button is enabled if only one file is selected)



Format (group)

Select the video aspect to use which can be 4:3, 16:9 or 2.35 (cinema). « Default » disables use of -aspect parameter.

The source video aspect, if found, is indicated with an '*' at the right the corresponding video aspect (previous picture has 4:3 as source aspect)

Source aspect 4:3 enables **[Crop high]** special option. This one used in combination with 16:9 allow you to zoom 16:9 film into a 4:3 source file to a full 16:9 output file.

As for Audio file, the **[Set for all]** will force video aspect for any files into the list and force video aspect to default if no suitable format was found. The crop option is propagated and calculated for any files to respect the ratio used for the setting. e.g if the ratio from used video to set crop/pad = 1 and the next video file has a newratio = 1.25, the crop/pad is adjusted using following formul:

$((\text{crop or pad}) / \text{ratio}) * \text{newratio} \% 2 * 2$

The center image is taken by FFMPEG at the specified **[first frame]** (or **[Last frame]** if changed). You see where you are into the video.

Use RMB (Right Mouse Button) on the picture to save it as thumbnail.

WARNING: Use of **[First frame]** and **[Last frame]** may take a long time to display the picture due to the long ffmpeg respons time needed to take the picture at specified location. Specify the to jump to and click on the blue button to refresh displayed image. When you use the slider, prefer move the slider instead of click into the slider bar.

For additional adjustment, you can use the CROP/PAD option on the left of the picture. The sum of both top/bottom or left/right must be an even number and this is why only one of them is enabled updating both side crop/pad value into one operation. Of course, you can [enable all] crop/pad button but you must be careful to choose a valid number to respect video size rules.

Below the crop/pad options, you'll have a [**>**] button which allows you to play the video from specified first frame.

Button [**xml**] opens chapter/comment XML file editor. (see how to create video chaptering or subtitles)

Into [**User parms**], you can add your specific options but be sure to not interfere with those set by AVxCAT. To have a look on set options, you can have a look into the FCAXxxx.TMP file generated during conversion process used as input parameter for ffmpeg.

Preset (enabled since v0.9.3) :

Some internal hard coded x264 preset exist and can be called using following user parameter pre-fixed with « pre264 » keyword (e.g. pre264 hq)

1. baseline (if the parameter after pre264 is unrecognized, this option is used as default)
2. hq
3. lossless-fast
4. lossless-medium
5. lossless-slow
6. lossless-slower
7. lossless-ultrafast
8. max
9. normal

Default used option without specifying a user parameter is AVxCAT own setting named « user1 »

Like you can find under video option, you can select video and/or subtitle stream to be included into final video file.

Use the [**P**] button to select and correctly add **(codec specific) preset** (prefixed by « -fpre » or you can specify external preset files adding the parm into the user field e.g. **-fpre C:/ffmpeg/share/ffmpeg/libx264-lossless_max.ffpreset**

You can use other presets options like -vpre which requires having set some definition e.g. -vpre fast

« Fiest, ffmpeg searches for file named arg.ffpreset in the directories %FFMPEG_DATADIR% if set and %HOME%\ffmpeg and the datadir defined at configuration time (usually %prefix%\share\ffmpeg) in that order. For example, if the arguments is **fast**, it will search for file **libx264-fast.ffpreset** »

New video options since v0.9.8

[x] 2 pass Button which enables use of 2-pass processing for ffmpeg. Both steps are automatically processed without any other user action. This option is usable on any file from the input process list.

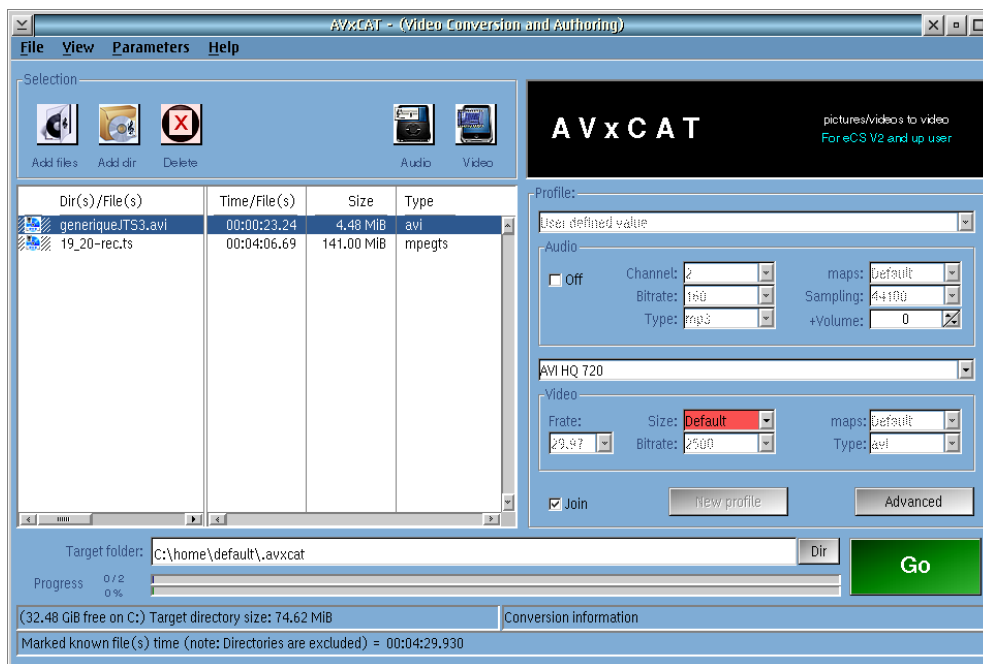
[x] All Button near « 2 pass » enables the « 2 pass » process on all files into the process list without any need to select and set 2 pass on each file.

[0] S: Option is very useful to increase or decrease (blur) video contrast. Default ffmpeg value is 1.0 to which the specified value divided by 10 is added e.g. S: set to 5 results into a ffmpeg setting of 1.5

I've done a test up converting a video to a resolution of 1280x720, adding sharpness of 7, use of Matroska codec for the output file (MKV) and a video bitrate of 3000. The result was surprising well.

note: « 2 pass » may not be usable on some codec using mp4 conversion. For this reason, some known not working codec in « 2 pass » mode have this option disabled. This is normal and as expected

Join Video files



- Verify temporary path disk has enough free size
- Add video files into process list
- Use advanced option to cut part of selected video files if needed (*crop/pad not supported)
- Select « 2 pass » option if needed
- Select **AVI or MPEG** output video codec using defined profiles or not (only supported codec)
- Set [x] Join checkbox on
- Change « Size » from « Default » to a supported size (red background = unsupported)
- Click on [GO] Button

Process will cut (if defined) input video file and convert it into selected codec temporary file. At end of single converted file, process starts a second step which appends all files and final step will convert to the specified codec output file using « sameq » quality option.

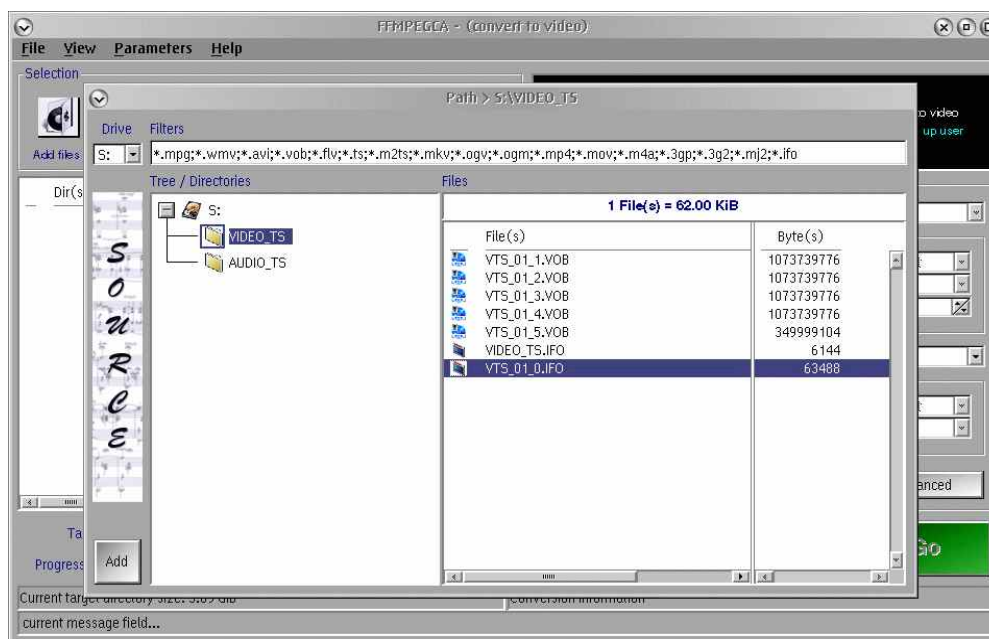
The resulting JOIN file always named « ~FFJOIN. XXX » with XXX = your selected coded file extension which is Avi or mpeg

Note 1: Crop/pad isn't supported because video can't be resize with this facility. It may work if all video files have the same video size and of course, default size is selected. Any other option may result into a final conversion fail.

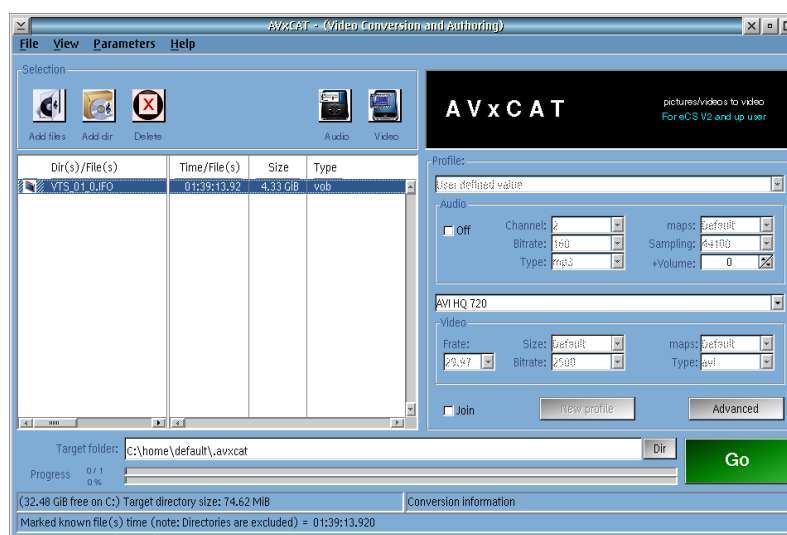
Note 2: AVI and MPEG video codec are those codec given best join result. Of course, VOB is an other good candidate codec for join function but less used and not as easy to handle. Other video codec may fail or give unpredictable result.

Convert a non protected DVD film into a single VIDEO file

Use internal filemanager and DVD tree. Go into VIDEO_TS and select the film corresponding *.IFO file. Generally, it is the one having the most .VOB files. e.g. **VTS_01_0.IFO** has attached **VTS_01_.VOB**



AVxCAT adds IFO with full film time/size into the file list with a special « VOB » type codec to inform you that the calculated values are from all corresponding VOB files.



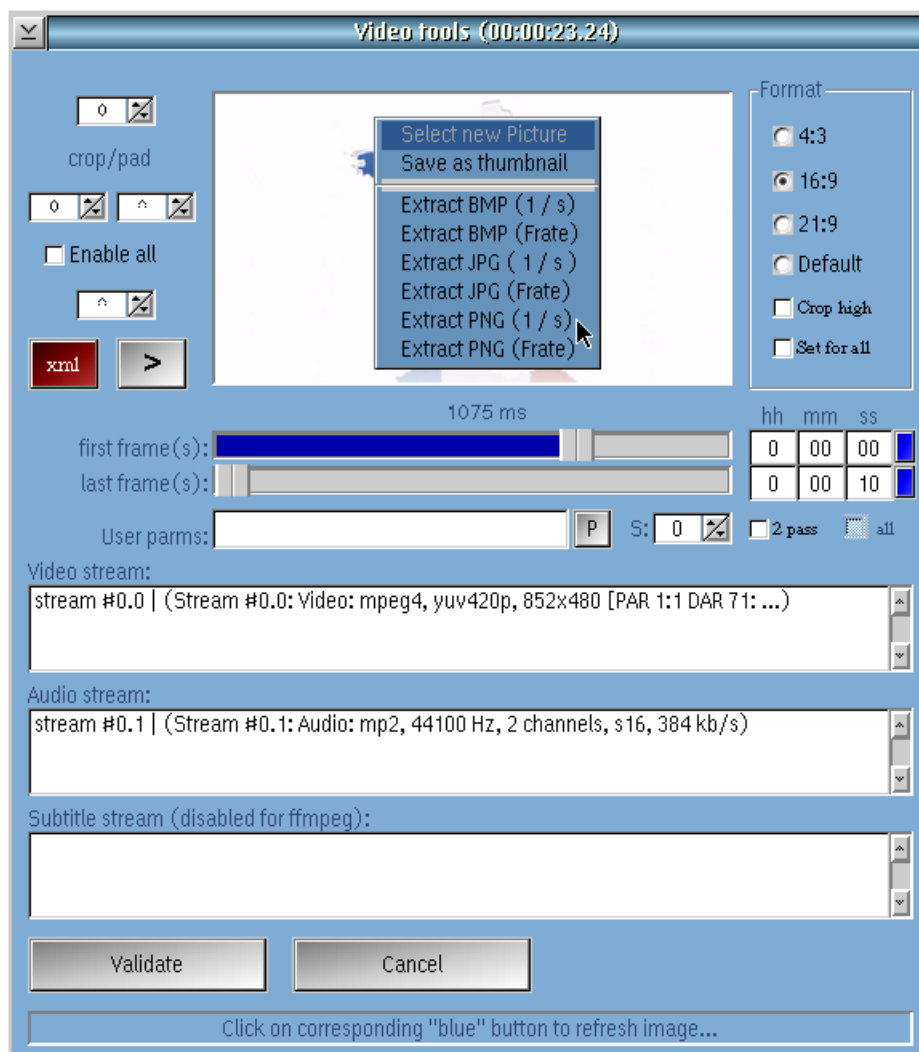
Of course you can use [Advanced] option which display first VOB info only for audio selection and start of video as well as video format to use.

If temporary path disk space is not enough (e.g. RAMFS used), you can set a specific temp path on popup of following command: **AVxCAT.EXE --vobtemp** (specify the path as DEFVOB to reset to the default program temp path). Be carefull to use « -- » in front of vobtemp

At run time, first process may take several time (estimation given) to complet before FFMPEG processes the file and progression is then shown.

Extract pictures from the video file

- Select the video file from the added files into the process list.
- Set the **Frate used to extract images** (e.g. 1 = 1 per second or 25 = 25 per second)
- Click on advanced option
- Set the start time if needed
- Click RMB (Right Mouse Button) on the displayed thumbnail which opens a popup menu
- Select « **Extract image(s) at Frate** » and you'll get **10 images (default) from the video** file
- To change the default number of extracted images, add « **-vframes x** » into the user params field (*x must be a numerical value e.g. 100 to extract 100 images*) or use **First frame(s) time** with **last frame(s) time** value. Images are then extracted using Frate starting at first frame(s) time up to last frame(s) time.



Click and selected image files type and frate. Than, select destination path and you'll get all extracted images. During the extraction, the dialog is disabled and a message is displayed and tells you to « ...Wait... »

Create SLIDESHOW / ANIMATION

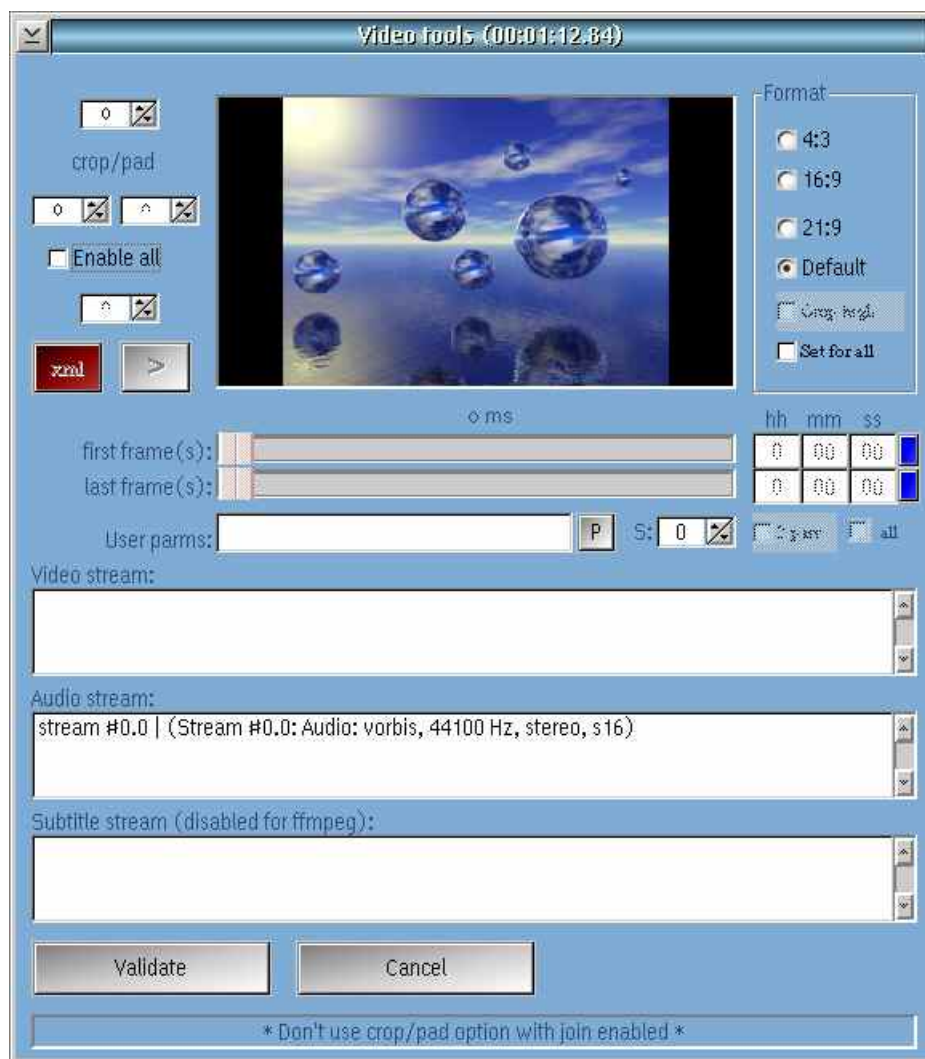
Always use an audio file. This one can be you recorded audio file or a « dummy » audio file which consist of a real audio file with lowest volume level (e.g. Convert an audio with volume set at -256). Cut the audio file to the required play time due this one is used to end your diaporama or animation.

Initial step

Proceed as for [audio conversion](#) and select audio file(s)

Then, [switch to video view](#) , select the video profile to use and click on **[Advanced]**. For some profile, some setting could be forced for better output result. Default AVxCAT bitmap is used as picture.

To change it and use other FFMPEG image file (*.bmp, *.jpg, *.gif, *.png..) click RMB (Right Mouse Button) and select a new picture. Add extra parameters if needed ([Default format strongly suggested](#)) and save the setting. Select the video profile to use and that's all (some setting are forced to get better result)



Create a slideshow « diaporama »

Always select an audio file first (this one can be a mute audio file)

Select video « FLV flash *slideshow* » profile



A/ create you pictures in a suitable image format (bmp is nice) with the same size (**even value only**) for each picture. e.g. 480X360. Use an incremental numerical ordered naming convention. e.g. IMG001.BMP, IMG002.BMP etc... If you do a numbering on 3 characters, use always the same rule for any new picture. Add as many picture as needed according Frate (display time) set before building the diaporama.

B/ Proceed like « create a video from an Audio » until you open the advanced option.

Under [Advanced] option, click on RMB and select a new picture. Select one the the newly created picture (e.g. IMG001.BMP). This one is then displayed in place of the default picture and because the name end with a number « 001 », process turns AVxCAT mode into DIAPORAMA mode (see title). Into this mode, the picture is renamed as IMG%3d.BMP using full range.



Review other parameters like « format » to get a correct rendering as you can see on this picture, Diaporama mode may auto-enable default flash diaporama profile.

To change the video type from flv to mpeg, select user profile but **DON'T CHANGE and use Default for maps, size and sameq for bitrate**. Only change Frate if needed which is the number of frames per second. Selecting .333 is same as display picture 3s (0.25=4s...)

WARNINGS:

Video type MP4 with x264 for diaporama gives wrong duration (ffmpeg bug). To bypass this problem, use video type mpg and then, convert the resulting video file from mpg to mp4 (x264).

Video type AVI os/2 player compatible has a limited resolution of 480x360. Use this option on video using correct size or select this option and switch to user profile and change the size only.

A diaporama with no sound uses a « mute » audio file with the expected duration.

Create an animation

Proceed like for diaporama but change the Frate « frame rate » to the correct number. If you created 25 images for 1 seconds, set Frate to 25.00 (this produces a smooth video)

Add chapters to an existing video (With KMP or VLC player)

Create chapters (XML file and optional subtitles and/or html)

Select the video to be chaptered, open video [Advanced] options and click on [xml]. Following window appears :

The screenshot shows a software window titled "Create xml chapters" with a "more options" tab. The main window is divided into two panes. The left pane contains a form for creating a chapter. It has checkboxes for "+html", "img", "+sub", and "Hmx", a "duration" field set to 2000, and a dropdown menu showing "ORTSF3". Below these are fields for "Chapter title" (containing "La cathédrale des rois de France"), "page" (set to 3), "Start-Time (hh:mm:ss)" (00:00:54), and "End-time" (00:00:00). A large text area for "Chapter comments" contains a paragraph about Clovis and a source URL. At the bottom of the left pane are buttons for "<", "New chapter", "Save", "Cancel", and ">". The right pane, titled "more options", has a "New category name" field, "Add new" and "Delete selected" buttons, a "Select a category" dropdown, and a "Saved pages from the category" list. At the bottom of the right pane are "Save entries" and "Delete selected entry" buttons.

The chapter xml file is always created and you can add an html and/or subtitle files (SRT or SSA or SUB)
Required fields:

- Chapter title (or omit chapter title to create subtitle only)
- Start-Time (respect the format 00:00:00 or 00:00:00.000 for srt,saa,sub only), End-time for play
- First paragraph is used to create subtitle except if you specify:
 1. « .stt » with no comments disables subtitle for this chapter
 2. « .stt » lines with comments are used instead of first chapter if added into the comment field

Any added « .stt » are not displayed into the chapter reader nor added into html conversion.
Of course, adding comments is welcome as a short chapter description

To synchronize the time with the video, start the video using [>] button on [advanced] option window.
You'll probably see that as soon the xml generator gets focus, the video is no more visible !
Click on [x] **hmx** checkbox to hide unwanted AVxCAT window which makes KMP appear.

In top of KMP window title, current video time is displayed

[New chapter] - Add a new chapter timestamp for the current video

[<] - Navigate backward into chapter

[>] - Navigate forward into chapter

[save] - Create all selected files

[Cancel] - No change

[x] +html - Generate html file too


[x] img - Enabled with html and adds thumbnail into generated html

[x] +srt - Generate a subtitle srt file using timestamp + display duration in 1/1000 of second



Here is an extract of HTML generated chapter file:

00:00:18 Title 1 : Générique pour mémoire historique



Vercingétorix (né aux environs de -80 sur le territoire des Arvernes, dans l'actuelle Auvergne, mort le 26 septembre -46 à Rome) est le fils du chef gaulois peuple celte des Arvernes, Celttilos. Il fédère la plupart des peuples gaulois et leurs chefs pour tenter de repousser l'envahisseur romain Jules César à la fin de la guerre des Gaules (-58 à -51). Vaincu à Alésia en -52, il est emprisonné, puis exécuté à Rome, à la suite du triomphe de César.

Source:
[Vercingétorix](#)

How to include a web link ?

Any single line (do not press enter key at end of line) starting with http:// is converted into a hyperlink

Following rules applies:

- No blank into web link
- After the web link and separated by a blank, you can add a comment which is then taken as the text to be displayed for the hyperlink instead of the http://... text (see example above under Source:)

How to include page jump or other video start sequence into a same chapter

Add a single line into the comments with following starting characters :

@page x (x = page number / chapter number)

@video 00:00:00 (time MUST be specified as hh:mm:ss rounded to seconds)

or

@page your comment x (x= page number always placed as last charater on the line (@page can be @page:))

@video your comment 00:00:00: (some comment as for page. Time must be at last position into the line)

All files are saved under the same path as selected video. With [x] img checked, images are generated under a subfolder into source path.

Note: generating all thumbnails for the html page may need some time to end. FFMPEG needs to seek to each timestamp location.

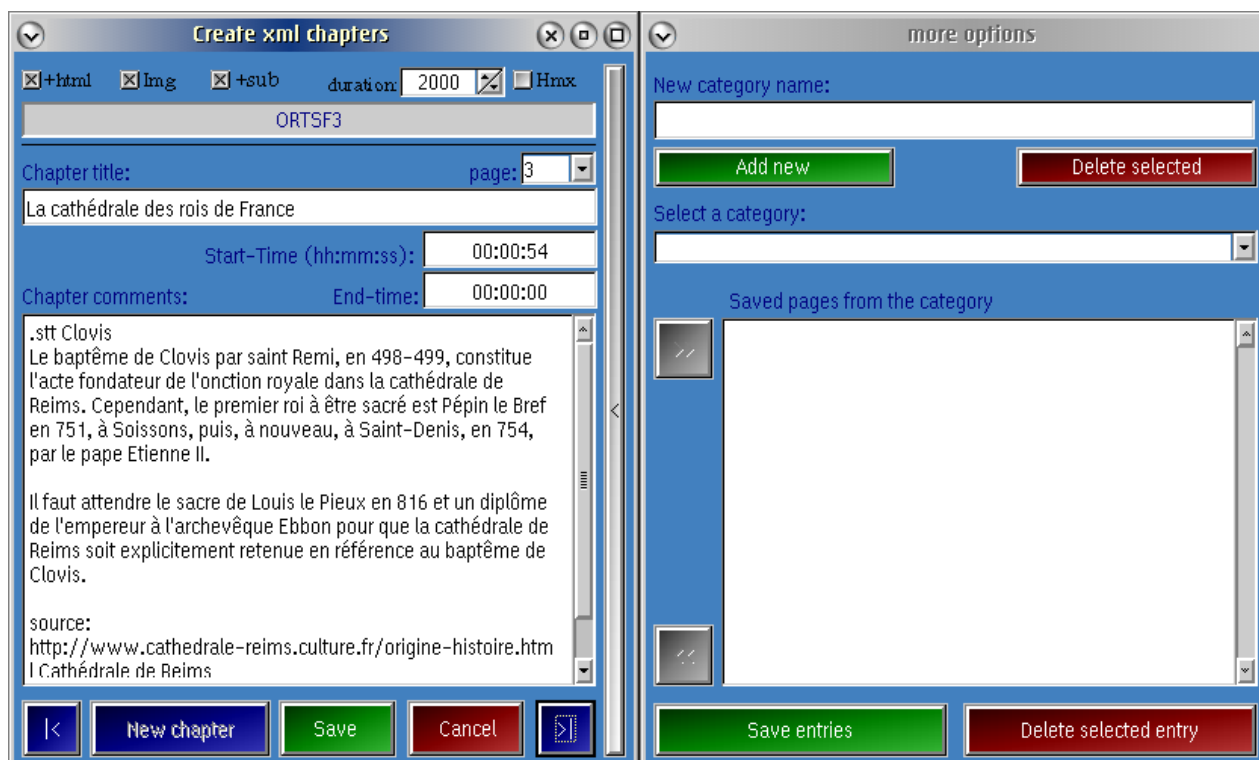
How to play the video using created chapter file ?

See next page...

Create video chapter from saved categories

Create categories

Open any chaptered video and expand right Chapter creation window to open « more options »



Add a new category name (e.g. Holidays) and click on **[Add new]**. The category will be added into the category list. Select a chapter you would like use as part of a category and click on **[>>]** to add current chapter contain and video file name into a category entry. Redo the operation with any chapter from any video eligible to this category. To save the added entries to a category, don't forget to click on **[Save entries]**

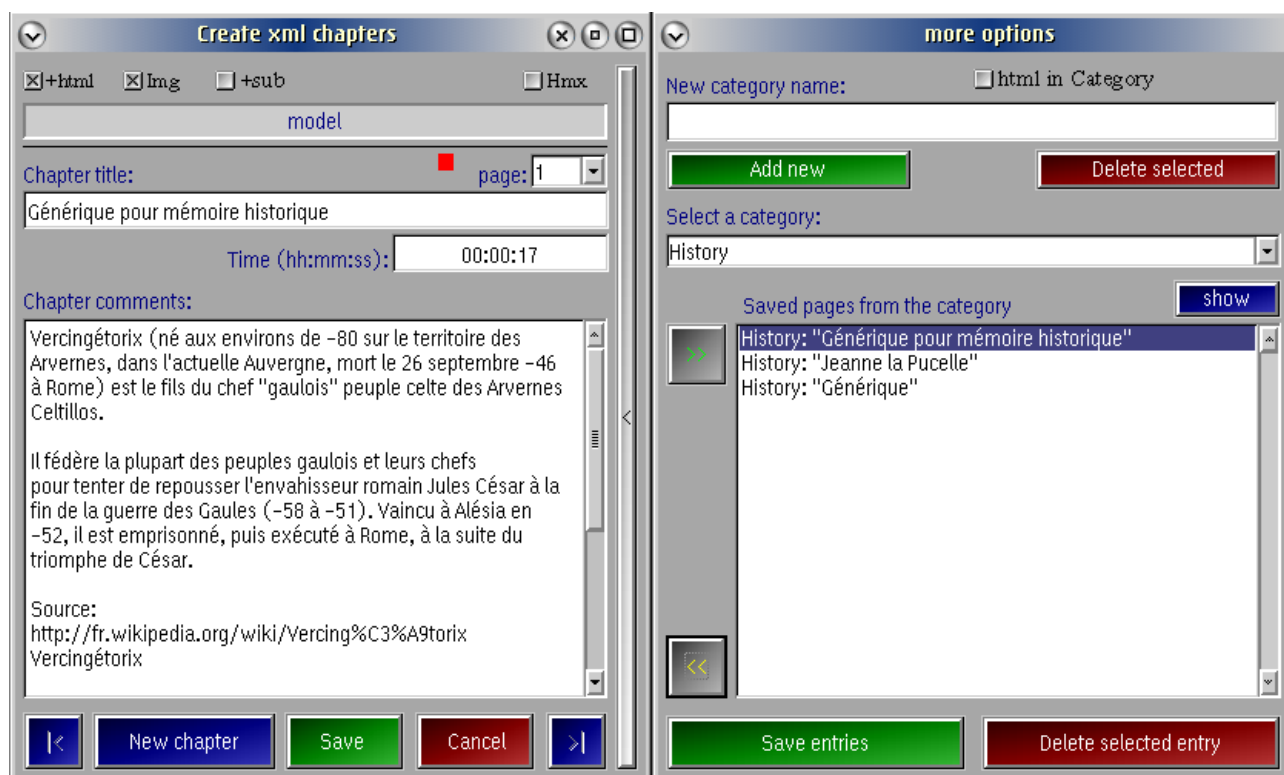
Create a specific video for the category

To create a specific « category video » using all or part of the category entries, Create a copy from model.flv and give it the same name as the category. Go to create chapter and expand the right window. Select a video category and then select an entry. Click **[<<]** to create the current chapter (page) using selected category entry. Add a new chapter and repeat the operation. Select **[x]** html and **[x]** img

Create a html file for the category

which enables a **[x]** html in category checkbox under « more options ». Select this checkbox and at end of all added chapters, click on Save which adds a « category.html » copy under category directory. Next time you select this category under « more options », a **[show]** button is made available to display the corresponding category html result. This is usefull to review each category entries.

Note: See start parameters about how to change html fonts.



Of course, you can create a video using mixed entries of different categories. Just change the category and select the entry to be added into the project video.

When score **red light** is on, selected chapter is an imported category

When score **green light** is on, current chapter is well exported as a new category entry.

Play video with chapters

Requirements

Use configured KMP player (KMP062 or up) or VLC player

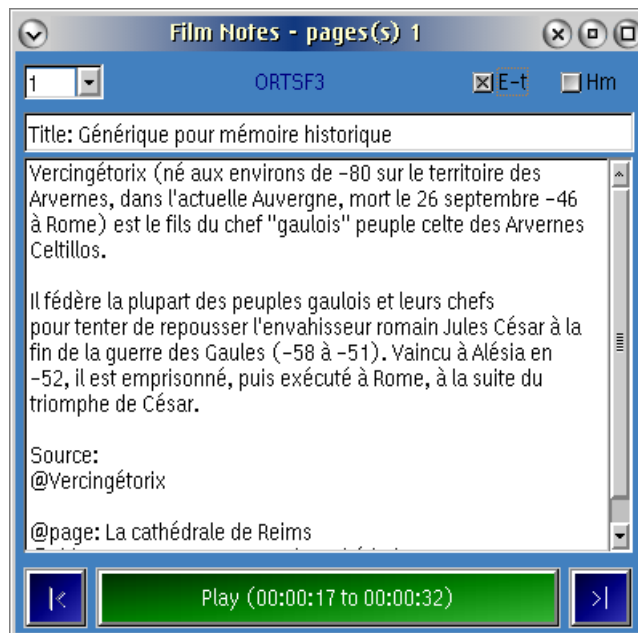
Process

Add the video for which you created chapters if it isn't in AVxCAT main window process list.

It is suggested to read chapter « Play Video - DVD - Audio » too.

To play the video, select the video file from the list and click 2 times (or enter key or RMB « Play (Open) »)

As soon AVxCAT find an xml file under the same directory as the selected video file and with the same name, it automatically reads the xml file and opens following chapter window:



Use [<] and [>] to select chapter to **[play]**

Check [x] **Hm** (like under generator) to Hide main AVxCAT window.

Check [x] **E-t** (End-Time) to enable End of video play as specified during chapter creation

Any supported hyperlink are displayed prefixed by '@'

e.g.

@Vercingétorix (web hyperlink)

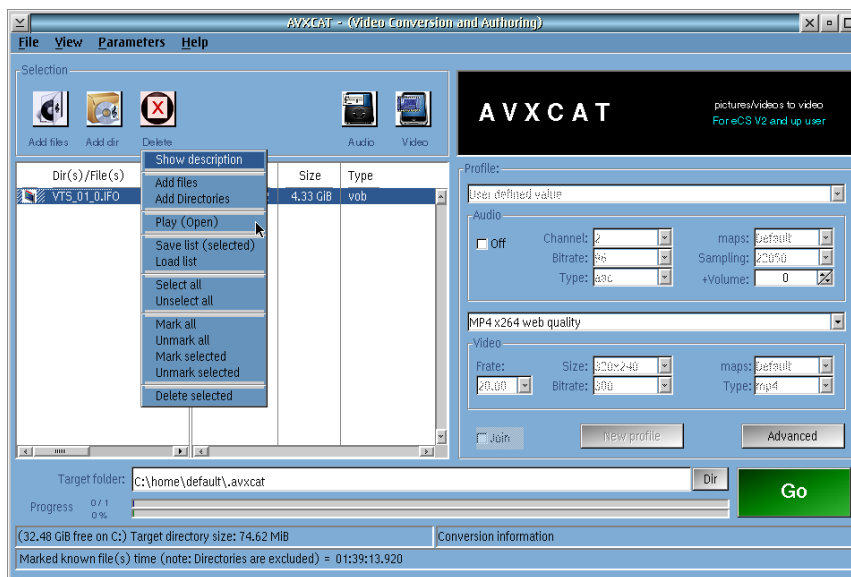
@page:

@video:

Chapter can be a part of current video or a link to an other video file according what you defined under chapter creation and imported entries from a category.

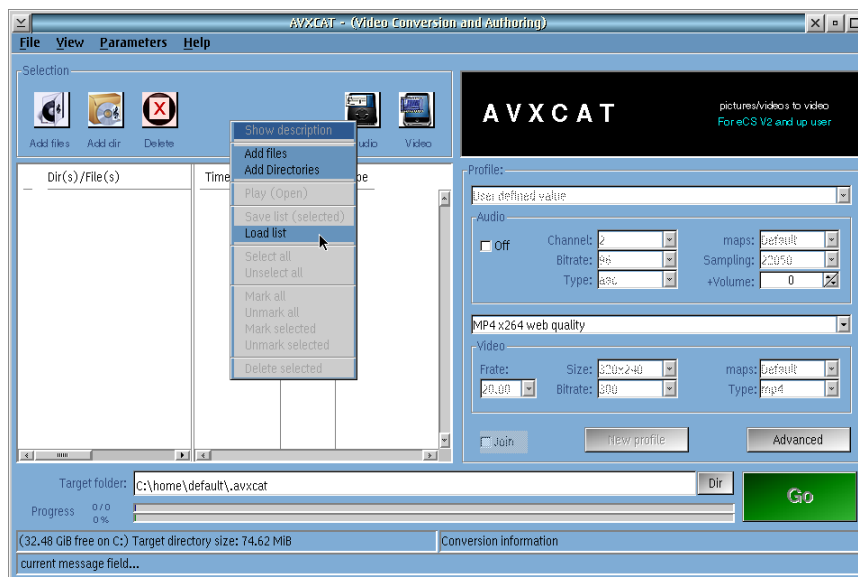
Note: more update will be done on this part in futur doc update

Play Video – DVD – Audio

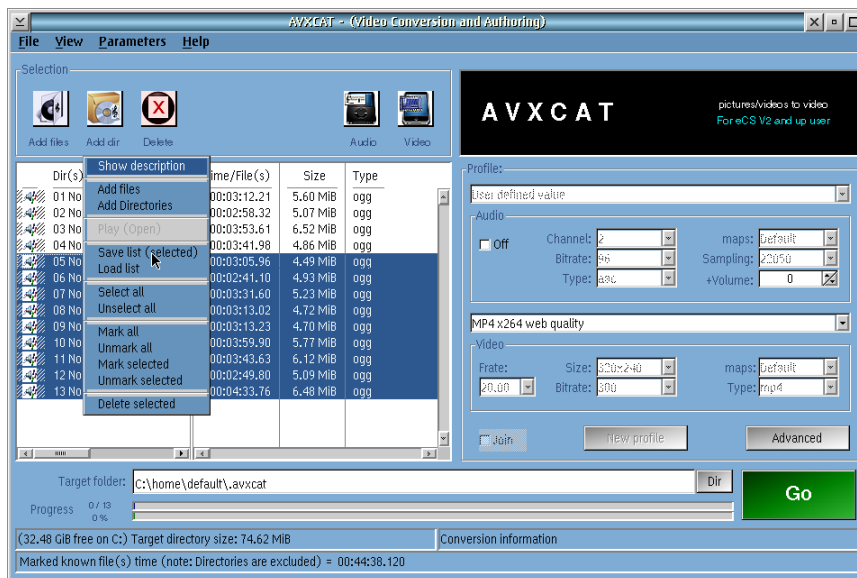


1. To play audio files, configure the required video player or audio player, add audio files into the process list and « mark » them. **Enter** or « **2 clic** » or Use « **Play (Open)** » from RMB popupmenu and play the selected entry of the list. The configured player will start.
2. To play video files, proceed as for audio files except if a chapter file created by AVxCAT exit for the selected file, chapter window opens instead of starting the player
3. To play a **DVD**, add the « **VIDEO_TS** » folder of the DVD into the list or you can select the *.IFO corresponding the film stream (this last option takes longer because it calculates the total time of all film files).

Save / Load lists (since v1.0.0)



Since V1.0.0, you can load PM123 *.LST list into AVxCAT process list. To use this option, click on the RMB (Right Mouse Button) and select load. From the fileprompt window, select the *.LST to import.



Like Load option, you can save your selected entries from the current process list into a *.LST file usable by PM123 (audio list only). Click on RMB and select « Save list (selected) » option. A fileprompt window opens, go into your list directory and specify the list filename replacing *.LST and click [ok]

Special parameters (use only one at a time)

- **- -vobtemp** (popup input field will open at AVxCAT start)
Specify a new path for DVD rip or other specific conversion. Set path to DEFVOB to reset to default
- **- -locald** (saved in ini)
Change internal filemanager to display local drives only (default)
- **- -usedd** (saved in ini)
Change internal filemanager to display all used drives
- **- -remoted** (saved in ini)
Change internal filemanager to display all remote drives only
- **- -amode** (used for current run)
Start AVxCAT in audio mode only (planned for futur use when called from external program)
- **- -vmode** (used for current run)
Start AVxCAT in video mode only (planned for futur use when called from external program)
- **- -async x** (used to change default « 3 » ffmpeg video async parameter. Numeric value should be between 1 and 10 (e.g. Audio syncro is performed every 3 seconds – this gives nice syncro)
- **- -jsync x** (used to change default video join stream mapping syncro. Use 0 for default, 1 for video stream synchronized to audio (if exist) and 2 for audio synchronized to video (if exist))
- **- -mxplayerb**
All player be started as /MAX and /F thread
- **- -resethm**
reset permanent disabled player help window
- **- -htmlz 4 4 3 4** (Change font size into html generated file for Title, Chapter, Time, Comments, Title .. valid number range: 1 to 5)
- **- -paranoia x** (enable -paranoia option on cdda2wav which may give better result. Set x to 0 or 1)
- **- -deemphasize x** (enable cdda2wav deemphasize option, usefull on very old Cds. Set x to 0 or 1 (0=off or 1=on))
- **- -ffdebug** (converts generated ffmpeg command file into a line command executable batch file for debugging – requires copy_metadata as input parms or add a copy_metadata=" line as line 2)
- **- -aacgain x options** (enable mp3gain on aac audio files. To enable « x=1 » aac support, a new mp3gain out of aacgain is needed and expected in the futur). With x=0 (mp3) support only, you can specify new mp3gain parameters, add them as « options » . e.g. **- -accgain 0 -r -k**

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Rémy DODIN