

SolveigMM Video Splitter

User Guide



SolveigMM Video Splitter: 7

First edition: August 18, 2005

Date modified: June 07, 2019

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Solveig Multimedia Video Splitter

This documentation is designed to help you in using Solveig Multimedia Video Splitter. It contains information that describes basic and advanced steps for performing splitting tasks, interface items and shortcut keys. This documentation is divided into the following sections:

- <u>Getting started</u>: This section contains introductory information about Solveig Multimedia Video Splitter, supported file formats, system requirements, basic terms and shortcut keys
- <u>Solveig Multimedia Video Splitter interface</u>: Provides information about controls in the Solveig Multimedia Video Splitter user interface
- <u>Using Solveig Multimedia Video Splitter</u>: Provides information about procedures to accomplish common tasks in Solveig Multimedia Video Splitter
- How-To: Provides information about the basic steps of video splitting process
- <u>Technical information</u>: Provides the technical description of the components Video Splitter is based on

Notices

SolveigMM Video Splitter

User Guide

Version 7

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Getting started

SolveigMM Video Splitter is a fast and powerful video splitting tool (see <u>supported file formats</u>). You can split your video file into parts with a few mouse clicks without any quality loss.

It is also possible to cut out several file portions of a movie at one time. You can get rid of all commercials in your movie in a couple of simple steps.

Video Splitter supports batch processing. If you need to process several tasks at a time, the Batch Manager help with it. You can add all your trimming tasks to a batch queue and process all of them at a time. Batch processing is supported only in Video Splitter Business Edition.

Join Manager of Video Splitter allows to join multiple audio/video fragments. The re-encoding is not involved in the joining process so all files must have the same parameters, such as video frame height/width, audio/video compression type, etc.

The slicing feature of Video Splitter allows to split files in parts by specified duration, size and by number of equal parts.

It is also possible to make the screenshot from the selected video frame.

Since version 6 Video Splitter has flexible timeline with support of editing of multiple files being placed on the same timeline per one run. Simply add files of the same format to the list of files, drag them to the timeline, place markers and get the desired video or audio track.

In this section:

- <u>Distinction between Home Edition and Business Edition</u>: The explanation of difference between Video Splitter Home and Business Editions
- Basic terms: The explanation of concepts and terms referred to in this document
- <u>Supported file formats</u>: The list of file formats that SolveigMM Video Splitter can handle
- System requirements: Minimum and recommended system requirements for SolveigMM Video Splitter
- <u>Keyboard shortcuts</u>: The list of keyboard shortcuts

Distinction between Home Edition and Business Edition

SolveigMM Video Splitter is available in two editions, **Home Edition** and **Business Edition**. You can compare these editions in the table below.

| Feature | SolveigMM Video Splitter Home Edition | SolveigMM Video Splitter Business Edition |
|---|--|--|
| Batch Manager. Unlimited number of editing tasks in one run | | ✓ |
| Command line interface (SolveigMM Batch Splitter console utility) | | V |

Basic terms

This section explains the key terms referred to throughout this document. Understanding these terms will help you start using Solveig Multimedia Movie Splitter in the most comfortable way.

- Splitting process
- Joining process
- Source and destination files
- Markers
- Fragments

Splitting process

Splitting is the process of dividing your video files into parts. For example, you can cut out a piece of video with undesired scenes (e.g. commercials, corrupted video). The splitting process leaves source files intact saving the result in the destination file.

Joining process

Joining is the process of combining multiple parts or fragments of video/audio into a single file. Joining does not involve re-encoding so it does not affect the output audio/video quality.

Source and destination files

The source and destination files are the video files of a <u>supported format</u>. The source file contains video that you can split into parts, the destination file contains the final movie clip. During the splitting process, the source file remains in its original location and will not be changed or deleted.

Markers

A marker is a constituent part of a fragment. A fragment consists of two markers: start and end. It is set in the current cursor position.

The blue color means that the marker is selected. If marker is not selected it has the white color.

Such operations as deleting and positioning are applied to selected markers only.



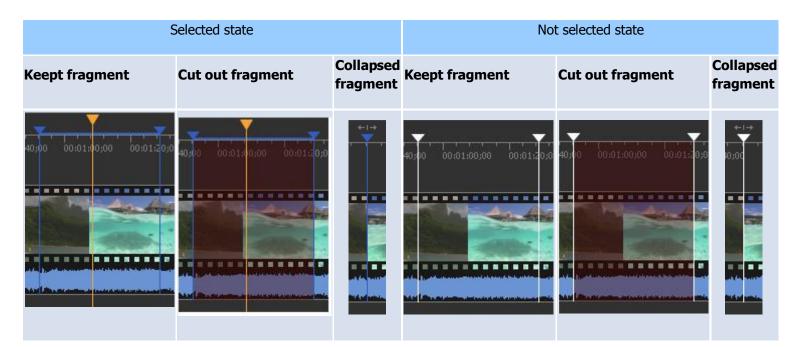
Fragments

A fragment is a part of a movie (or audio) file limited by two markers that is to be removed or kept in the final movie, e.g. the commercial block you need to be cut out.

The cut out fragment is usually highlighted with the red color.

You can see a sample keept and cut out fragments in the selected and not selected state below.

In case of some marker's time position corrections, you could deploy the collapsed fragment by double clicking on it.



For more detailed color definition see <u>Using splitting controls</u> section.

Supported file formats

- SolveigMM Video Splitter supports the following media file formats:

| H.265 | H.264 | MPEG-2 | MP4 ISO Format | AVCHD Format |
|---|---|--|---|--|
| video elementary stream in MP4/TS/MKV | video elementary stream in MP4/TS/MKV/AVI | video elementary stream in PS / TS | with H265 / AAC with H264 / AAC other video/audio | |
| MPEG TS Format | MOV Format | AVI Format | ASF Format | Matroska Format |
| with H265 / audio (AC3, AAC) with H264 / audio (AC3, AAC) | with H264 / AAC other video/audio | DV AVI type 1, type 2 OpenDML AVI any video/audio type any size > 2GB, > 4GB | video/audio type | with H264 / AAC with H265 / audio other video / audio |
| WEBM Format | WMV Format | MPEG-1 | FLV Format | Audio |

| VP8 Video | any Windows Media | Systom stroom | H264 Video | mn? | |
|--------------|---------------------|------------------|-------------|-----|--|
| | arry wiridows Media | System stream | 11204 VIUEO | mp3 | |
| Vorbis Audio | Video | Video elementary | AAC Audio | mp1 | |
| | any Windows Media | stream | | aac | |
| | Audio | Audio elementary | | ac3 | |
| | | stream | | | |

- Indexation supports the following file formats:
- MPEG-1 Video Format files (*.mpg, *.mpeg, *.m1v, *.mpv)
- MPEG-2 Video Format files (*.mpg, *.mpeg, *.mpv, *.m2v, *.vob, *.ts, *.m2ts, *.vob)
- Support of embedded subtitles of formats (*):
- UTF8
- ASS
- SSA
- GAB2
- Support of external subtitles of formats (**):
- ASS
- SRT
- (*) Available for file formats: AVI, MKV, WEBM
- (**) Available for file formats: AVI, MKV, WEBM, MP4

System requirements

Software Requirements

- Windows® 98/ Me / 2000 / XP / 7 / 8 / 10
- DirectX 8.0 Runtime or higher
- Video and audio decoders for the preview feature (DirectShow, VFW or DMO)
- WMV/ASF support requires Windows Media Format 9 Series Runtime (shipped with Windows Media Player 9 and higher) MS: https://support.microsoft.com/en-gb/help/14209/get-windows-media-player
- Windows Media Format 11 Series Runtime for WMV file frame accurate editing https://www.free-codecs.com/download/windows-media-format-11.htm

Hardware Requirements

- CPU (Intel® Pentium II, Celeron, AMD® Athlon, Opteron etc.)
- 128 MB RAM
- Any VGA card
- About 110 MB of free disk space

Keyboard shortcuts

Almost every procedure in SolveigMM Video Splitter can be done using shortcut keys. Using these shortcut keys you can do some tasks more quickly.

The table below provides the list of operations that you can perform using keyboard shortcuts.

Hot Keys of Video Splitter (main window):

| One anation | Charles & Iray |
|----------------------------|----------------|
| Operation | Shortcut key |
| Add Marker | M |
| Clear All Markers | Ctrl + C |
| Cut Out Previous Fragment | F |
| Cut out Selected Fragment | D |
| Invert Time Line Fragments | I |
| Keep Selected Fragment | S |
| Play/Pause | Space |
| Redo | Ctrl + Y |
| Remove Marker(s) | Delete |
| Save | Ctrl + T |
| Undo | Ctrl + Z |
| Close | Ctrl + W |
| Open Media File | Ctrl + O |
| Save Project | Ctrl + S |
| Jump 1/20th Backward | Page Down |
| Jump 1/20th Forward | Page Up |
| Jump 2 min Backward | Shift + Left |
| Jump 2 min Forward | Shift + Right |
| Jump to Movie End | End |
| Jump to Movie Start | Home |
| Next Frame | Ctrl + Right |
| Next K Frame | Right |
| Previous Frame | Ctrl + Left |
| Previous K Frame | Left |
| Select Next Marker | Tab |
| Select Previous Marker | Shift + Tab |
| Select Slider Cursor | Ctrl + Tab |
| Preferences | Ctrl + P |
| Maximize Zoom | Num / |
| Move Scaled Area Left | Alt + Left |
| Move Scaled Area Right | Alt + Right |
| Reset Zoom | Num* |
| Zoom In | Num+ |
| Zoom Out | Num- |
| | |

Hot Keys of Batch Manager:

| Operation | Shortcut key |
|-------------------------|--------------|
| Add Task to Batch Queue | A |

| Delete Selected Fragment | Shift + Delete |
|---|----------------|
| Delete Selected Task(s) | Delete |
| Start Batch processing | Ctrl + T |
| Start Barch Processing For Selected Task(s) | Shift + T |
| Update Task | U |
| Load Batch List | Ctrl + O |
| Edit the task in main window or show the selected fragment in the main window | Enter |
| Select all tasks | Ctrl + A |

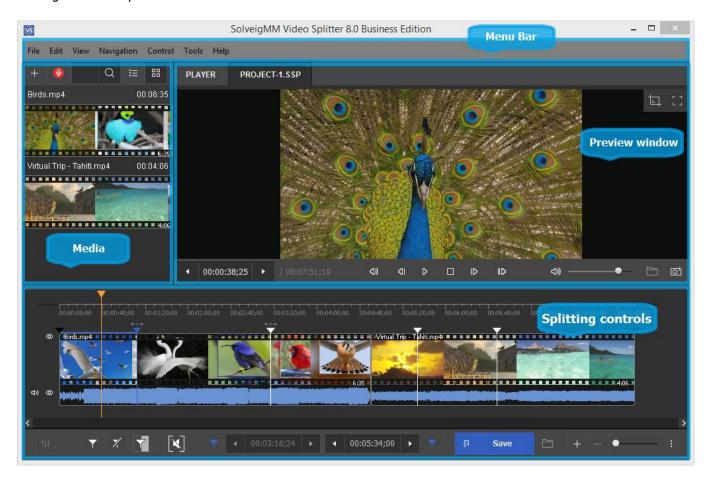
Hot Keys of Join Manager:

| Operation | Shortcut key |
|-------------------------------------|--------------|
| Add media file(s) to the list | Ins |
| Delete the selected files from list | Del |
| Move the selected item down | PgDown |
| Move the selected item up | PgUp |

Solveig Multimedia Video Splitter interface

The Solveig Multimedia Video Splitter user interface consist of five main parts: Menu bar, Navigation controls, Information window, Splitter controls and Preview window.

SolveigMM Video Splitter main window:

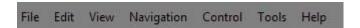


In this section:

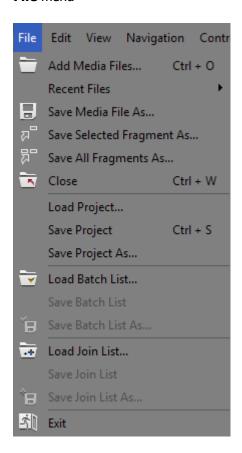
- Menu bar
- Stream selection window
- Navigation controls
- Media panel
- Splitting controls
- Preview window
- Progress window
- Splitter in system tray
- Filters info window
- Batch manager
- Join manager
- Slicing Window
- Stream selection window
- Preferences window

Menu bar

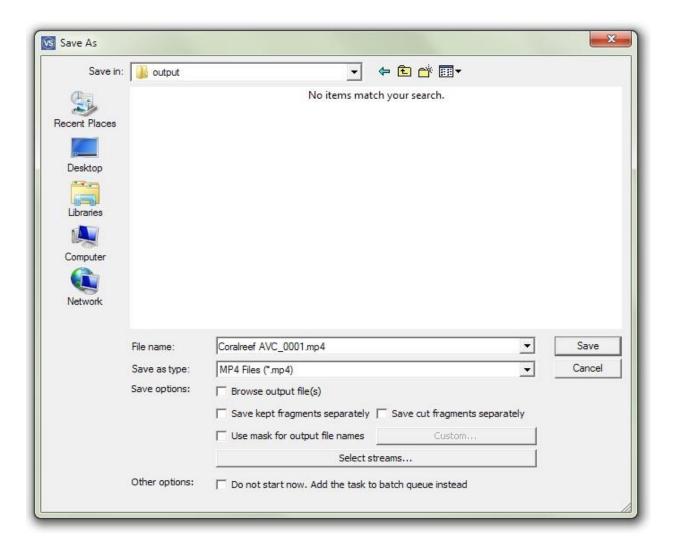
You can use commands in the menu bar to perform tasks in Solveig Multimedia Video Splitter. These commands are described in this document.



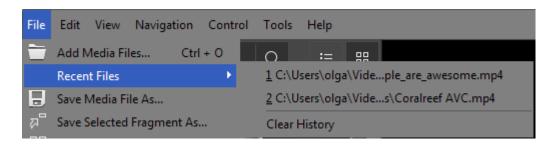
File menu



| Menu item | Description | Shortcut key |
|---------------------------|--|--------------|
| Add Media Files | Select a supported media file to be opened and edited (*) | Ctrl + O |
| Save Media File As | Specify the output file name and immediately save it (start the trimming process) (*) | |
| Save Selected Fragment As | Specify the output file name and immediately save it (start the trimming process) (*) | |
| Save All Fragments As | Specify the output file name and immediately save all fragments (start the trimming process) (*) | |
| Close | Close the input and output files | Ctrl + W |
| Load project | Open a SolveigMM Video Splitter project file | |
| Save project | Save the project file | Ctrl + S |
| Save project As | Save the project file to the specified folder | |
| Load Batch List | Load a task list to the Batch Manager | |
| Save Batch List | Save the batch list | |
| Save Batch List As | Save the batch list to the specified folder | |
| Load Join List | Load a join list to the Join Manager | |
| Save Join List | Save the join list | |
| Save Join List As | Save the join list to the specified folder | |
| Recent Files | Open the recently edited files | |
| Exit | Close the program | |

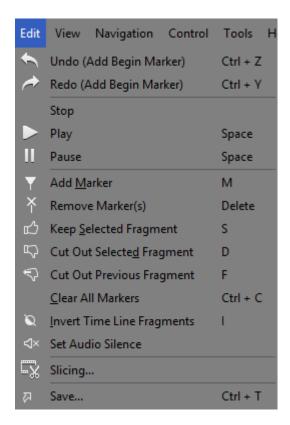


File menu -> Recent Files



| Menu item | Description |
|---------------|---|
| Clear History | Allows to clear history of recent files |

Edit menu

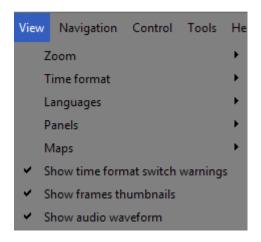


| Menu item | Description | Shortcut key |
|---------------------------|---|--------------|
| Undo (Add Marker) | Undo the action | Ctrl + Z |
| Redo | Redo the action | Ctrl + Y |
| Stop | Stop playback | |
| Play | Start playback | Space |
| Pause | Pause playback | Space |
| Add Marker | Add a marker | М |
| Remove Marker(s) | Remove the selected marker or markers (*) | Delete |
| Keep Selected Fragment | Keep the selected fragment (*) | S |
| Cut Out Selected Fragment | Cut the selected fragment (*) | D |
| Cut Out Previous Fragment | Cut out the previous fragment (*) | F |
| Clear All Markers | Remove all markers | Ctrl + C |

| Invert Time Line Fragment | Invert all timeline fragments on the slider (*) | I |
|---------------------------|---|----------|
| Start trimming | Start the trimming process (*) | Ctrl + T |
| Slicing | Opens slicing window | |
| Set audio silence | Allows to mute sound of the selected fragment | |

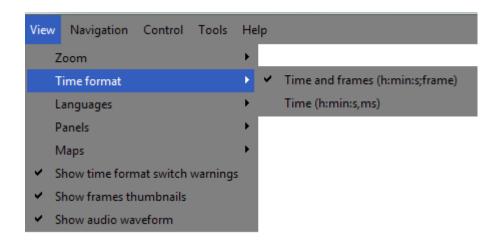
(*) - These operations are available from the menu and from the context menu . For details, see <u>Navigation controls</u>, <u>Splitting controls</u>

View menu



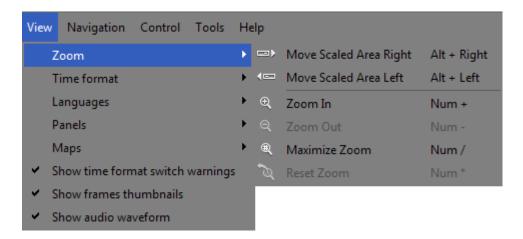
| Menu item | Description | Shortcut key |
|-----------------------------|--|--------------|
| Time format | Opens the submenu | - |
| Show frames thumbnails | Allows to show or hide frames thumbnails | |
| Show format switch warnings | Allows to turn off or turn on format switch warnings | - |
| Zoom | Opens the submenu | - |
| Languages | Opens the submenu language of interface selecting | - |
| Panels | Opens the submenu | |
| Maps | Opens the submenu | - |
| Show audio waveform | Allows to show or hide audio waveform | - |

View menu -> Time format



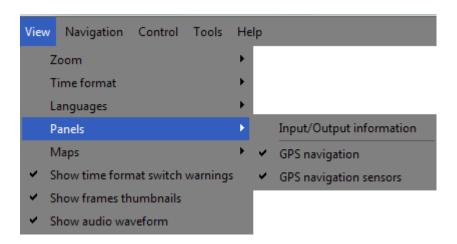
| Menu item | Description | Shortcut key |
|------------------|---|--------------|
| Times and frames | Allows to show timeline in HH:MM:SS;frames format | - |
| Time | Allows to show timeline in HH:MM:SS;ms format | - |

View menu -> Zoom



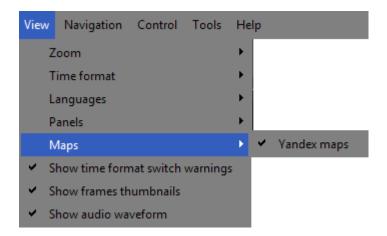
| Menu item | Description | Shortcut key |
|------------------------|---|-------------------|
| Move Scaled Area Right | Move the zooming scrollbar right | Alt + Right Arrow |
| Move Scaled Area Left | Move the zooming scrollbar left | Alt + Right Arrow |
| Zoom In | Zoom in the timeline slider | NumPad + |
| Zoom Out | Zoom out the timeline slider | NumPad - |
| Maximize Zoom | Set the max scale rate | NumPad / |
| Reset Zoom | Reset the scale rate to 1 (initial scale) | NumPad * |

View menu -> Panels



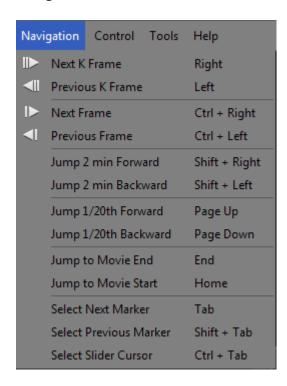
| Menu item | Description |
|--------------------------|--|
| Input/Output information | Shows information about input and output files |
| GPS navigation | Shows GPS information if file contains such |
| GPS navigation sensors | Shows GPS navigation sensors: speedometer, compass and accelerometer (if file contains such information) |

View menu -> Maps



| Menu item | Description |
|-------------|---|
| Yandex maps | Displays route on the Yandex maps (if file contains such information) |

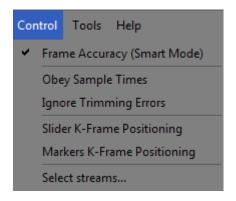
Navigation menu



| Menu item | Description | Shortcut key |
|---------------------|-------------------------------------|---------------------|
| Next K Frame | Go to the next K Frame | Right Arrow |
| Previous K Frame | Go to the previous K Frame | Left Arrow |
| Next Frame | Go to the next Frame | Ctrl + Right Arrow |
| Previous Frame | Go to the previous Frame | Ctrl + Left Arrow |
| Jump 2 min Forward | Jump 2 minutes forward | Shift + Right Arrow |
| Jump 2 min Backward | Jump 2 minutes backward | Shift + Left Arrow |
| Jump 1/20th Forward | Jump 1/20th of movie length forward | Page Up |

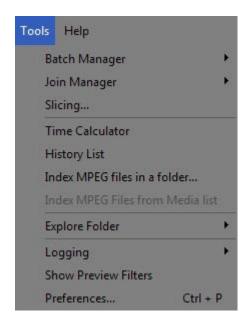
| Jump 1/20th Backward | Jump 1/20th of the movie length backward | Page Down |
|------------------------|--|-------------|
| Jump to Movie End | Jump to the movie end | Home |
| Jump to Movie Start | Jump to the movie start | End |
| Select Next Marker | Select the next marker | Tab |
| Select Previous Marker | Select the previous marker | Shift + Tab |
| Select Slider Cursor | Select the slider cursor | Ctrl + Tab |

Control menu



| Menu item | Description |
|--------------------------------|--|
| Frame Accuracy (Smart Mode) | Enable the frame accurate trimming mode |
| Obey samples times | Use an alternative synchronization algorithm. By default, it is disabled. If the resulting file is out of sync after repeated trimming selecting this option should improve audio/vido synchronization. |
| Ignore Trimming | Ignore trimming errors. |
| Errors | Note: It is reccommended to keep it disabled by default. |
| Slider K-Frame Positioning | If this option is enabled, the cursor jumps to the nearest previous K Frame after you position the slider. This mode implements the What You See Is What You Get feature. If this option is disabled, you can navigate through all movie frames. |
| Markers K-Frame | If this option is enabled, the marker jumps to the nearest previous K Frame after you position it. This mode implements the What You See Is What You Get feature. If this option is disabled, you can set the marker at any movie frame. |
| Positioning | Note: If the start marker of a fragment is disabled, the fragment in the final movies will |
| | be started with the K Frame anyway. Note: If the end marker of a fragment is disabled, the fragment in the final movies will end with the frame at the marker position. |
| Select streams | Opens the window for selecting video and audio streams for preview and trimming. For details, see Stream selection window |

Tools menu

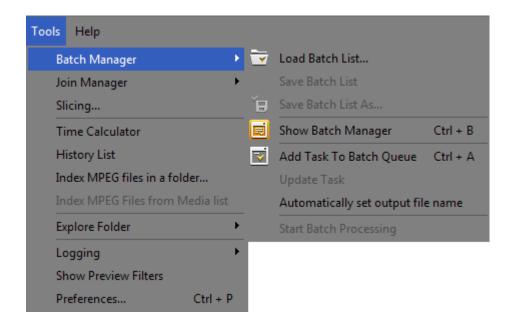


| Menu item | Description | |
|----------------------------|--|--|
| Batch Manager | Open the sumbenu of the Batch Manager item (available for Business Edition version only) | |
| Join Manager | Open the Join Manager window | |
| Time Calculator | Show the time calculator | |
| History List | Open the history list of actions | |
| Index MPEG files in folder | Create index for MPEG files in the selected folder | |
| Index MPEG File | Create index for the MPEG2 video file (*) | |
| Explore Folder | Open Windows Exporer in the folder with the Input or Output media files | |
| Logging | Open menu for actions with log files | |
| Show Preview filters | Show the list of filters used for preview | |
| Preferences | Open preferences window | |
| Slicing | Open slicing window | |

(*) - This operation is available for MPEG2 video only if the file has not been indexed yet.

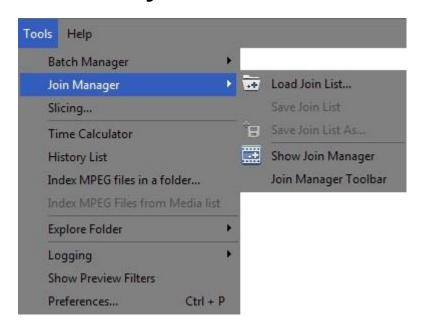
Tools -> Batch Manager menu

Note: This menu is available in Business Edition version only



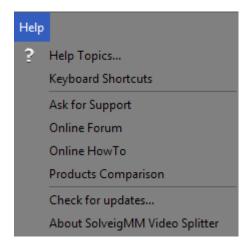
| Menu item | Description | Shortcut key |
|------------------------------------|--|--------------|
| Show Batch Manager | Show the Batch Manager window | Ctrl + B |
| Load Task List | Select a supported batch file | |
| Save Task List | Save the Task List containin trimming task descriptions to an *.xtl file. See the Task List syntax in Batch file format | |
| Save Task List As | Save the Task List containin trimming task descriptions to an *.xtl file to the specified folder. See the Task List syntax in Batch file format | |
| Add Task To Batch Queue | Add the current task to the batch queue | А |
| Update task | Update the selected task in the batch queue | |
| Automatically set output file name | If enabled allows to set the name for the output file automatically | |
| Start Batch Processing | Start the batch processing | |

Tools -> Join Manager menu



| Menu item | Description |
|-----------------------|---|
| Load Join List | Load a joining task from a file |
| Save Join List | Save the current joining task to a file |
| Save Join List As | Save the current joining task to a file to the specified folder |
| Show Join Manager | Show the Join manager main window |
| Join Manager Tooolbar | Show/hide the Join manager toolbar window |

Help menu

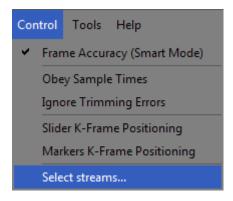


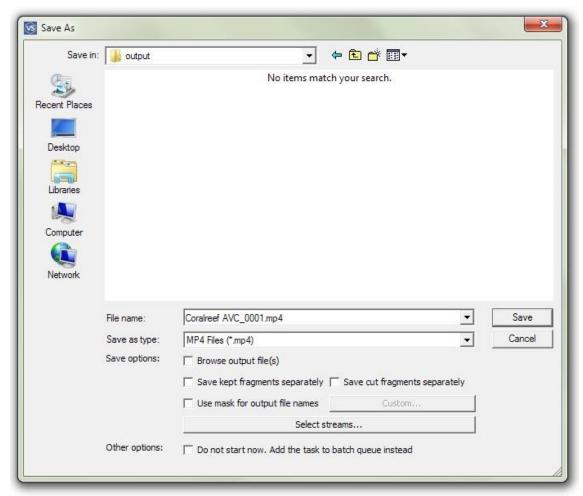
| Menu item | Description | Shortcut key |
|--------------------|---|--------------|
| Help topics | Open the help file | F1 |
| Keyboard ShortCuts | Shows the Keyboard Shortcuts section in the help file | |
| Register | Register SolveigMM Video Splitter | |
| Ask for Support | Open Solveig Mltimedia support section of the website | |
| Online Forum | Open the Solveig Multimedia forum Open comparison table of SolveigMM products | |

| Online HowTo | Open HowTo section of the website |
|-----------------------------------|--|
| Product Comparison | Open the webpage with SolveigMM products comparison chat |
| Check for updates | Check if the latest Video Splitter version is installed |
| About SolveigMM Video Splitter | Open the About dialog box |

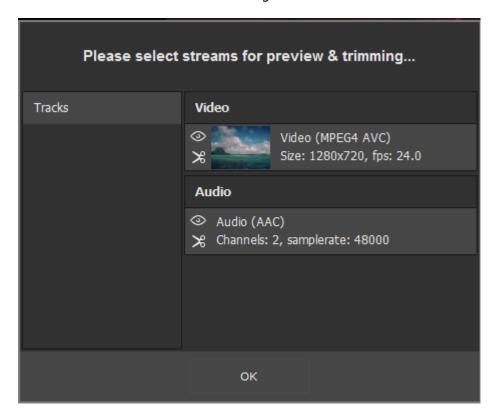
Stream selection window

Stream selection window allows stream selecting for preview and editing. This window appears automatically after opening of file with multiple video or audio tracks. You can also open this window from **Control -> Select streams...** menu or from "**Select streams...**" button of the dialog window opens after selecting the trimming operation.



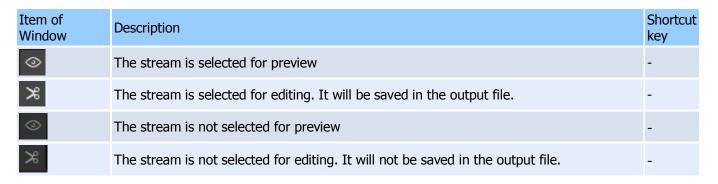


Stream selection window has the following view.



To preview the desired video or audio stream in Video Splitter please click the icon with an eye () near this stream.

To save the stream in the resulted output video file please click the icon with scissors () near this stream.



Navigation controls

Navigation controls are designed for navigation through an open source media file. Using these controls, you can start and stop playback, pause it or search for the necessary position forward and backward. Also, the current position and total duration are displayed.



| Window item | Description | Shortcut key |
|-------------------------------|---|----------------------|
| | Previous K Frame Next K Frame | Left arrow |
| D | Play/Pause | Space |
| П | Pause | |
| ۵۱ | Previous Frame | Cntr + Left arrow |
| ID | Next Frame | Cntr + Right arrow |
| ◆ 00:01:19;10 → | Slider cursor time position. You can edit this value manually | |
| / 00:07:43;00 | Total file length | |

Media panel

Media panel allows adding the list of files of the same file format. Simply drag-and-drop file to the "Media" panel or click anywhere to open the dialog and add files. You could also click the () button to open the new media file.

We would like to draw your attention to the fact that the files should be of the same file format and video/audio parameters to be added to the media list.

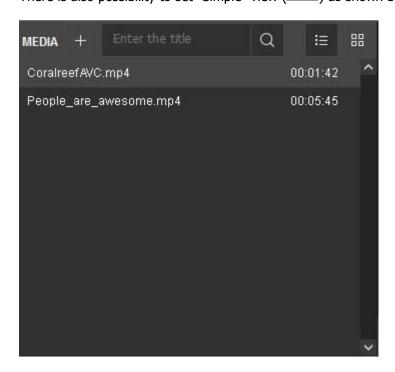
The files could be later dragged on the multi-timeline to be edited.



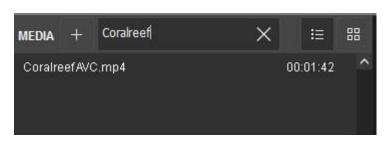
For your convenience there are two possible views of files in the list. By default is used "Extended view" as on the screenshot above.



There is also possibility to set "Simple" view () as shown below.



If you have numerous files in the list, you can search appropriate by using special search string.



Splitting controls

Splitting controls are the heart of Solveig Multimedia Video Splitter. Using these controls, you can manage the fragments that will or will not be saved in the final movie.

You can set fragments to be cut or kept, invert or completely delete fragments from your movie. Finally, the main button that starts the splitting process is located on this panel.



| Window Item | Description | Shortcut key |
|-------------------|---|--------------|
| Y | Add Marker: Add a new marker to the current slider cursor position. | М |
| × | Delete Marker: Remove selected marker or markers. | Delete |
| × | Set audio silence: allows to set audio silence for the chosen fragment | |
| ♂ Save | Save: Start trimming or batch processing (if there are any tasks in the batch queue) Browse output file | Ctrl + T |
| 4 00:00:30;04 ▶ | Left marker cursor time position. You can edit this value manually | |
| < 00:01:22;21 ► P | Right marker cursor time position. You can edit this value manually | |
| + - • | Zoom: Increase or Decrease the slider timeline resolution to make editing neighbouring markers more comfortable (*) | NumPad + |
| | Story board Off/On: turn on/off the story board | |
| 40) | Audio waveform On/Off: turn off/on the audio waveform | |
| | Get screenshot: allows to make the screenshot of the chosen video frame Browse screenshot: allows to open folder with the created screenshot | |

| 4)) | Mute selected audio track. Muted track will not be present in either the preview or the output file. | |
|-----|--|--|
| 0 | Minimize selected track on the timeline. | |
| : | Displays zoom popup menu | |
| | Invert intervals selection | |

Sample fragments:

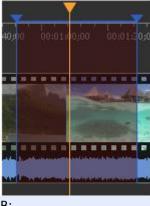
Fragment color

Description



This fragment is set to be kept. It will be present in the final movie. The blue color of markers means you can edit it (delete, set it to be kept, etc.)

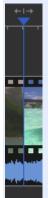
A:



A: Deployed state of the cut out fragment. This fragment is set to be deleted. It will not be present in the final movie

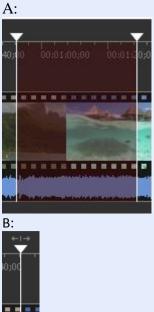
The blue color of markers means you can edit it (delete, set it to be kept, etc.).

B: Collapsed state of the cut out fragment.





This fragment is set to be kept. It will be present in the final movie. The white color of markers means that this fragment can not be edited.



A: Deployed state of the cut out fragment. This fragment is set to be deleted. It will not be present in the final movie.

The white color of markers means that this fragment can not be edited.

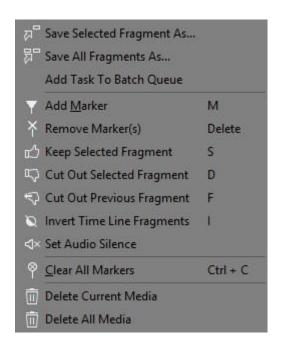
B: Collapsed state of the cut out fragment.

To place several files on the flexible timeline drag them to the right area of multitimeline after each file. View of Video Splitter with several files added on the multitimeline:



Notice: You can also paste the file from the MEDIA list to any time positions of already added file on the multitimeline.

Slider context menu



| Menu item | Description | Shortcut key |
|-------------------------------|---|-----------------|
| Save Selected Fragment As | Specify the output filename and immediately save the selected fragment (start the trimming process) | |
| Save All Fragments As | Specify the output filename and immediately save all fragments (start the trimming process) | |
| Add Task To Batch Queue | Allows to add Task to Batch Queue | |
| Add Marker | Add a new marker to the current slider cursor position | M |
| Remove Marker(s) | Remove the current marker or fragment | Delete |
| Keep Selected Fragment | Sets the type of the selected fragment to be kept | S |
| Cut Out Selected Fragment | Set the type of the selected fragment to be cut out | D |
| Cut Out Previous Fragment | Set the type of the previous fragment to be cut out | F |
| Invert Time Line Fragments | Invert time line fragments | I |
| Set audio silence | Allows to mute sound of the selected fragment | |
| Clear All Markers | Remove all markers | Ctrl + C |
| Delete Current Video | Allows to delete selected video or audio file from the multi-timeline | |

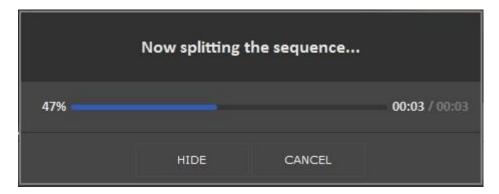
Preview window

The preview window is designed for easy navigation through media files and helps you put splitting markers as precisely as possible.

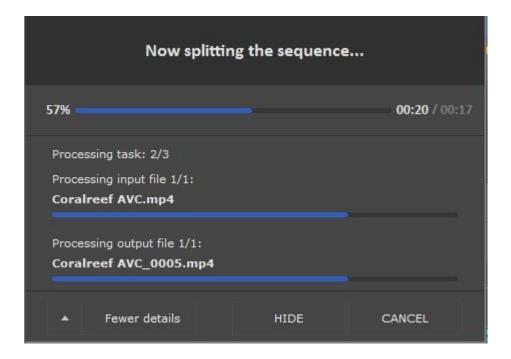


Progress window

The progress window indicates the current progress in percentage terms. You can cancel splitting by clicking the **Cancel** button or hide Splitter to the system tray by clicking the **Hide** button.



The Batch Processing progress window is shown below:



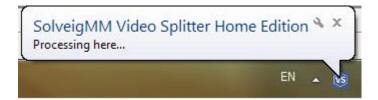
The upper progress bar shows the progress of the task being performed The lower progress bar shows the progress of all the tasks in the batch queue

The **Hide** button hides Splitter to the system tray. When trimming is complete, the Splitter window appears.

See also Splitter in system tray

Splitter in system tray

When you click the **Hide** button, Video Splitter is hiden to the system tray.



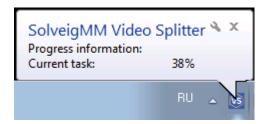
The following context menu is available when Video Splitter is in the system tray:



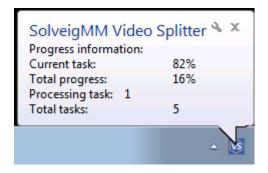
| Menu item | Description |
|---------------|---|
| Show Program | Restore Video Splitter from the system tray |
| Show Progress | Show the current progress |
| Exit Program | Cancel the trim process and exit |

The following progress information will be shown if you click the Video Splitter system tray icon:

One trimming task:



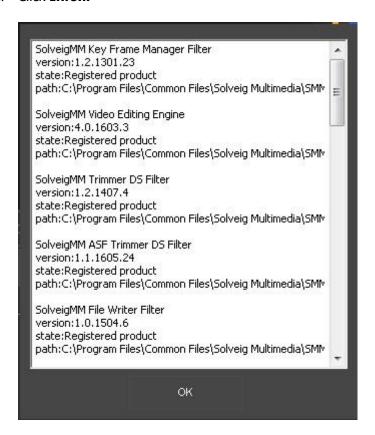
Batch processing:



Filters info window

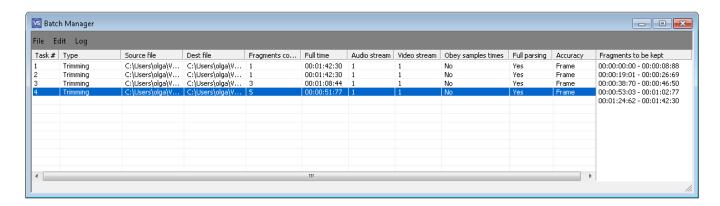
This window contains all the components necessary for Video Splitter to work properly.

- 1. Click the icon of in the upper left corner of the window (You can use the **Alt + Space** shortcut)
- 2. Click Info...



Batch manager window

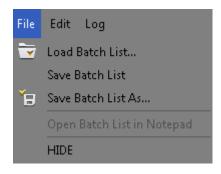
The Batch Manager available only in Video Splitter Business Edition. For more information see <u>destinction between</u> <u>Home Edition and Business Edition</u>.



The Batch Manager window is used to edit the batch queue.

Menu description:

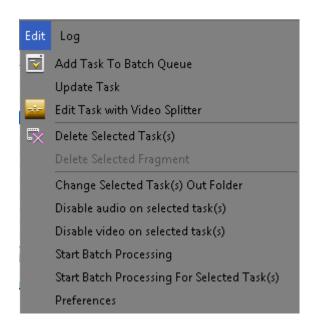
File menu



| Menu item | Description | Shortcut key |
|---------------------------|--|--------------|
| Load Task List | Load a saved batch queue from a file (*) | - |
| Save Task List | Save the batch queue to a file | - |
| Save Task List As | Save the batch queue to a file to the specified folder | - |
| Open Task List in Notepad | Open the batch queue in Notepad (*) | - |
| Hide | Close this window | - |

(*) - See Task List syntax in Batch file format

Edit menu



| Menu Item | Description | Shortcut key |
|---|---|--------------|
| Add Task To Batch Queue | Add the current Video Splitter task to the batch queue | Ctrl + A |
| Update task | Update the task in the batch queue according to the changes made in Video Splitter | U |
| Edit Task with Video Splitter | Edit the selected task in the Video Splitter main window | Enter |
| Delete Selected Task(s) | Delete the selected task(s) | Delete |
| Delete Selected Fragment | Delete the selected fragment(s) | Delete |
| Change Selected Task(s) Out Folder | Change the output folder for all selected files. The program will not change the output filenames | |
| Disable audio on the selected task(s) | Allows to disable audio content of the selected tasks | Delete |
| Disable video on the selected task(s) | Allows to disable video content of the selected tasks | |
| Start Batch Processing | Start batch processing | Ctrl + T |
| Start Batch Processing For Selected Task(s) | Start batch processing for the selected tasks | Shift + T |
| Preferences | Open preferences window | Ctrl + T |

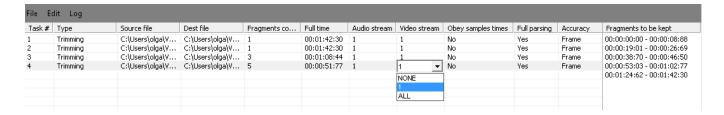
Log menu



| Menu Item | Description |
|----------------|--|
| Show log | Show or hide the log window |
| Write log file | Specify the filename all the messages will be written to during the batch manager operation. |

| Save log as | Save all log messages to a file |
|-------------|---------------------------------|
| Clear log | Erase all messages |

Task queue field



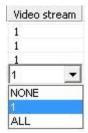
The list enumerates all tasks in the batch queue:

Column description:

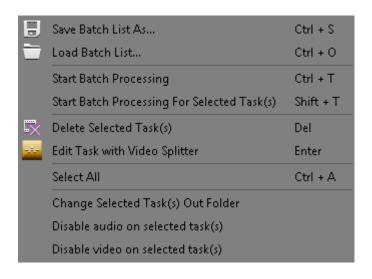
| Menu Item | Description |
|--------------------|--|
| Task # | Task number |
| Source file | Source filename |
| Dest file | Destination filename |
| Fragments count | Number of fragments to be cut |
| Full time | Total final file length |
| Audio stream | Audio stream number (*) |
| Video stream | Video stream number (*) |
| Obey samples times | Use an alternative synchronization algorithm. By default, it is disabled. If the final file is out of sync after repeated trimming, enabling this option should improve audio/video synchronization. (*) |
| Accuracy | Shows the selected editing accuracy. |

(*) - These fields can be edited in the batch manager window. Just click the cell with the left mouse button two times (not a double-click) or click the mouse wheel. You can select the necessary item from the drop-down list depicted below.

Changing settings in the task list window

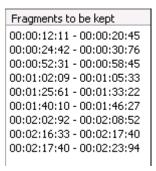


Context menu description:



| Menu item | Description | Shortcut key |
|---|---|--------------|
| Save Task List As | Save the batch queue to a task list file. | Ctrl + S |
| Load Task List | Load a batch queue from a task list file See Task List syntax in <u>Batch file format</u> | Ctrl + O |
| Start Batch Processing | Start batch processing | Ctrl + T |
| Start Batch Processing For Selected Task(s) | Start batch processing for selected task(s) | Ctrl + T |
| Delete Selected Task(s) | Delete the selected task(s) | Delete |
| Edit Task with Video Splitter | Edit the selected task in the main window | Enter |
| Select All | Select all tasks | |
| Change Selected Task(s) Out Folder | Change the output folder for all selected files. The program will not change the output filenames | |
| Disable audio on selected task(s) | Allows to disable audio content of the selected tasks | |
| Disable video on selected task(s) | Allows to disable video content of the selected tasks | |

Fragment list



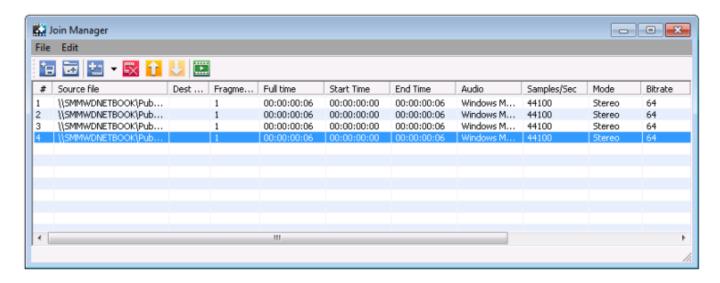
All the fragments to be cut out from the selected task are enumerated here.

Fragment list context menu



| Menu item | Description | Shortcut key |
|-------------------------------------|--|--------------|
| Delete Selected Fragment | Delete the selected fragment | Delete |
| Show the Fragment in Video Splitter | Show and select the fragment in the Video Splitter main window | Enter |

Join manager window



Join manager is used to join file with equal parameters like width/height of the frame, video/audio compression etc. Currently supported formats are listed here. The list enumerates all files to be joined together. Only the whole files can be joined for now.

Columns description:

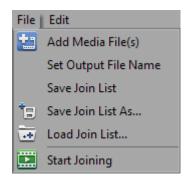
| Menu Item | Description | |
|-------------|--|--|
| # | File order | |
| Source file | Source file name | |
| Full time | Full time of current file to be appended to resulting file | |
| Start time | Start time of the current fragment of the current file(*) | |

| End time | End time of the current fragment of the current file(*) |
|-------------|---|
| Audio | Audio encoding |
| Samples/sec | Audio sampling frequency |
| Mode | Audio mode |
| Bitrate | Audio bitrate |
| Video | Video compression |
| Width | Video frame width |
| Height | Video frame height |
| Type | the file type |

(*) - only full files can be joined so start time is the beginning of the file and end time is the duration of the file.

Menu description:

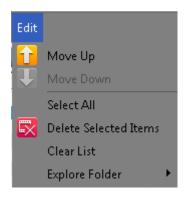
Menu "File"



| Menu item | Description | Shortcut key |
|-------------------|---|--------------|
| Add Media File(s) | Add files into the list(*) | Ins |
| Save Join List | Save current joining task into the file | |
| Load Join List | Load current task from the file | |
| Start Joining | Start the joining progress for the current task | |

(*) - if you try to add files with different parameters you will be prompted with the appropriate message in the satus bar of the "Join manager".

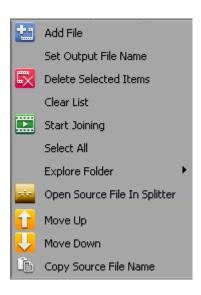
Menu "Edit"



| Menu Item | Description | Shortcut key |
|-----------------------|---|--------------|
| Move Up | Move selected file up in the list | Page Up |
| Move Down | Move selected file down in the list | Page Down |
| Delete Selected Items | Delete all selected items from the list | Del |

Clear List Delete all items from the list

Context menu:



The context menu commands duplicate menu commands for convenience, and it's "**Add**" and "**Move**" commands are applied to chosen file in the list (the highlighted one). Others are applied to the list in general.

Join manager toolbar



The toolbar also duplicate some commands that allow you to perform joining not opening the main Join Manager window.

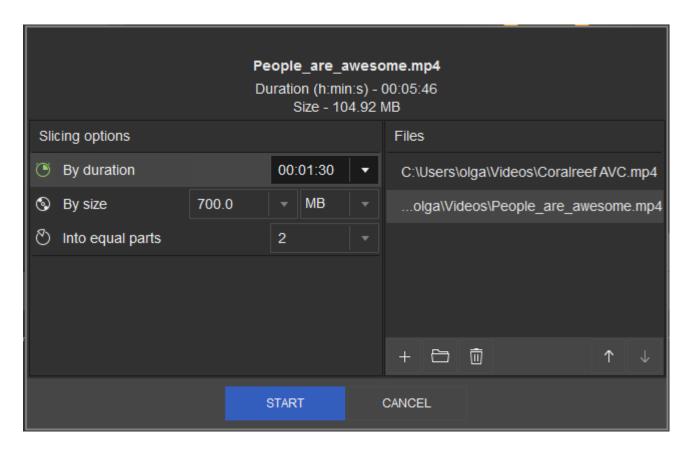
| Toolbar Item(left to right) | Description |
|-----------------------------|--|
| Start Joining | Starts current joining task |
| Show / Hide | Shows / Hides the Join manager main window |
| Add File(s) | Adds files into the list |
| Load List | Loads joining task from file |

Slicing window

Slicing window allows to fulfill splitting of the file into parts. Fragements length can be specified by duration, by size or by number of equal parts.

To open the slicing window follow to **Tools -> Slicing..** or **Edit -> Slicing..** menu and open one or several files you would like to slice.

The slicing window is depicted on the screenshot below:



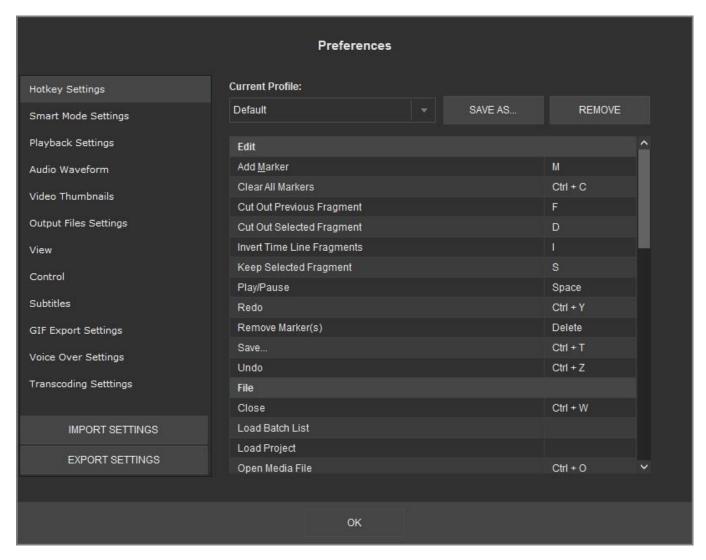
To start slicing, select the type of spliting: by duration, by size, into equal parts. Enter the value for the selected type of slicing. You can change the order of the files prepared for slicing using appropriate buttons with arrow icons.

This window also displays the duration and the size of the file or current project.

Click "Start" to begin the slicing.

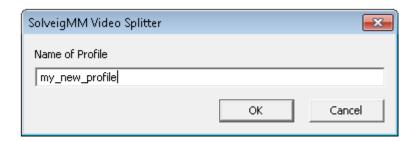
Preferences window

"Hot Keys Settings" tab



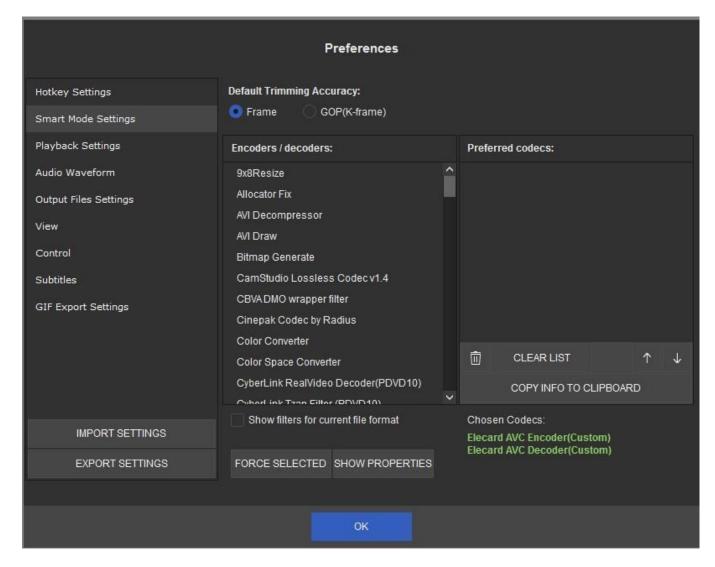
Video Splitter allows to choose the defined settings of your desired hot key profile.

Simply enter your hot key for the chosen operation (right column), click **Yes** in the appeared information window and then enter the desired name for the new profile, then click on the **OK** button. The new profile will appear in the **Current Profile** combobox.



You can remove your profile by selecting the needed one in the "**Current profile**" combobox and clicking on the **Remove** button.

"Smart Mode settings" tab



Smart Mode Settings window allows to choose the decoder and encoder that will be used in re-encoding process of first and last GOP when frame accuracy trimming (Smart Mode) is enabled.

To select the desired coden, choose one or several from the **Encoder/decoders** list and press the **Force selected** button.

The chosen codec will appear in the **Preferred codecs** list.

You can choose several codecs from the **Encoder/Decoder** list. All they will be placed to preferred codec "**Preferred codecs**" area.

Important notice: the decoder or encoder can be forced only for **WMV** and **AVI**.

Video Splitter uses codec that will be suitable for the format of the opened file.

You can use **Move Up** and **Move Down** buttons, to change the priority of the chosen codec.

"Playback Settings" tab

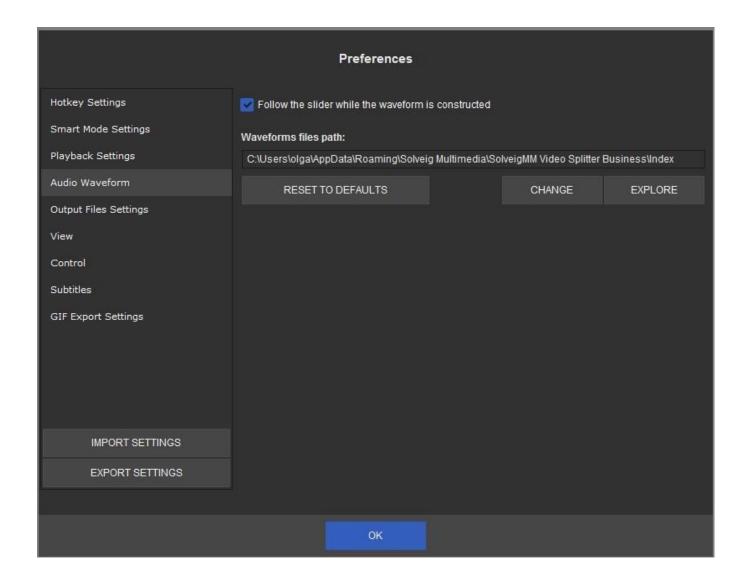
| Preferences | | |
|---|---|--|
| Hotkey Settings Smart Mode Settings Playback Settings Audio Waveform Output Files Settings View Control Subtitles GIF Export Settings | Video Renderer Default VMR-7 VMR-9 EVR AVI Demultiplexer SolveigMM AVI Splitter Microsoft AVI Splitter Restore frames with errors on AVC video RESET TO DEFAULTS | |
| IMPORT SETTINGS EXPORT SETTINGS | | |
| | ок | |

This tab allows to select video renderer.

If the default video renderer is not worked, then it is possible to select another video renderer.

EVR video renderer is recommended for users of Windows 7 if fps of video is more then 30.

"Audio Waveform" tab

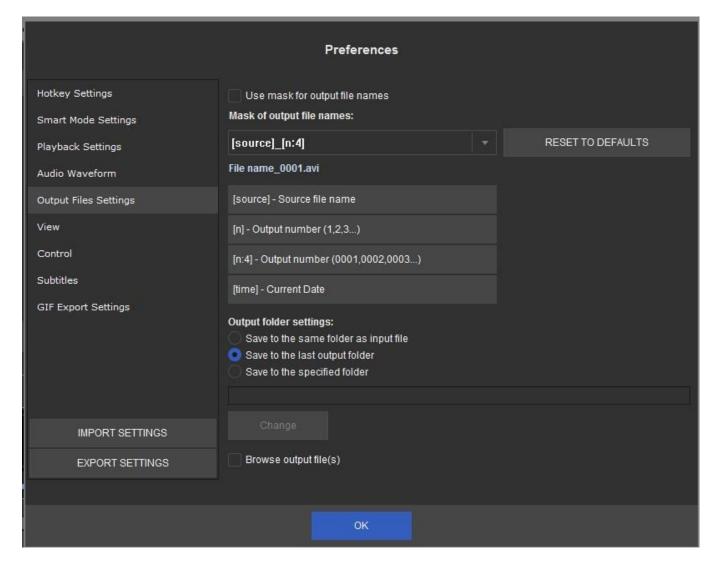


"Waveforms files path" setting defines waveform data cache path, that is used by Video Splitter.

"**Follow the slider while the waveform is constructed**" defines the way of waveform building. When the option is enabled the waveform will be built from the selected by the user slider position. Tick this checkbox if you would like the waveform building follow the slider movements.

If you would like you can change the file path for this file to keep free space on the system drive.

"Output Files Settings" tab



Output files settings tab allows to set mask of the output file and select output folder settings. The files mask is intended to generate the names of the output files, using build-in macroses.

The mask is the template that consist of macros. It is possible to add predefined macros using special buttons under the "Mask of output file names" line to current cursor position at template edit box.

Output file mask format:

[source] uses the name of the source file for the target.

[n] macros automatically numbers the (one or more) target. Target will automatically be numbered, if parameter is set, even if source name is not used.

[n:4] macros is the current number of fragment with defined minimum number of characters printed. Zeros are added to the left of the values.

[time] macros is intended for defining the current date time of the output file name.

[n:resetnextday] output number will be incremented during a day and reset nte next day.

[time] output current date and time in the following structure: YYYY_MM_DD_hh_mm_ss.

[time:YYYMMDD] output current date and time in the user-defined structure. in this example - YYYYMMDD.

[computerid] outputs the idendificator of the working PC. It can be set in the Computer ID field.

To add the required macros just click on the button with the macros name and then change it in the **Mask of the output files names** field if needed.

You can change the order of this macroses to get the files with names that will be suitable for you.

To reset the mask to initial view, just click on the **Reset to defaults** button.

Below please find examples of mask templates and the output files names.

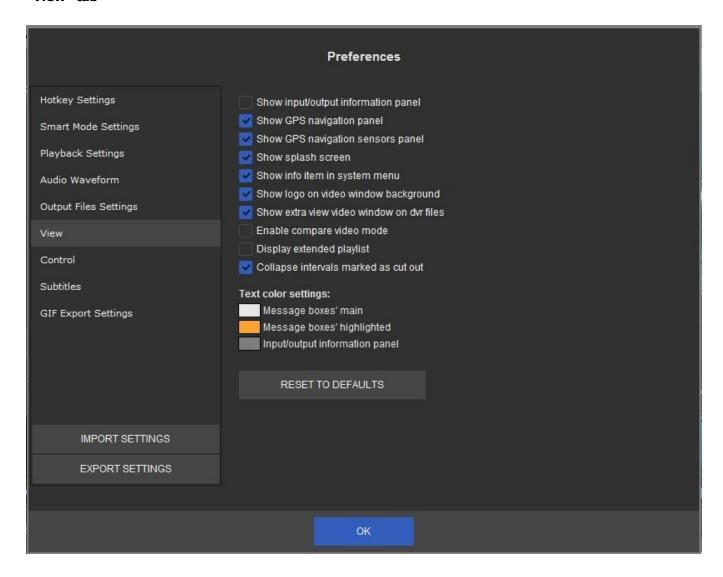
For example we have the **Video.avi** input file and would like to save three fragments from the file. We make this operation on September 25, 2012 at 18:50:30.

| The mask template | The output file name |
|---------------------|---|
| [n] | 1.avi 2.avi 3.avi |
| [source]_[n] | Video_1.avi Video_2.avi Video_3.avi |
| [source]_[n:2] | Video_01.avi Video_02.avi Video_03.avi |
| [source]_[n]_[time] | Video_1_2012_09_25_18_50_30.avi Video_2_2012_09_25_18_50_30.avi Video_3_2012_09_25_18_50_30.avi |

Output folder settings allows to define the output folder.

It is possible to save to the same folder of the input file, save to the last output folder or save to the specified folder.

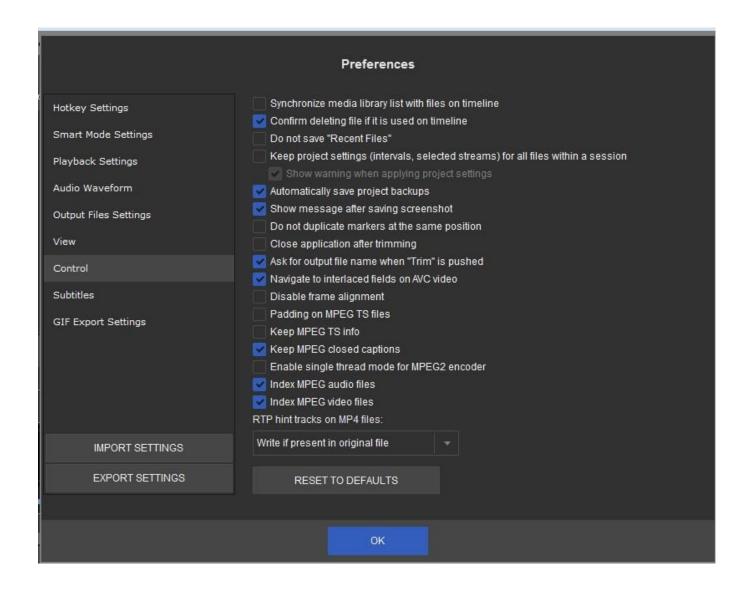
"View" tab



| Setting | Description |
|---|--|
| Show input/output information panel | Allows to show or close input/output information panel |
| Show GPS navigation panel | Allows to show or close GPS navigation panel |
| Show GPS navigation sensors panel | Allows to show or close GPS navigation sensors panel |
| Show splash screen | Allows to show or close splash screen on the product start |
| Show info item in system menu | Allows to show info item in system menu |
| Show logo on video window background | Allows to show or hide logo on video window background |
| Show extra view video window on dvr files | Allows to show extra view video window of rear camera on dvr files |
| Enable compare video mode | Allows to show compare video mode |

It is possible to set in this tab the text color for message boxes and text for input/output information panel.

"Control" tab



| Setting | Description |
|---|--|
| Don't save "Recent files" | Allows to disable saving of recent files in Recent files history |
| Keep project settings (intervals, selected streams) for all files within a session | Allows to save project settings (intervals, selected streams) for all files within a session |
| Show warning when applying project settings | Allows to enable or disable showing of warning message when applying project settings |
| Automatically save project backups | Allows to automatically save project backups |
| Show message after saving screenshot | Allows to show the message after saving of screenshot |
| Don't duplicate markers at the same | Disallows duplicating markers at the same position |

| position | |
|---|--|
| Close application after trimming | Allows to close automatically the application after trimming |
| Ask for output file name if "Trim" pushed | If chosen, the application asks destination file name on trimming |
| Navigate to interlaced fields on AVC video | Allows to navigate to interlaced fields on AVC video |
| Disable frame alignment | Allows to disable frame alignment. This feature is required for the accurate editing of audio. With this feature the selected position on the timeline is aligned accurately according the selected time position. Otherwise the selected position is aligned according the time position of the frame beginning that leads to changing from constant frame rate to variable for video as a side effect. |
| Padding on MPEG TS files | Allows to make padding on MPEG TS files |
| Keep MPEG TS PIDs | Keeps elementary transport stream PIDs in transport stream format |
| Saving MPEG2 closed captions data on reencoded frames | Allows saving closed captions data in VES stream on re-encoded frames |
| Enable single thread mode for MPEG2 encoder | Option enables this mode in Elecard encoder. If it is disabled it generates at different runs on the same raw data different encoded stream) |
| Index MPEG audio files | Allows to index MPEG audio files |
| Index MPEG video files | Allows to index MPEG video files |
| RTP hint tracks on MP4 files | Option is used for the preservation of RTP hint track information used by the streaming server (eg Darwing) in the broadcasting. Without this data for example Darwing streaming server will not work with the output file. |

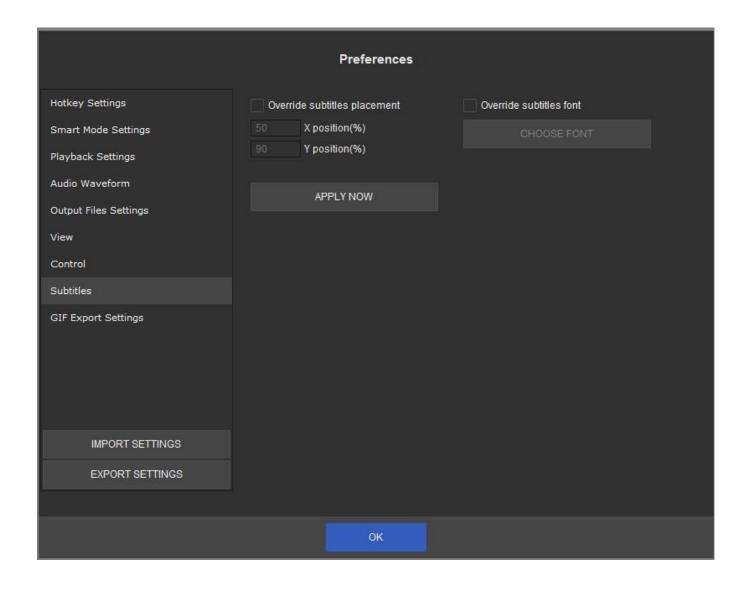
It is possible to set in this tab the text color for message boxes and text for input/output information panel.

"Subtitles" tab

The "Subtitles" tab allow to make settings for placement and font of subtitles for output files.

It is possible to select new position of subtitles in the resulted file by clicking the "Override subtitles placement" and by entering new values of X, Y positions.

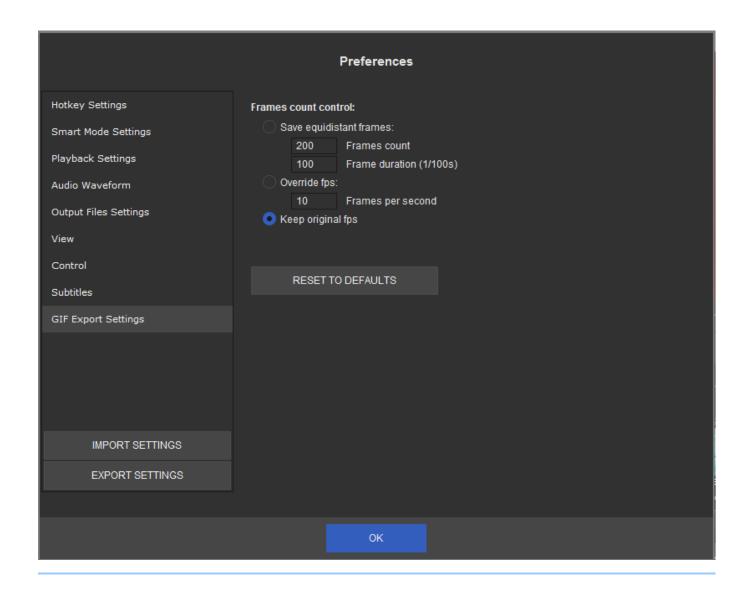
To change the subtitles font, please select "Override subtitles font" and click the "Choose font" button.



"GIF Export Settings" tab

"GIF Export Settings" tab allow to make special settings for GIFs that Video Splitter could create. You could set frames count control:

- Save equidistant frames:
- Frames count
- Frame duration (1/100s)
 - Overide fps set frames per second value
 - Keep original fps



Using Solveig Multimedia Video Splitter

In this section:

- Opening a source file
- <u>Using the splitting controls</u>
- Saving a media file
- Starting the trimming process
- Working with the batch queue
- Working with MPEG-2 files

Opening a source file

Operations with files are performed via the menu bar in Solveig Multimedia Video Splitter.

To open a source file, go to the menu bar, select **File** -> **Open Media File...** Select your video file in standard **Open File** dialog box. This file will not be changed, deleted or moved during the splitting process.

To set the destination file, select **File** -> **Output File...** and specify the name for the destination file. If a file with the same name already exists, you will be asked if you want to replace the old file with the new one. You can overwrite the old file or specify a new filename for the destination file.

If the file you edit contains several audio and/or video streams then after the file opening you will see <u>Stream selection window</u>, where you can select video and audio tracks for preview and editing.

See also: File menu, Stream selection window.

Using the splitting controls

Before you start the trimming process, you should define the fragments you want to be cut or kept in the output file.

To add a new fragment to the slider:

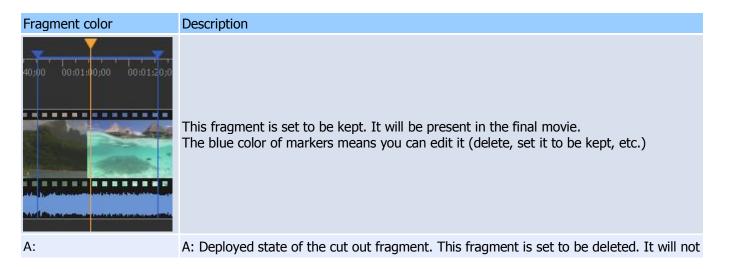
- 1. Navigate to the beginning of the future interval
- 2. Press the Set New Marker key (M) or select the Edit -> Set New Marker menu item from the menu bar
- 3. Navigate to the end of the future interval
- 4. Repeat step 2
- 5. If necessary, mark the interval as "Cut Off" by selecting Edit -> Cut Off Selected Fragment (D) or pushing

the "Scissors" (X) button

6. If you need to change the start or stop interval positions, just double click on the collapsed marker and drag the markers to their new positions



Sample intervals:





be present in the final movie

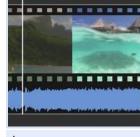
The blue color of markers means you can edit it (delete, set it to be kept, etc.).

B: Collapsed state of the cut out fragment.





This fragment is set to be kept. It will be present in the final movie. The white color of markers means that this fragment can not be edited.



A:



A: Deployed state of the cut out fragment. This fragment is set to be deleted. It will not be present in the final movie.

The white color of markers means that this fragment can not be edited.

B: Collapsed state of the cut out fragment.

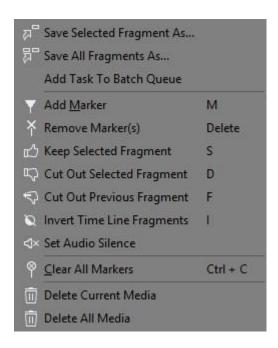


Splitting controls

| Window Item | Description | Shortcut key |
|-----------------------------------|---|--------------|
| Y | Add New Marker: Add a new marker to the current slider cursor position. | М |
| * | Delete Marker: Remove selected marker or markers. | Delete |
| [*] | Set audio silence: allows to set audio silence for the chosen fragment | |
| Save | Save: Start trimming or batch processing (if there are any tasks in the batch queue) | Ctrl + T |
| | Browse output file | |
| 4 00:00:30;04 ▶ | Left marker cursor time position. You can edit this value manually | |
| ◆ 00:01:22;21 | Right marker cursor time position. You can edit this value manually | |
| + - | Zoom: Increase or Decrease the slider timeline resolution to make editing neighbouring markers more comfortable (*) | NumPad + |
| | Story board Off/On: turn on/off the story board | |
| 40) | Audio waveform On/Off: turn off/on the audio waveform | |
| | Get screenshot: allows to make the screenshot of the chosen video frame | |
| | Browse screenshot: allows to open folder with the created screenshot | |
| 4) | Mute selected audio track. Muted track will not be present in either the preview or the output file. | |
| • | Minimize selected track on the timeline. | |



Slider context menu



| Menu item | Description | Shortcut key |
|----------------------------|---|-----------------|
| Save Selected Fragment As | Specify the output filename and immediately save the selected fragment (start the trimming process) | |
| Save All Fragments As | Specify the output filename and immediately save all fragments (start the trimming process) | |
| Add Task To Batch Queue | Allows to add Task to Batch Queue | |
| Add New Marker | Add a new marker to the current slider cursor position | M |
| Remove Marker(s) | Remove the current marker or fragment | Delete |
| Keep Selected Fragment | Sets the type of the selected fragment to be kept | S |
| Cut Out Selected Fragment | Set the type of the selected fragment to be cut | D |
| Cut Out Previous Fragment | Set the type of the previous fragment to be cut | F |
| Invert Time Line Fragments | Invert time line fragments | I |
| Set audio silence | Allows to mute sound of the selected fragment | |
| Clear All Markers | Remove all markers | Ctrl + C |
| Delete Current Video | Allows deleting the current video file from the multitimeline | |

Starting the trimming process

To start the trimming process after you set all the fragment you want to be deleted/saved, select **File** -> **Save Media File As...** (for details, see **File menu**) or click the **Save Media File As...** quick button (for details, click the

SolveigMM Video Splitter

Trim button (for details, see Splitting controls)

Note: You can save (trim) any selected fragment using the **Save Selected Fragment As..** item from the slider context menu (for details, see <u>Splitting controls</u>)

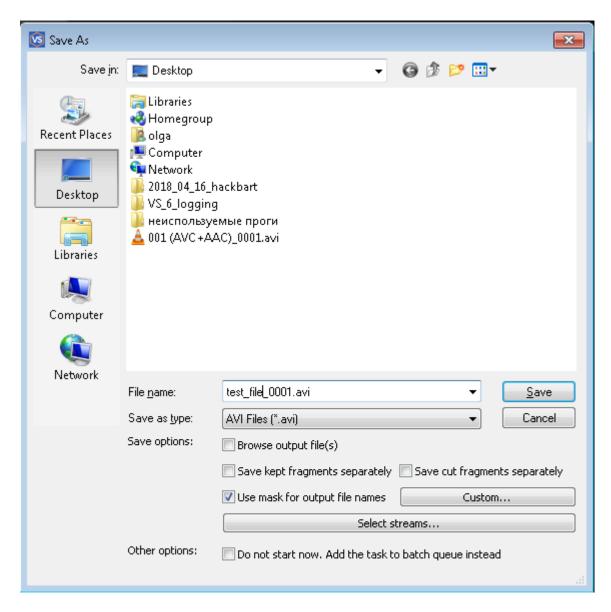
Working with the batch queue

To create a new batch queue (task list):

- 1. Open the media file you want to edit, set all the fragments you want to be saved/removed. For details, see Opening source file and Solveig Multimedia Video Splitter interface
- 2. Add the task to the queue. To do it, select Tools -> Batch Manager -> Add Task To Batch Queue
- 3. Repeat steps 1 and 2 for all the files you want to process.

See also **Tools** menu, Keyboard shortcuts

Also, you can add a task to the queue by selecting **File** -> **Save Media File As...** from the menu, or clicking the <u>Information panel</u> quick button, or selecting the **Save selected fragment as..** item from the slider context menu (for details, see <u>Splitting controls</u>). You should select the **Use mask for output files names** checkbox as shown below:



To open the Batch Manager window, select **Tools** -> **Batch Manager** -> **Show Batch Manager** on the menu or select **Tools** -> **Batch Manager** -> **Load Task List...** to open a task list file.

The Batch Manager window allows you to change audio/video streams, the **Obey samples times** attribute, delete any fragments, etc. For details, see <u>Tasks queue field</u>.

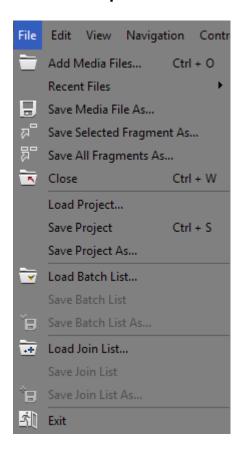
To edit a task, you have to open it in Video Splitter, change its fragments or settings and update it:

- 1. Select the task you need to edit. Select the **Edit** -> **Edit Task with Video Splitter** menu item or the **Edit Task with Video Splitter** item from the context menu or press the **Enter** hot key. For details, see <u>Tasks queue field</u>, <u>Keyboard shortcuts</u>
- 2. Edit the task in the Video Splitter main window. To view the existing fragments in Video Splitter, you can use the <u>Fragment list field</u>. To do it, select **Show the Fragment in Video Splitter** from the context menu or press the **Enter** hot key. For details, see <u>Keyboard shortcuts</u>
- 3. After you edit the trimming settings in Video Splitter, update the task in the batch queue by selecting the **Tools** -> **Batch Manager** -> **Update Task** menu item or the **Edit** -> **Update Task** item in the Batch Manager window.

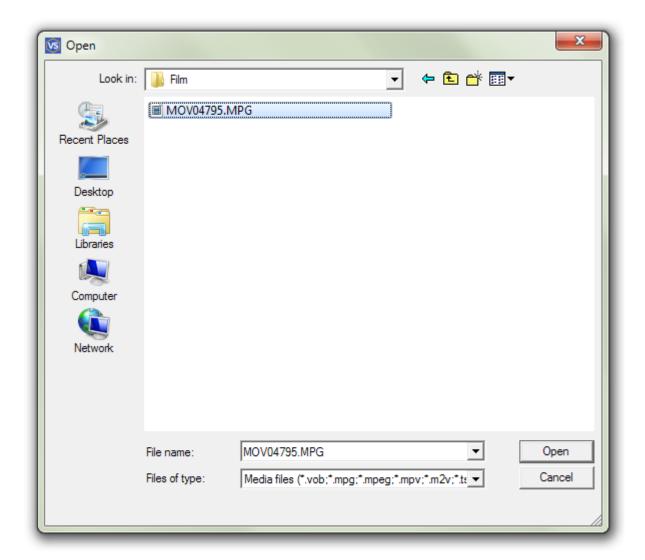
Working with MPEG-2 files

This section describes how to use SolveigMM Video Splitter with MPEG-2 video.

Open the MPEG-2 video file you want to split: Select **File** -> **Open Media File...** from the menu.



The standard Windows **Open File** dialog box will appear.



Select the video file and click **Open**.

Note. Indexing the MPEG file is recommended but not required.

With no index, you will not be able to use K-Frames and the trimming process can be inaccurate. You could enable/disabple option in the **Preferences -> Control** tab to "Index MPEG audio" or "Index MPEG video files".

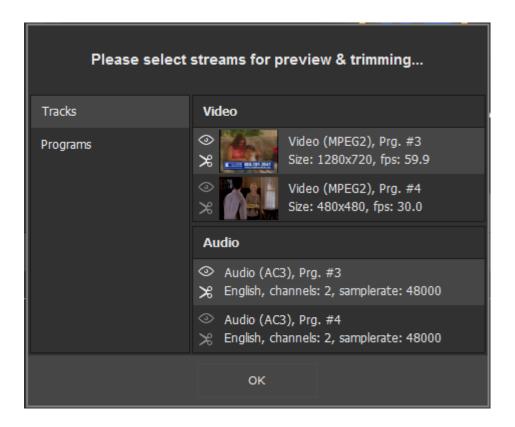
If you cancel the indexing process or choose not to index the file, you can index it later in the following way: select **Tools** -> **Index MPEG file in the folder or Tools** -> **Index MPEG files from Media list** from the menu.

If MPEG2 file contains several video or audio tracks then the <u>Stream selection window</u> will be opened.

It contains two tabs: **Programs** and **Tracks**, where you can select the desired stream by clicking the icon near the appropriate stream.

The icon with an eye () shows what stream is selected for preview.

The icon with the scissors () shows what stream is selected for editing.



| Item of Window | Description | Shortcut key |
|-------------------|--|-----------------|
| ⊗ | The stream is selected for preview | - |
| ⊘ | The stream is not selected for preview. It will be not shown. | - |
| * | The stream is not selected for editing | - |
| × | The stream is not selected for editing. It will not be saved in the output file. | - |

What to do next is described in **How-to section**.

How to...

- register Solveig Multimedia Video Splitter
- open a video file
- <u>select video and audio streams</u>
- preview a video clip
- <u>navigate in your video</u>
- set and delete markers
- set fragments to be kept or cut
- <u>fix audio/video synchronization</u>
- start splitting

start joining

How to register Solveig Multimedia Video Splitter

You can license this program right from our web page at http://www.solveigmm.com/en/products/video-splitter/. Click the **Buy Now** link there. We offer many different ways to order it, including secure web forms, phone, fax and mail orders, as well as corporate purchase orders. However, since the order information is likely to change in the future and your downloaded copy of Video Splitter may be several months or even years old, you should access our webpage for the most current order information.

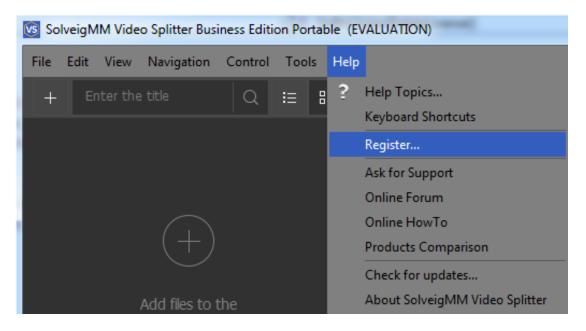
To find the current prices, please visit us on the web at http://www.solveigmm.com/.

After ordering you will get an activation key of the following format: "XXXXX-XXXXX-XXXXX".

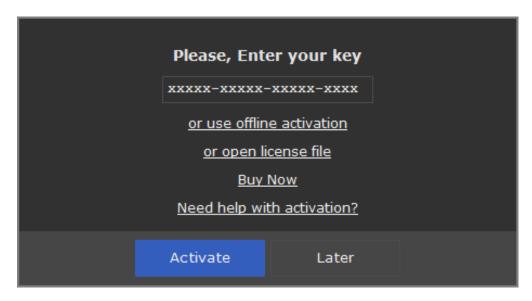
Online Activation

To activate your product online please do the following:

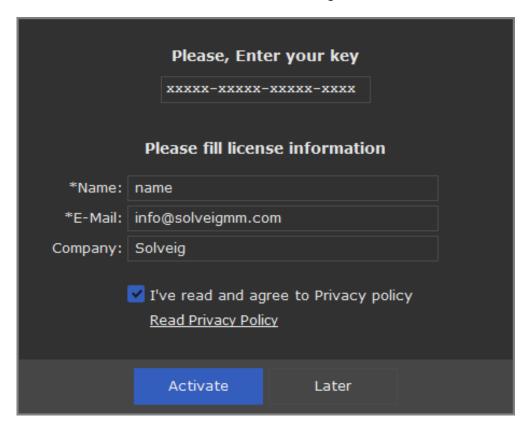
1. Open Video Splitter and click "Help->Register" menu item.



2. Enter your Activation key and click "Activate" button. This method requires a connection to the Internet.



3. Fill the license information fields and click "Activate" button again.

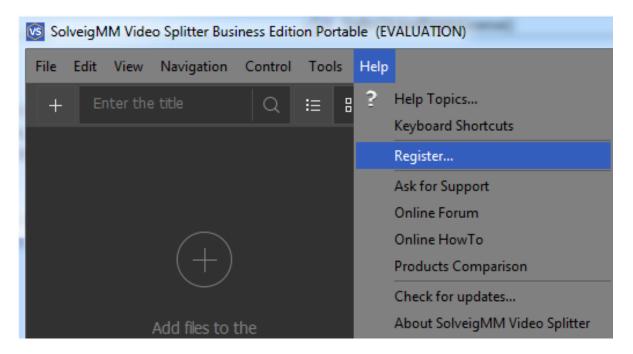


Offline Activation

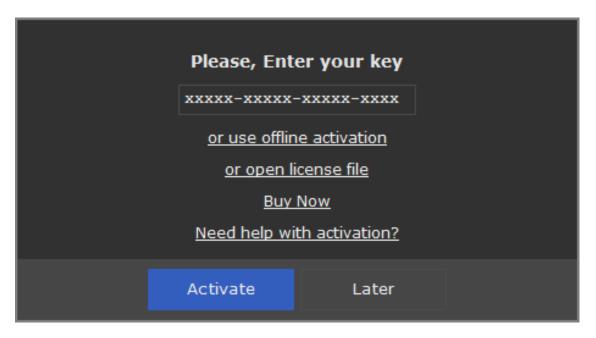
If for some reason you can't activate Video Splitter online there is an option of the offline activation (available only in Business version of the product) that doesn't require the Internet connection on the computer where Video Splitter is installed

To activate the product offline please do the following:

1. Open Video Splitter and click "Help->Register" menu item.

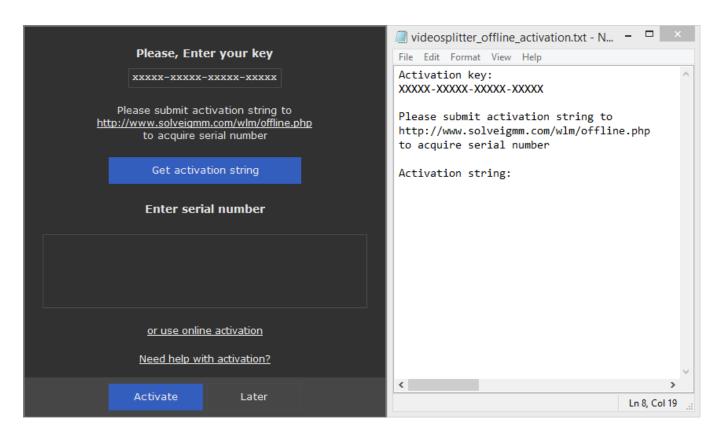


2. Click "or use offline activation" link.



3. Enter your activation code and click "Get activation string" button.

"videosplitter_offline_activation.txt" should appear with instructions on how to get a serial number to complete the activation process.



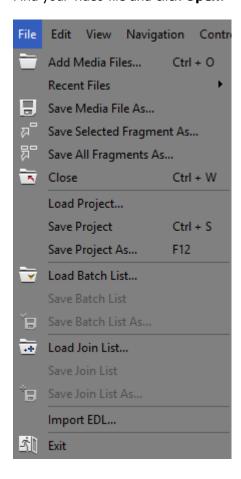
4. Open the URL http://solveigmm.com/wlm/offline.php in your web-browser and paste the activation string then click "Submit" button. As a result you will get a Serial Number. To complete the activation please copy the serial number from a web-browser and paste it into the appropriate field of the Video Splitter licensing dialog. Then click "Activate" button again.



How to open a video file

To open the video file you want to split, do the following:

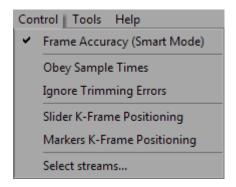
- 1. Select **File** -> **Open Media File...** from the menu. The standard Windows **Open File** dialog will appear.
- 2. Find your video file and click **Open**.



See also Supported file formats, File menu

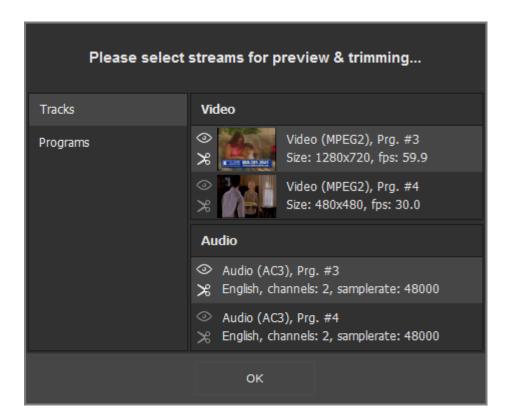
How to select video and audio streams

Solveig Multimedia Video Splitter allows you to choose the audio and video streams that will be rendered into the final movie. To choose the streams, open the **Control** menu and follow "**Select streams...**" menu item.



The special window will be opened. It is possible to select audio and video streams for the preview and editing here.

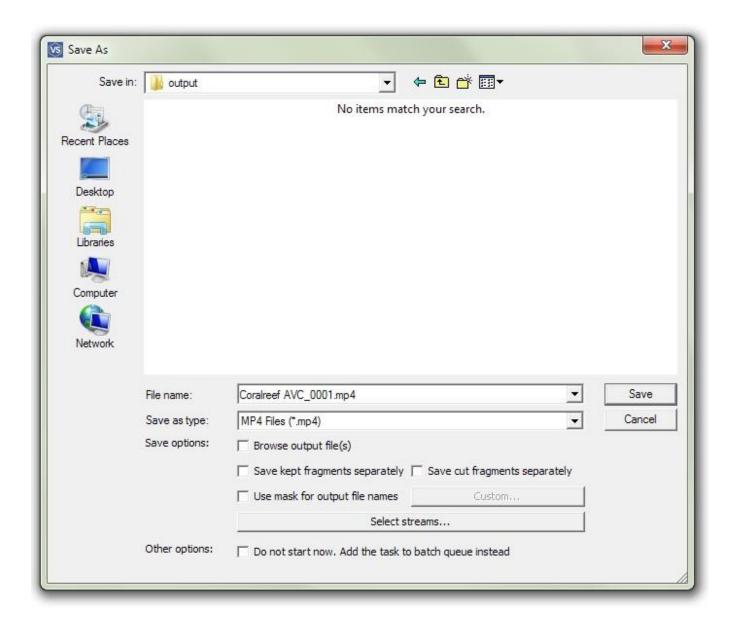
You can see this window also after opening of any file with multiple video or audio streams.



Choose the stream for preview by clicking the icon with an eye (). To select streams you want to be present in the output file click the icon with scissors ().

In the example on the above screenshot the one video stream and two audio streams were selected for editing.

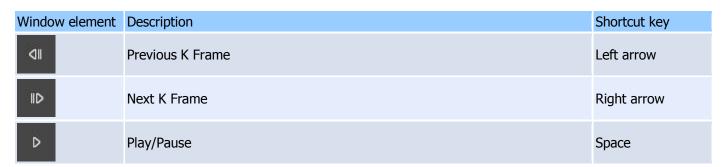
You can also open the stream selection window by clicking the "**Select streams..**." button from the dialog window that opens after the trimming start.



See also **Control** menu, Stream selection window

How to preview a video clip

- 1. Open a video file
- 2. To start playback, click the **Play** button. Also, you can use the **Edit->Play** menu item or the Space shortcut key.
- 3. To pause playback, click the **Pause** button. You can use the **Edit** -> **Pause** menu item or the Space shortcut key.



| П | | |
|----|----------------|--------------------|
| ID | Next Frame | Ctrl + Right arrow |
| ۵۱ | Previous Frame | Ctrl + Left arrow |

See also Navigation controls, Edit menu, Keyboard shortcuts

How to navigate in your video

- 1. To advance to the next K frame, click the **Next K Frame** button or select the **Edit->Next K Frame** menu item from the menu. You can also use the **Right arrow** shortcut key.
- 2. To jump to the previous K frame, click the **Previous K Frame** button or select the **Edit->Previous K Frame** menu item. The **Left arrow** shortcut key is also available.
- 3. Left-click the timeline at the position you need.
- 4. Type the necessary time in the edit box in the Navigation controls in the HH:MM:SS.mS format. The position will be automatically adjusted to the nearest previous K frame.

| Window element | Description | Shortcut key |
|----------------|------------------|--------------------|
| ۵۱۱ | Previous K Frame | Left arrow |
| IID | Next K Frame | Right arrow |
| ۵ı | Previous Frame | Ctrl + Left arrow |
| ID | Next Frame | Ctrl + Right arrow |

See also Navigation controls, Edit menu, Control menu, Keyboard shortcuts

How to set and delete markers

To select fragment you need to do the following:

- 1. Navigate to the position where you want to add it.
- 2. Press the Set new marker key (M) or select the Edit -> Set New Marker menu item

To delete a marker:

- 1. Left-click the marker you want to delete.
- Press Remove marker/fragment key (Delete) or select the Edit -> Remove marker or markers menu item.

To delete all markers from the timeline, select the **Edit -> Clear All Marks** menu item or use the **Ctrl + C** shortcut

Note: markers will be deleted without any confirmation

| Window element | Description | Shortcut key |
|----------------|------------------------|--------------|
| T | Add Marker | М |
| * | Delete Selected Marker | Delete |
| | Clear All Markers | Ctrl + C |

See also **Edit** menu, Keyboard shortcuts, Splitting controls

How to set fragments to be kept or cut

To define a new fragment:

- 1. Navigate to the beginning of the future fragment.
- 2. Press the Add a marker key (M) or select the Edit -> Set New Marker menu item.
- 3. Navigate to the end of the future fragment.
- 4. Repeat step 2.

To adjust the time of the fragment start and stop:

- 1. Deploy the collapsed interval. Select the marker at the beginning/end of the fragment.
- 2. Drag the marker to the necessry position (or use the the **Next K Frame / Previous K Frame** buttons) or timebox of the appropriate marker.

To delete a fragment:

- 1. Left-click the fragment you want to delete.
- Press the Remove marker(s) key (Delete), or select the Edit -> Remove marker or markers menu item.

Note: the fragment will be deleted without any confirmation.

To set a fragment to be kept:

- 1. Left-click the fragment you want to keep.
- 2. Right mous click and select "**Keep On Selected Fragment** key (S)" in the opened context menu or select the **Edit -> Keep On Selected Fragment** menu item.

To set a fragment to be cut:

- 1. Left-click the fragment you want to delete.
- Press the Cut Off Selected Fragment key (D) or select the Edit -> Cut Off Selected Fragment menu item.

| Window element | Description | Shortcut key |
|----------------|---|--------------|
| Y | Add New Marker: Add a new marker to the current slider cursor position. | М |
| * | Remove Selected Markers: Removes selected markers from the timeline. | Delete |

See also Edit menu, Keyboard shortcuts, Splitting contros

How to fix audio/video synchronization

Solveig Multimedia Video Splitter is designed to split media files without loosing audio/video synchronization. However, some media files lose synchronization after splitting. To avoid losing sync, you can try to do the following:

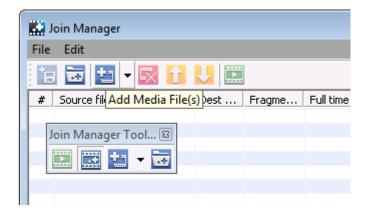
- 1. Open your video file.
- 2. Define the fragments you want to keep in the final movie.
- 3. Select the **Control -> Obey Sample times** menu item.
- 4. Continue the splitting process as usual.

See also **Control** menu, How to set fragments to be kept or cut

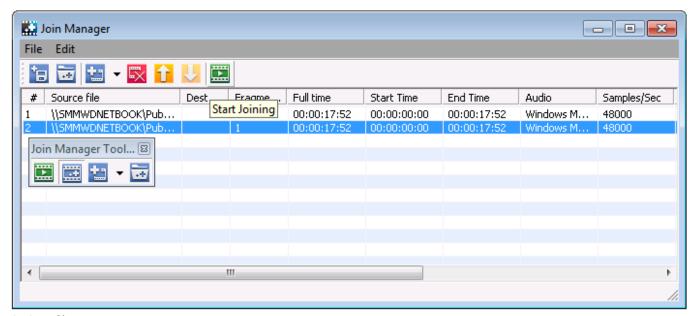
How to start joining

To start the joining process:

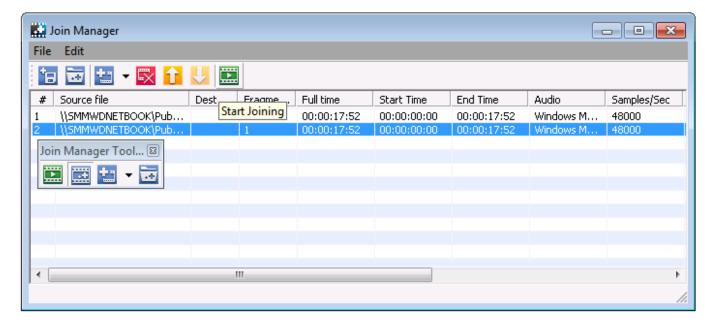
1. Add the video (audio) files you want to join either using drag'n'drop or by clicking the **Add Media File(s)** button.



2. If the files have different parameters, you will be notified.



- 3. Sort files.
- 4. Start joining by clicking the **Start Joining** button or selecting the **File->Start Joining** menu item.



5. Enter the name of the destination file and click Save. The progress bar will appear and show the progress.

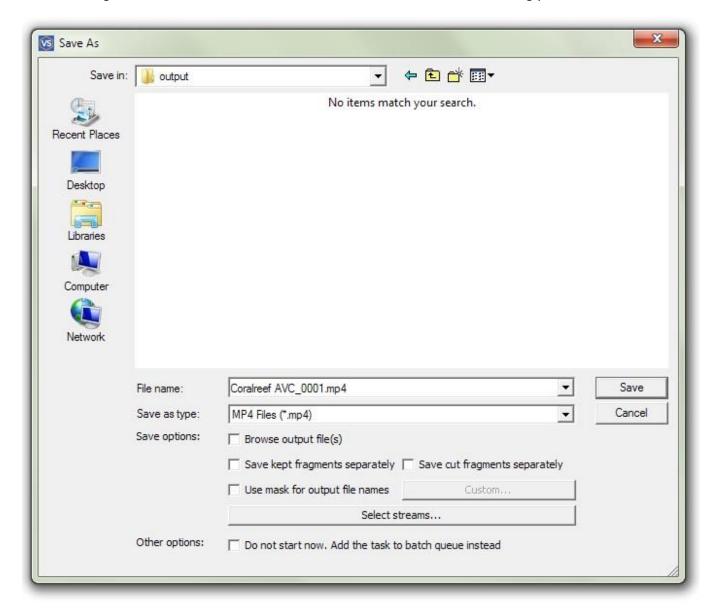
How to start splitting

To start the trimming process:

- 1. Open your video file.
- 2. Define the fragments you want to keep in the final movie
- 3. Press the Trim key (Ctrl + T) or select **Edit -> Start Trimming**
- 4. If you are asked for a file name, enter a name for the destination file and click **Save**.

You can also select streams you would like to be edited and saved in the output file by clicking the "**Select streams...**" button. The progress bar will appear and showing that splitting is in progress.

Note: selecting the **File -> Save Media File As...** menu item also starts the trimming process.



| Window element | | element | Description | Shortcut key |
|----------------|---|---------|----------------------------------|--------------|
| a di | P | Save | Save: Start the trimming process | Ctrl + T |

See also **Edit** menu, <u>Keyboard shortcuts</u>, <u>Splitting controls</u>, <u>Batch manager</u>

SolveigMM Batch Splitter console utility

The SolveigMM Batch Splitter console utility (SMM_BatchSplit.exe) duplicates the SolveigMM Video Splitter video/audio trimming functionality in the console mode. It allows you to trim AVI, ASF/WMV/WMA, MPEG-1, MPEG-2, MP4, MOV, MKV, AVCHD, MPEG Audio files (See <u>Supported File Formats</u> for more details). The files and parameters should be described in the batch file (*.xtl) specified as the input parameter to the utility.

XTL batch file could be obtained by "Save Task List As..." command from Video Splitter's main window or <u>SolveigMM Video Splitter Batch Manager</u> "File" menu. See <u>Batch file structure</u> and <u>XTL batch file samples</u> for more details.

Usage:

BatchSplit.exe [-L logfilename] [-LD log_dir] [-P profile] file.xtl

Parameters:

-L logfilename: Log filename. By default it equals to "BatchSplit.log". Use the NULL value to disable logging.

-LD log_dir: Log files directory. Create log files from components involved in operation.

-P profile: Set codecs profile.

file.xtl: XTL Batch file path name.

Example:

BatchSplit.exe -L MySplitTaskLog.log "D:\Video\SplitTasks\MySplitTask.xtl"

Note: SolveigMM Batch Splitter console utility available only in SolveigMM Video Splitter Business Edition.

For more information see <u>destinctions</u> between Home Edition and Business Edition.

Batch file structure

Video Splitter batch files have the *.xtl, *.jxtl extensions and are based on the DirectShow Editing Services XTL format.

Note: All the sections and attributes are case-sensitive and must be in the lower case. The values must be enclosed in quotation marks ("").

timelines Element

The timelines element is the root XML node.

Example:

<timelines version="2">

</timelines>

Attributes:

| Attribute name | Possible values | Required | Description |
|----------------|-----------------|----------|--|
| version | 2 | Yes | The name attribute specifies the output filename with its path |

Parent/Child Information:

| Parent | Children |
|--------|-----------------|
| none | <u>timeline</u> |

timeline Element

The timeline element describes particular timeline.

Example:

<timeline>

</timeline>

Attributes:

no attributes specified.

Parent/Child Information:

| Parent | Children |
|------------------|--------------|
| <u>timelines</u> | <u>group</u> |

group Element

The group element defines output files parameters.

Example:

<group name="..." mode="..."> </group>

Attributes:

| Attribute name | Possible values | Required | Description |
|----------------|------------------------------------|----------|--|
| output | string with file path name | No | Specifies the output file name with it's path |
| out_type | see <u>Output file types</u> | No | Specifies output file type. Note: This parameter should be set depending on input format and video audio codec. |
| outdir | string with file path | No | Specifies the output files' path for tasks with multiple files output |
| outmask | see <u>Output file mask format</u> | No | Specifies the output files' mask for task with multiple files |
| compatibility | see Compatibility types | No | Specifies the output files compatibility |

Output file types:

avi - Audio Video Interleave

asf,wmv - Window Media Video

wma - Windows Media Audio

mpa, mp3, mp1 - MPEG audio

mpg_ts - MPEG2 transport stram

mpg_ps - MPEG2 program stream

mpg_ves - MPEG2 video elementary stream

mpg1_sys - MPEG1 system stream

mpg1_ves - MPEG1 video elementary stream

avc_ves - AVC video elementary stream

wav - Waveform Audio

matroska - Matroska

mp4 - MPEG-4 Part 14 file format

flv - Flash Video

gif - Animated GIF

yuv- I420 YUV

raw - Raw format

Compatibility types:

original - Ordinary file

GeoVision - GeoVision RemoteView compatible file

BlueSonicF008 - DVR BlueSonic F008 file

Parent/Child Information

| Parent | Children |
|-----------------|--------------|
| <u>timeline</u> | <u>track</u> |

task Element

The task element defines operation that is applied to timeline.

Example:

<task type="..." time="..." timeFormat="..."/>

Attributes:

| Attribute name | Possible values | Required | Description |
|-------------------|-------------------------------------|----------|--|
| type | joining, indexation, autosplit | No | Specifies the task type. See <u>Task types</u> for detais |
| time | time string | No | Specifies the time parameter for task |
| timeFormat | 100ns_units, time10ms, parts, bytes | No | Specifies how to interpret value specified in time attribute. See <u>time format types</u> |

Task types:

joining - Join should be applied to timelineindexation - Indexation operation should be applied to clipautosplit - Slicing by time, by size, into parts should be applied to timeline

Parent/Child Information:

| Parent | Children |
|--------|----------|
| group | none |

track Element

The track element is container for clip elements it defines common attributes for clips if it is not set.

Example:

```
<track video="..." audio="..." text="..." obey_sample_times="..." accuracy="..." compatibility="..."> </track>
```

Attributes:

| Attribute name | Possible values | Required | Description |
|------------------|--|----------|---|
| video | any number | No | Specifies the number of video stream. The 0 value means no video stream. The -1 value means - all video streams |
| audio | any number | No | Specifies the number of audio stream. The 0 value means no audio stream. The -1 value means - all audio streams |
| text | any number | No | Specifies the number of text stream. The 0 value means no audio stream. The -1 value means - all text streams |
| obey_sample_time | 0, 1 | No | The obey_sample_times attribute specifies whether an alternative synchronization algorithm should be used: 0 = Do not use obey_sample_time 1 = Use obey_sample_time By default, obey_sample_time equals to 0 |
| accuracy | see <u>Trimm</u> accuracy types | No | Specifies accuracy type in trimming operaion |
| compatibility | see <u>Compatibility</u> <u>types</u> | No | Specifies graph compatibility option for operation |
| flags | see <u>Trimm flags</u> | No | Specifies coma separated options used in trimming |

| for details | operation. See <u>Trimm flags</u> for details |
|-------------|---|
| | |

Trimm accuracy types:

frame - Frame accuracy **gop -** K-frame (GOP) accuracy

Parent/Child Information:

| Parent | Children |
|--------|-------------|
| group | <u>clip</u> |

clip Element

The clip specifies the media source.

Example:

<clip src="..." index="..." video="..." audio="..." text="..." start="..." stop="..." timeFormat="..." flags="..."/>

Attributes:

| Attribute name | Possible values | Required | Description |
|-------------------|----------------------------------|----------|---|
| src | string with file path name | Yes | Specifies the path name of the input media file |
| index | string with index file path name | No | Specifies the path name of the input media file' index |
| video | any number | No | Specifies the number of video stream. The 0 value means no video stream. The -1 value means - all video streams |
| audio | any number | No | Specifies the number of audio stream. The 0 value means no audio stream. The -1 value means - all audio streams |
| text | any number | No | Specifies the number of text stream. The 0 value means no audio stream. The -1 value means - all text streams |
| start | time string | No | The start time of the fragment. See <u>time format types</u> for details |
| stop | time string | No | The stop time of the fragment. See <u>time format types</u> for details |
| timeFormat | 100ns_units, | No | Specifies time format for start, stop attributes. See <u>time</u> |

| | time10ms, position | | format types for details |
|-------|--------------------|----|--|
| flags | audio_silence | No | Specifies options used in trimming operation. See <u>Trimm flags</u> for details |

Time format types:

```
100ns_units - Value is interpreted as 100ns Units ( 1 sec = 1e7 UNITS)
time10ms - Value is set in format "HH:MM:SS.mS"
position - Value is set using key words: "begin", "end"
bytes - Value is interpreted as bytes count
parts - Value is interpreted as parts count
```

Trimm flags:

audio_silence - audio will be muted on fragment

Parent/Child Information:

| Parent | Children |
|--------|----------|
| track | no |

XTL batch file samples

Trimming

```
<timelines version="2" >
  <timeline>
    <group output="C:\Base\output\2a2v 0001.avi" >
      <track video="1" audio="2" accuracy="frame" >
        <cli>src="C:\Base\avi\2a2v.avi" start="00:00:00.00" stop="00:12:32.00" />
        <clip src="C:\Base\avi\2a2v.avi" start="00:32:41.00" stop="00:42:02.00" />
        <clip src="C:\Base\avi\2a2v.avi" start="00:54:09.00" stop="01:08:51.00" />
      </track>
   </group>
   </timeline>
   <timeline>
     <group output="C:\Base\output\2a2v 0002.avi" >
        <track video="1" audio="1" accuracy="frame" >
          <clip src="C:\Base\avi\2a2v.avi" start="00:00:00.00" stop="00:12:32.00" />
          <cli>src="C:\Base\avi\2a2v.avi" start="00:32:41.00" stop="00:42:02.00"
flags="audio silence" />
          <clip src="C:\Base\avi\2a2v.avi" start="00:54:09.00" stop="01:08:51.00" />
        </track>
     </aroup>
    </timeline>
    <timeline>
    <group output="C:\Base\output\H263 PCM 0001.avi" >
        <track video="1" audio="0" accuracy="gop" >
          <clip src="C:\Base\avi\H263 PCM.avi" start="00:11:48.08"</pre>
```

3 files will be created as a result:

1) C:\video\result\2a2v_0001.avi - the file will consist of three sequential fragments from C:\video\2a2v.avi

| Start Time | End Time |
|-------------|-------------|
| 00:00:00 | 00:12:32.00 |
| 00:32:41.00 | 00:42:02.00 |
| 00:54:09.00 | 01:08:51.00 |

The file will contain the video stream and the second of two audio stream.

- 2) C:\video\result\2a2v_0002.avi the file will consist of three sequential fragments from C:\video\2a2v.avi as for the first timeline but in second fragment audio will be muted.
- 3) C:\video\result\H263_PCM_0001.avi the file will consist of one fragment from C:\video\H263_PCM.avi

| Start Time | End Time |
|-------------|-------------|
| 00:11:48.08 | 00:20:14.52 |

The file will contain only the video stream.

The file will contain only the audio stream.

Indexation

As a result, the index file would be created for the corresponding MPEG-2 file specified in the clip

Joining

```
</timeline>
</timelines>
```

As a result, a file containing all parts specified in each <u>clip</u> in the specified order will be created.

Slicing

As a result, media file a.avi will be splitted into parts by time (1.5 minutes each one) and saved to C:\Base\output\ as separate files

File with multiple audio streams trimming

As a result, a file containing one video track and two audio tracks will be created and saved to G:\output\. The file consist of one fragment with the start time position 00:00:12;21 and end time position 00:00:18;07.

File with external subtitles trimming

```
</group>
</timeline>
</timelines>
```

As a result, a file containing fragment with start time 00:05:41;00 and end time 00:12:42;03 and external ASS subtitles will be created.

Technical information

Video Splitter is based on the SolveigMM Video Editing SDK. Send any questions about the SolveigMM Video Editing SDK to the Solveig Multimedia Technical Support Team at support@solveigmm.com

SolveigMM Video Splitter includes the following components:

| Component | File Name | Description | |
|--|-------------------------|---|--|
| COM \ ActiveX objects | | | |
| SolveigMM Video Editing Engine | SMM_EditEngine.dll | COM object for GOP accurate AVI, Windows Media video, MPEG1 and 2, Windows Media audio trimming without decoding/encoding | |
| SolveigMM ActiveX time line control | SMM_OCXSlider.ocx | ActiveX time line control | |
| SolveigMM Frame Stepper | SMM_FrameStepper.dll | COM object for frame/K- frame navigation on media files | |
| SolveigMM Audio Silence Generation Library | SMM_SilenceGen.ax | COM object for gettings samples for muted audio with different compression format. | |
| SolveigMM Audio Peak Reader | SMM_AudioPeakReader.dll | COM object for getting amplitude peaks data for audio streams to display waveform | |
| DirectShow Trimmer Filters | | | |
| SolveigMM HEVC Video Trimmer Filter | SMM_HEVCVideoTrimmer.ax | DirectShow filter for GOP/Frame accurate trimming HEVC video | |
| SolveigMM AVI Video Trimmer Filter | SMM_AVIVideoTrimmer.ax | DirectShow filter for GOP/Frame accurate trimming video in AVI files | |
| SolveigMM-Elecard MPEG-2 Frame Accuracy Trimmer | SMM_MP2FATrimmer.ax | DirectShow filter for frame accurate MPEG-2 Video/Audio trimming | |
| SolveigMM MPEG4 Trimmer | SMM_MPEG4TrimmerFA.ax | DirectShow filter for MPEG4 AVC GOP/Frame accurate | |

| | | file trimming |
|--|-------------------------|--|
| SolveigMM ASF Trimmer | SMM_ASF_Trimmer.ax | DirectShow filter for frame and GOP accurate Windows Media Video files trimming |
| SolveigMM AVC Video Trimmer Filter | SMM_AVCVideoTrimmer.ax | DirectShow filter for GOP/Frame accurate trimming MPEG4 AVC video |
| SolveigMM Audio Trimmer Filter | SMM_AudioTrimmer.ax | DirectShow filter for trimming audio |
| SolveigMM VP8 Video Trimmer Filter | SMM_VP8VideoTrimmer.ax | DirectShow filter for GOP/Frame accurate trimming VP8 video |
| SolveigMM MP4V Video Trimmer Filter | SMM_MP4VVideoTrimmer.ax | DirectShow filter for GOP/Frame accurate trimming MP4V video |
| SolveigMM Subtitles Trimmer Filter | SMM_SubtitlesTrimmer.ax | DirectShow fitler for trimming subtitles/text streams |
| DirectShow Multiplexer/Demultiplexer | | |
| SolveigMM ASF Multiplexer | SMM_ASFMuxer.ax | DirectShow filter for the video and audio multiplexing into Microsoft Advanced Streaming Format. |
| SolveigMM Wave format Multiplexer | SMM_WavMux.ax | DirectShow filter for the audio multiplexing into Wave File Format |
| SolveigMM MP4 format Multiplexer | SMM_MP4Muxer.ax | DirectShow filter for video and audio multiplexing into QuickTime File Format and MPEG-4 |
| SolveigMM MP4 format Demultiplexer | SMM_MP4Demuxer.ax | DirectShow filter for demultiplexing QuickTime File Format and MPEG-4 Part 14 file format. |
| SolveigMM FLV format Multiplexer | SMM_FLVMuxer.ax | DirectShow filter for video and audio multiplexing into FLV File Format |
| SolveigMM FLV format Splitter | SMM_FLVDemuxer.ax | DirectShow filter for demultiplexing FLV File Format |
| SolveigMM Matroska file format Multiplexer | SMM_MKVMuxer.ax | DirectShow filter for video and audio multiplexing into Matroska file format. |
| SolveigMM Matroska file format Splitter | SMM_MKVSplitter.ax | DirectShow filter for demultiplexing Matroska file format |
| SolveigMM MPA format Demultiplexer | SMM_MPADemuxer.ax | DirectShow filter for demultiplexing audio from MPEG audio format, and accurate navigation on Variable Bitrate MPEG audio files |

| DirectShow Encoders/Decoders | | |
|---|------------------------------|---|
| SolveigMM Vorbis Audio Decoder | SMM_VorbisDecoder.ax | DirectShow filter for decoding of Vorbis Audio. It is based on WebM project source code |
| SolveigMM VP8 Video Decoder | SMM_VP8Decoder.ax | Decoder for VP8 video |
| SolveigMM VP8 Video Encoder | SMM_VP8Encoder.ax | Encoder for VP8 video |
| Others | | |
| SolveigMM File Writer | SMM_FileWriter.ax | DirectShow filter for writing AVI and MPEG audio files. It is used to keep A/V synchronization when AVI with MPEG VBR audio is trimmed |
| SolveigMM K Frame Manager | SMM_KFrManager.ax | DirectShow filter for providing the K frame navigation during playback |
| SolveigMM Media Joiner | SMM_MediaJointer.ax | DirectShow filter file-by-file audio/video joining. |
| SolveigMM ASF Validator | SMM_ASFValidator.dll | Library for Windows Media Video files validation. |
| SolveigMM Thumbnails Generation Library | SMM_ThumbNail.dll | Library for generation thumbnails from video files. |
| SolveigMM Custom Encoder | SMM_CustomEncoder.dll | Library for partial reencoding video fragments |
| SolveigMM Timeline Editing Object | SMM_TimelineEditingObj.ax | DirectShow filter that wraps trimming graph into one filter using XTL Batch file |
| SolveigMM Media File Chopper | SMM_MediaFileChopper.ax | DirectShow filter that splits output into sequence of separate files with given duration or file size |
| SolveigMM Trimm Graph Manager | SMM_TrimmGraphManager.ax | DirectShow filter that manages trimming process in trimming graph. Works with trimmer filters: SMM_AVIVideoTrimmer.ax, SMM_AudioTrimmer.ax, SMM_AVCVideoTrimmer.ax, SMM_VP8VideoTrimmer.ax, SMM_MP4VVideoTrimmer.ax |
| SolveigMM Subtitle Overlay | SMM_SubtitleOverlay.ax | DirectShow filter for displaying subtitles. |
| SolveigMM Timeline Preview Object | SMM_TimelinePreviewSource.ax | DirectShow filter for the timeline set in the XTL format playback |

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