



Elias Software  
Elias Studio 3.2.2  
Manual

[www.eliassoftware.com](http://www.eliassoftware.com)

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# 1 Basic Information and License

## 1.1 What is Elias?

The Elias Engine is a musical engine for handling music for games. We call each piece of music a “theme” since it is more than just a song that loops. A theme is a piece of music that can adapt and evolve depending on the game’s instructions and can seamlessly handle transitions. Each theme is constructed by tracks with their associated levels that organize and handle your audio files. The Elias Studio is the music composer’s tool to construct and organize the themes for the Elias Engine. For example themes, video tutorials and themes for purchase visit [www.eliassoftware.com](http://www.eliassoftware.com).

For instant assistance you can hover over different controls and buttons to see tooltips.

## 1.2 License

The first time you start up the Elias Studio you will be prompted to give all your license information such as API license email and API license key. You will find the key if you log into your account at [eliassoftware.com](http://eliassoftware.com) and the license email is the same as the online account you use to purchase the license. You will also find these in your confirmation email upon purchasing a license. If you do not have your license information you can cancel and do it later by starting the studio again at another time.

**ATTENTION:** Version 3.2.1 of the Elias Studio is free to use so the license check has been disabled and no license is needed to run the full version of the studio.

## 1.3 Free version vs Pro version

If you are using the free version of the Elias Studio and you want to unlock its full potential, you should consider upgrading to the Pro version where there are no limitations or restrictions. For more information and to purchase a license visit [www.eliassoftware.com](http://www.eliassoftware.com). If this is your first experience with Elias and want to know the differences between the free and full version, here's a comparison chart:

| Features                     | Free                                    | Pro                                |
|------------------------------|---|------------------------------------|
| Loop Tracks                  | 4                                       | Unlimited                          |
| Max Level                    | 8                                       | Unlimited                          |
| MIDI                         | -                                       | ✓                                  |
| Action Presets               | Unlimited                               | Unlimited                          |
| Track Groups                 | -                                       | Unlimited                          |
| Export Delivery Package      | No Zip / No Rename / No Wav             | ✓                                  |
| Sound packs <sup>1</sup>     | ✓                                       | ✓                                  |
| Number of slots              | 4                                       | 10                                 |
| Stinger Tracks               | 4                                       | Unlimited                          |
| Variations                   | Unlimited                               | Unlimited                          |
| Transition Presets           | 2                                       | Unlimited                          |
| Studio Settings <sup>2</sup> | Limited                                 | Unlimited                          |
| Autosave                     | No Custom location, fixed time interval | Custom Location, any time interval |
| Internet Required            | For Saving                              | For Saving <sup>3</sup>            |

1. Includes Elias Tiny Band that is a collection of digital instruments ready to use with Elias. Download is available after you have acquired any version of the studio and can be found in your account under Download Engine & Assets.

2. You are not able to: change Drop policy, turn off tooltips, use formatted Json, Auto Open most recent Project or to set time interval, max number of autosaves or add a custom save location for autosave. Read more about Studio settings here: [10.1 Edit - Studio Settings](#)

3. Internet is only required when using a monthly licence. A yearly license will not require internet connection except when activating the key.

## 2 Setting up a Project

Be sure to organize your audio files. When saving your theme and creating the .mepro be sure to put your audio files in the same folder or organize them in sub-directories. The Elias Studio works with audio in Ogg or Wav format in 16-bit.

The first thing you want to do when creating a project in Elias Studio is to specify the most basic settings in General Settings and in Theme Settings.

In Theme Settings you have to define how many levels you want to use, how many bars long your music loop is, the time signature of your theme and the tempo in beats per minute. There are many more settings to fine-tune in order to get your Theme to make those perfect transitions but by following this basic setup and adding your music files you have basically all you need before pressing play and listening to your Theme for the first time.

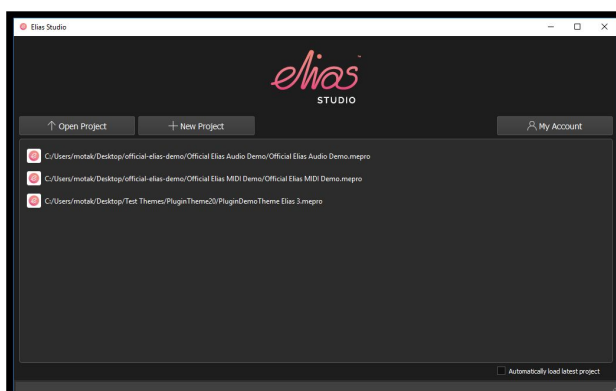
Later in this manual we will get deeper into the settings of Elias Studio.

### 2.1 Start-up Screen

Every time the Elias Studio is started you are greeted by the start-up screen where you find a selection of options on how to get started. Locate an existing project or create a new project with the two buttons in the top, or you can double-click on one of the projects in the list of your most recent projects.

At the bottom you can choose to automatically load the latest project every time you start the program. You can revert this by going to studio settings and disabling “Auto Open Most Recent Project”.

Clicking the My Account button will open your web browser so you can log in on your account at [www.eliassoftware.com](http://www.eliassoftware.com) and manage your licenses.

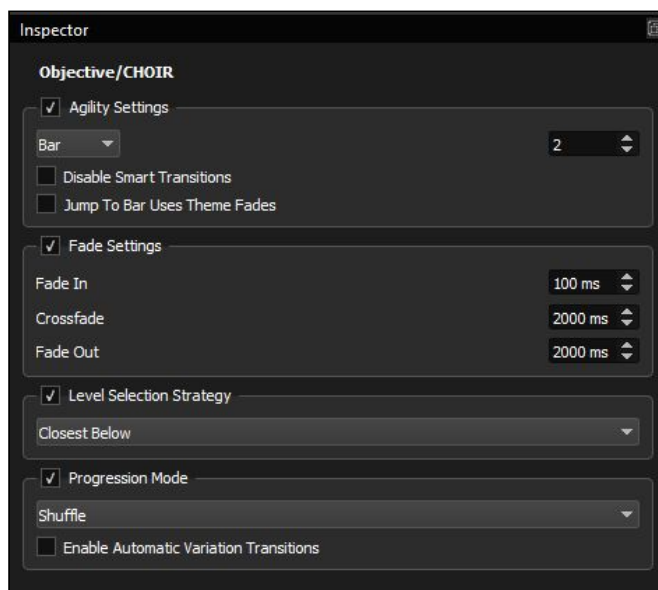


*Startup window with one project in the list of recent open projects.*



### 3 Inspector

The Inspector is a context sensitive window that is a fundamental part of the studio since it displays the settings for the currently selected item. Here you'll find the settings for individual tracks, level slots, variation slots, action presets, track groups and segments as well as buses and effects in the mixer. Notice that the segments in the segment timeline have no settings to manipulate in the Inspector. As soon as you select something that has controls you can manipulate its settings in the Inspector.



*Inspector showing the settings for a loop track.*

## 4 Levels

The basic structure of the Elias Studio is a number of tracks and a grid of level slots.

### 4.1 Level slots and variation slots

Below each track header there are a number of level slots and each cell is a container for a path to one or more audio files saved on your computer. The number of levels shown depends on how many you use. Below the last non-empty level five empty levels are always visible.

Each level slot can also contain sub-levels that we call variation slots. Imagine that you have an exploration part of a game where you will spend a lot of time. Music in those cases can become very repetitive and annoying. To prevent this you can add variations to your melodies and instruments that can be randomly combined or cycled through, depending on time, location or something else in the game. With sufficient variation the music can feel new and fresh for hours upon hours of gameplay.

What variation that will be selected during playback is decided by the progression settings that are active at that moment. Variation slots are found when expanding a level by clicking on the larger level number to the far left.

To expand or collapse all levels at once click in the lighter grey, rectangle area above the levels and to the left of the tracks.

A level slot or variation slot can also be constructed with shorter segments, by using the segment view that can be a different length and be placed at any bar inside the loop. You can read more about segments in Chapter [6 Segments](#).

Drag and drop a desired file into the slot you want to use. You can also double-click on a variation slot to locate a file with explorer/finder. If you double-click on a non-empty variation slot, the file you choose will replace the one you double-clicked.

If you want to move one filled level slot or variation slot to another, click it, drag and drop it onto the desired slot. Hold the Alt-key whilst dragging and dropping to copy a level slot or variation slot to another. To delete a slot, select it and press "Delete". You can also right-click the level slot or variation slot and choose "Clear". If you hover the mouse over a slot, the full path will be displayed as a tooltip.

If you want a track to go silent at a specific level, you can add a silent trigger by right-click on the desired level slot and select "Make Silent". Silent can also be added as a variation.

Audition level slots and variation slots by right-clicking on a slot and then select “Audition” to hear it isolated without starting the player. Note that if a level has more than one variation, you cannot audition it directly; you have to choose a specific variation slot to audition.

To add a new level in between the levels you have already filled, right click in the left side of the track view in the numbered area and select “Insert Level”. You can also remove levels this way. Notice that you cannot add new levels in the area above your last non empty level since these are automatically there for you so you so you can keep building your theme.

To open up a file’s directory in your explorer, right-click on the file in the segment view and select “Show in Explorer”.

|    |                         |                       |                     |            |                   |
|----|-------------------------|-----------------------|---------------------|------------|-------------------|
| ▶1 | Choir 1 Boy             | Strings 1 p           | 1                   | 1          | Other 1 Low pad   |
| ▶2 | 2                       | Strings 2 mf          | 2                   | 2          | 2                 |
| ▶3 | Choir 3 Boy & Women     | 3                     | 3                   | 3          | 3                 |
| ▶4 | 4                       | Strings 4 mf melody   | 4                   | Silent     | 4                 |
| ▶5 | <2>: Choir 5 plus flute | 5                     | Brass 5 Horn melody | 5          | 5                 |
| ▼6 | 6                       | 6                     | 6                   | <1>: 4     | 6                 |
|    |                         |                       |                     | 4 Segments |                   |
| ▶7 | 7                       | Strings 7 Ostinato mf | 7                   | 7          | Other 7 plus bass |

*Green level slots have only one full-length variation.*

*Red level slots are silent.*

*Blue level slots contain at least two variations with the number of variations written beside the level slot name. During playback the currently played variation is displayed as a level name.*

*Yellow level slots are made comprised of segments. If a level slot contains variations that are made of segments, the level slot will still be blue.*

Tip: A theme does not usually, unlike a DAW, have a track for every single instrument. Try to use as few tracks as you can to make it as easy and light as possible to run. For example, you could have a structure of one rhythm track, one bass track, one melody track, and one harmony track, with a total of four tracks. But it is all up to you and how you want to construct your theme.

## 5 Tracks

### 5.1 Create and edit track

When you first start an empty project you will have one track at hand but you can add new tracks by going to the “Theme” menu and selecting “Add New Track” or press Ctrl+Shift+T.

When creating a new track, you can select between four different types of tracks; audio loop track, midi loop track, stinger track or midi stinger track. The track also needs to be named and notice that there can not be tracks with identical names within the active theme.

If you want to create more than one track at a time you can select the number tracks you want to create in the field at the bottom of the create new track dialog.



Loop tracks will be created in the loop track view and the stinger tracks in the stinger track view.

The tracks will have a letter “A” at the colored area of the track if it is an Audio track and the letter “M” if it is a Midi track.

To remove a track right click on the colored area of the track and select “Delete Track”.

To rename a track either double click the track name or right click the track and select “rename track”. This will bring up a window where the track name can be change. Notice that you can not have two tracks with the same name.

To duplicate a track, right-click on the track you want to copy and select the option “duplicate track”. You will be prompted to give it a name and the new track will be added to the far right in the track view.

At the bottom of the colored area you will find two buttons. The one to the left () will solo the track and the one to the right () will mute the track. In the 3.0.0 beta the mute and solo buttons have been disabled. Keep in mind that you can only solo one track at a time so if you want to solo more than one track you have to do it the other way around and instead mute the ones you don't want to hear.

If you want to make a track wider, place the pointer in the spaces between the colored areas of the tracks and the track to the left of the pointer can be dragged out to become wider. Hold the shift key while doing this to widen all the tracks at the same time.

## 5.2 Audio Loop tracks

Audio loop tracks play audio files such as Wav or Ogg Vorbis. These audio files can be as long as the loop or constructed by shorter segments (read more about segments here: [6 Segments](#)) and will repeat for as long as the theme plays, if the theme changes or if the user instructs Elias to jump to a specific bar. You can read more about Loop track settings here: [11.2 Loop Track settings](#).

| Loop Tracks |                         |                        |                        |                      |                      |
|-------------|-------------------------|------------------------|------------------------|----------------------|----------------------|
|             | Choir                   | Strings                | Brass                  | Percussion           | Other                |
|             | S M                     | S M                    | S M                    | S M                  | S M                  |
| 1           | Choir 1 Boy             | Strings 1 p            | 1                      | 1                    | Other 1 Low pad      |
| 2           | 2                       | Strings 2 mf           | 2                      | 2                    | 2                    |
| 3           | Choir 3 Boy & Women     | 3                      | 3                      | 3                    | 3                    |
| 4           | 4                       | Strings 4 mf melody    | 4                      | Silent               | 4                    |
| 5           | <2>: Choir 5 plus flute | 5                      | Brass 5 Horn melody    | 5                    | 5                    |
| 6           | 6                       | 6                      | 6                      | <1>: 4<br>4 Segments | 6                    |
| 7           | 7                       | Strings 7 Ostinato mf  | 7                      | 7                    | Other 7 plus bass    |
| 8           | Choir 8 Women           | 8                      | 8                      | <1>: 5               | 8                    |
| 9           | 9                       | Strings 9 Ostinato f   | ...ss 9 Melody & Stabs | 9                    | 9                    |
| 10          | 10                      | 10                     | ...10 Stab Ostinato mf | 10                   | 10                   |
| 11          | Choir 11 Tutti mf       | 11                     | 11                     | Perc 11 Timp & Hit   | 11                   |
| 12          | 12                      | 12                     | 12                     | 12                   | Other 12 busy bass   |
| 13          | 13                      | 13                     | 13                     | 13                   | Other 13 plus guitar |
| 14          | Choir 14 Tutti f        | ...gs 14 OstinatoOct f | 14                     | 14                   | 14                   |
| 15          | 15                      | 15                     | 15                     | <1>: 5               | 15                   |

Track view showing five audio loop tracks.

## 5.3 Audio Stinger Tracks

A stinger is an audio clip that you can play while your theme is playing, and is not locked to follow the loop. It can for example be a jingle that is played at specific points, or percussion that builds up towards a level change. When and how they are played is all specified in the Elias Studio or the game, before and while playing the theme.

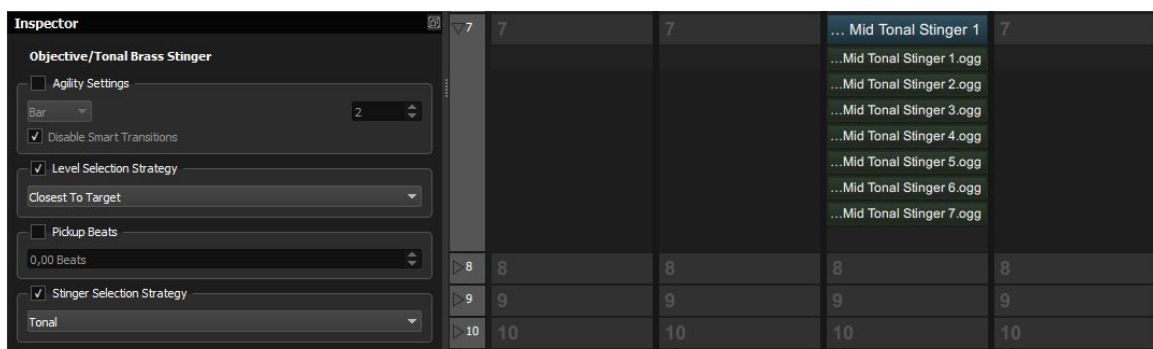
You will find the stinger tracks in its own tab. The stinger tracks have all the same functions as the loop tracks and you can read more about its settings here: [11.3 Stinger track settings](#).

Stingers can follow beat points and be synced to your music loops so that they can seamlessly blend with the loop.

### 5.3.1 Stinger Variations Custom Agility Beat Points - Tonal Stingers

Since we can specify the exact moment in a loop a stinger track or stinger variation can be played, we can make so-called tonal stingers, i.e. stingers that can follow the harmonies and melodies of the theme. It can, for example, add a motif or melody to the loop that has a variation for every chord; meaning that it can be called upon at every bar or beat if you set it up that way.

First you have to specify that this stinger track has tonal stingers by checking the “Stinger Selection Strategy” box and select “Tonal Stinger”. This tells the engine to ignore the settings in Level Selection Strategy and follow the Custom Agility Settings that you specify for each stinger variation. Read more about Custom Agility Beat Points and how to add them in chapter: [13 Agility](#).



*Stinger track view with level 7 expanded to show 7 different variations in that level slot.*

## 5.4 Midi loop tracks

The midi loop tracks behave the exact same way as the audio loop tracks with the format being the only difference. Instead of an audio file you here place the midi file you want to use, but just like the audio loop tracks you make the loop as long as the number of bars you have set the theme to be, or you can construct a midi level slot with shorter segments. Notice though that you do not need to think of adding a tail at the end since the midi instruments will have their natural tails as the note stops.

When a midi track is selected you can access its settings in the inspector. Read more about these settings here: [11.4 Midi loop track settings](#).

Midi has some pros and cons; for example you can basically have a midi loop track agility set to Anytime since every note will be played and naturally finished so tails are not cut in the same

way as audio can be during a fade or change. Keep in mind that using sustain on a midi track could make some notes ring longer than wanted.

Midi can also save a lot of space if the patch or patches you are using are light.

There will also be an economize feature in the Elias Studio in a future update that will make your projects even smaller when using patches. If there are samples in you patch that are not used they will automatically be removed if you wish when exporting a delivery package, but more about this in the future.

The obvious con is of course that midi can never compare to the real thing, even though they can sound really good, a violin for example can never have as much expression and diversity as a real recording of one that you can have in an audio file.

## **5.5 Midi Stinger Tracks**

As with midi loop tracks, midi stinger tracks behave the same as its audio counterpart. They have the same pros and cons as the audio loop tracks.

Read about the midi stinger track settings here: [11.5 Midi stinger track settings](#).

## 6 Segments

To build a loop with segments, be sure to have the segment view open. The segment view is a timeline showing every bar and beat in a loop. Create shorter loops with the same tempo, and also make sure to keep a tail at the end of the loop so that the audio isn't cut. This will help transitions between segments to become more smooth.

To add your segments to a loop, select an empty level slot or an empty variation slot and start to drag and drop your audio files onto the segment timeline at the bars you want them to play. When dropping the files, you are prompted to specify the length of the segment in bars. This way another segment (or the same segment again) can be placed after it and still let the tail ring out while the new segment is playing, to make that transition seamless. When dropping one or several files you can also specify how many times you want it to repeat. Instances for each of the repeated segments are then added to the timeline and you can rearrange them or delete them as you wish. When dropping more than one segment to the timeline you can set where each file should be placed, the length of them and if you want to repeat any of them as well. Notice that Elias will react if any segments are going to be overlapping by limiting the numbers or greying out the controller completely and make it uneditable.

You can also move the segments around on the timeline by clicking and dragging it to another place in the loop. If you hold the Alt-key, a copy of that segment will be made. If you want to change the number of bars on a segment you can right-click on it and select "Resize Segment" and set a new value in the dialog box. Delete a segment by selecting it and pressing the "Delete" button, or right-click it and select "Remove Segment".

If you set your segment to be shorter than the audio, it will still be played without being cut, since this is how tails are handled to make segment transitions smooth.

Notice that only two segments inside a variation can be played simultaneously. If you have a tail that stretches over two other segments the first one will be cut abruptly when the third starts playing. The reason for this is that having more than two segments playing at the same time within a variation will be too demanding for the system should a transition occur at the same time.

A segment can also be duplicated from the context menu. Right-click on the segment you want to duplicate, and if there is room available, you will be able to select "Duplicate segment" in the context menu.

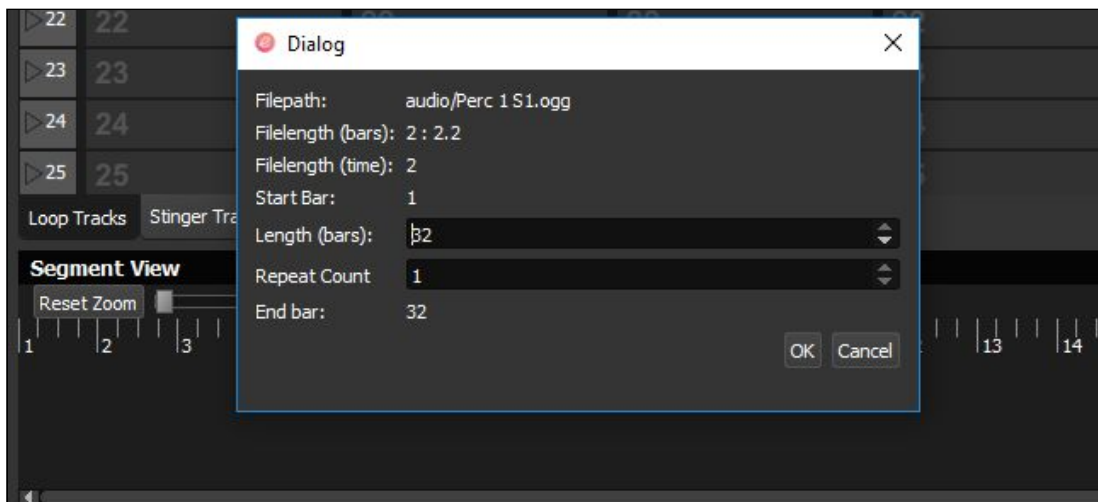
Use the zoom slider to zoom in on the timeline and click the "Reset Zoom" button to make the whole loop fit the window.



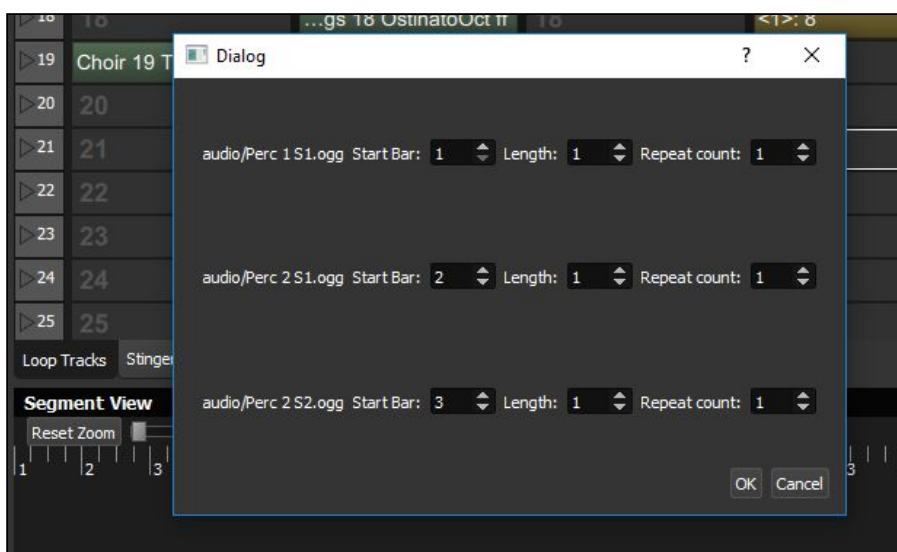
Tip: You don't need to fill the whole timeline with segments - only put them where they are needed.



*Segment view shows level slot 18 comprised of segments.*



*Adding one audio file to the timeline brings up these options and information.*



*Dragging more than one audio file and drop it on the timeline will bring up these options.*

## 7 Generators

Generators has their own window and can be found as one of the tabs in the main window when using the default layout. Here you create generators that will hold all your patches. Create a new generator with the Add Generator button. To remove a generator, select it and click the Remove Generator button.

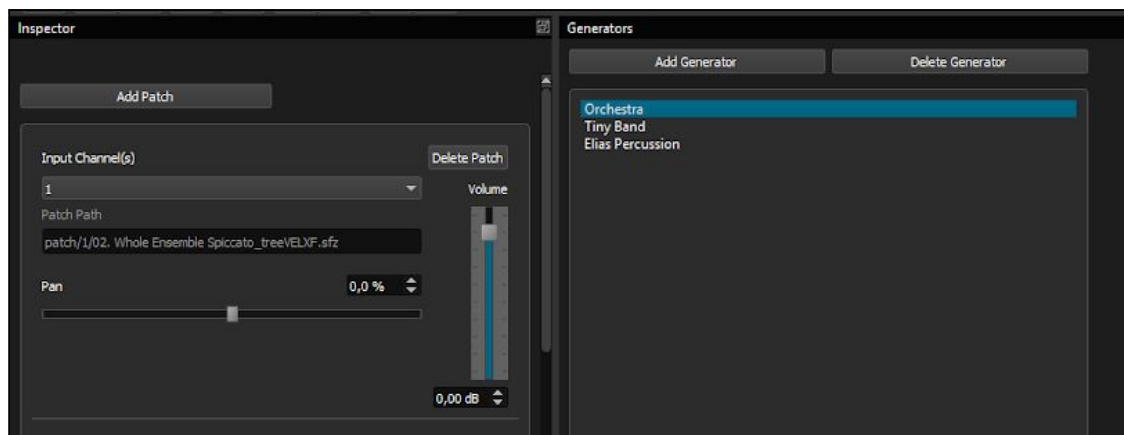
For each generator you create a corresponding bus is created in the mixer where you can route the audio and use effects as usual.

Add patches to your generator in the Inspector.

### 7.1 Patches

The patches in Elias are digital instruments in the SFZ format but with some of our own opcodes. You add them in the Inspector with a generator selected. To remove a patch, either click the “Delete Patch” button in the top right corner of each patch, or right-click anywhere inside the area of the patch you want to remove and select “Delete patch”.

When your patch has been added you can set which input channel you want it to use. You can also adjust the balance and the initial volume on the controls below the path to your patch.



*To the right we see the generator tab with one generator created. To the left in the Inspector you can see a patch has been loaded in the generator.*

#### 7.1.1 Tiny Band and other Patches

Tiny Band is a small and free instrument library from Elias. After you have acquired the Studio you can download Tiny Band in your account under Download Engine & Assets. More instrument libraries are available for purchase at [www.eliassoftware.com/shop](http://www.eliassoftware.com/shop).

## 8 Transition Presets

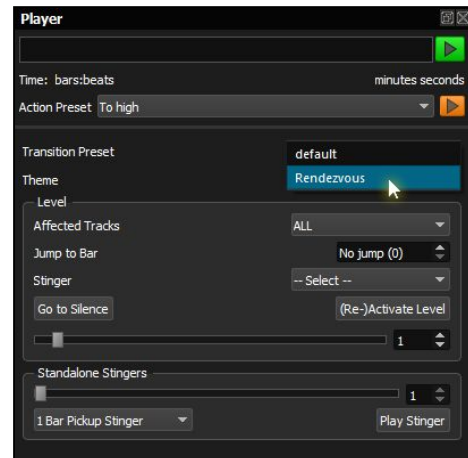
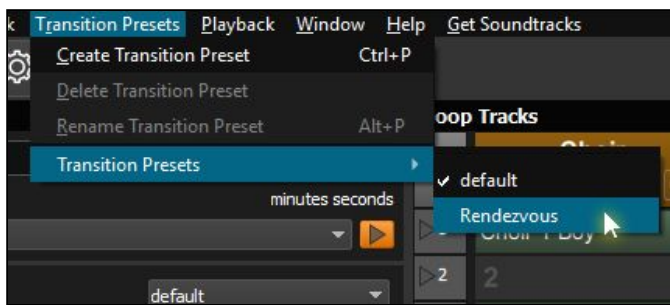
Transition Presets are project global settings that decide how transitions and level selections are handled. You can create as many Transitions Presets as you like for each wanted situation. Remember that a Transition Preset controls all tracks in all themes, so be sure you have everything set up for each Transition Preset.

To create and manage Transition Presets there is a dedicated menu at the top. When you create a new Transition Preset you can copy settings from another preset. This is very useful when you have implemented Custom Beat Point settings on tonal stingers and other sources and tracks, so you don't have to recreate those settings.

All your Transition Presets are listed in the Transition Preset menu and in the top of the Transition Presets tab, and you can change the currently active Transition Preset you want to edit and play there. You can also change the currently active Transition Preset in the drop-down menu in the Player window. While playing, you can use the menu in the player to select which Transition Preset you want to use in the next level event. You can also change the active Transition Preset here when not playing as well, in order to edit them.

Transition Preset settings are “inherited”, which means that if no specific settings are applied to a level slot, it will inherit the track settings. If no track settings are specified it will inherit the settings from the theme specific settings found in the Transition Settings Tab. And if there are now specific settings to the theme transition settings, it will inherit the basic settings found at the top of the Transition Settings tab.

Tip: When making your Transition Presets, starting at the top and working your way down can be a good method. Start with the basic settings at the top of the Transition Settings tab and give them the most general settings you think your themes, tracks and level slots should have. Move downwards for a more granular approach for each theme if need be. Then go through both your loop and stinger tracks and make adjustments where needed, and then go onto your level slots if you have specific behaviors there. Lastly, if you have variations, you can go through these. A good idea can be to start with your most general Transition Preset where you set all your Custom Agility Settings in tracks, level slots and variations slots. You can then copy these settings when making your next Transition Preset and save a lot of time.



*Select Transition Preset from either the Transition Preset menu (left) or in the Player (right).*

## 9 Track Groups

Track Groups are used to exclude certain tracks in level transitions. Sometimes you might want to have some tracks continue playing what they are playing and this is the way to do it. Create track groups in its own dedicated window that can be found in a tab in the main window with the default layout.

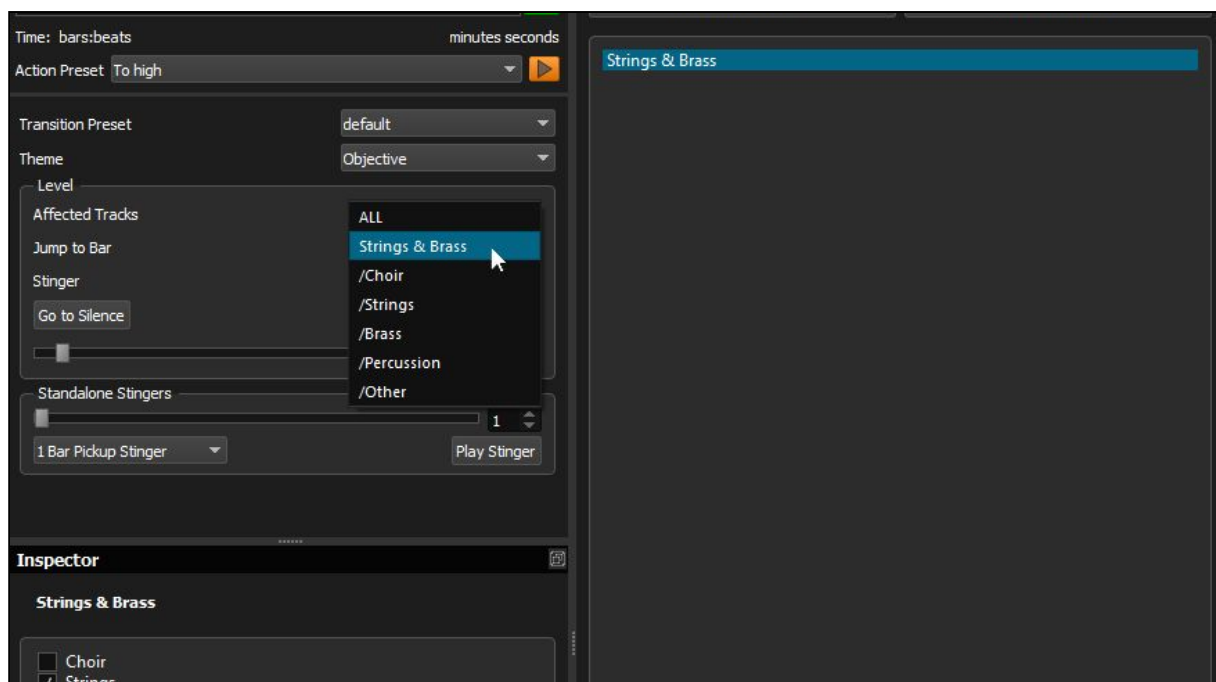
Create and remove track groups with the two buttons at the top of the window. When a track group has been created, you will find a list of the currently selected theme tracks in the Inspector. Check the checkboxes by the track names to include them in this group.

You only see and manage the track groups for the theme that is currently selected.

These track groups are used in the Player during playback and are selected in the “Affected Tracks” drop-down list in the “Level” section. The track group will then be active as long as you have it selected.

Notice that if you want to affect just one single track you do not need to create a group for it since you can select the tracks separately in the player. You can also use the Action Preset event Set Level on Track to affect a single track.

You can also use track groups in the “Set Level Event” in an Action Preset.



*List of track groups and Inspector showing the settings for the group “Strings & Brass”. You can also see the list of Track Groups in the player with all the individual tracks also selectable.*

# 10 Settings

The first thing you need to do when you start building your theme is to tweak some basic settings, so the engine can play and loop your music properly. Below we will go through all the menu settings in Elias.

## 10.1 Edit - Studio Settings

- Output device - Set your audio device.
- Buffer Size - Set the size of each audio buffer. Larger Buffer Sizes are more stable but will cause more latency. Using smaller buffers gives the engine less time process and calculate the actions but they will instead be executed faster. Using large buffers are often fast enough but it all comes down to how the music is written and what the user wants to do with it. Generally, this is something you set later in the process when building a game to fine-tune the performance of the overall game.
- Sample Rate - Choose one of the predefined sample rates from the list. Make sure that this setting is matching your audio files.
- Drop policy decides what will happen if you drag and drop more than one file into a level slot. Add Across Levels will add your files to the level slot you drop them on and the levels below. Add as Variations will add all the files to the level slot you drop it in as variations. Remember that you can also add several files as variations by expanding the level and drop your files on the variation slot instead of the level slot.
- If you have Auto-run Analysis on startup and/or Auto-run Analysis for modified files enabled a full analysis will run when loading a project, as well as when a new file is added or modified on disk. However, it will increase load times of projects based on the size of the project. If this option is disabled and you modify a file the analysis for that file will not be correct until you run a full analysis manually.
- To enable and disable tooltips
- Use Formatted Json decides if you want the mepro files to use the Json layout format instead of the initial layout.
- Auto Open Most Recent Project will automatically open the most recent project you were working on when you start the studio. This will skip the start screen and get you straight into the studio at start-up. This option is also available in the start-up screen.
- Filter Startable Action Presets by Theme - With this option activated you will only see themes that are able to start the theme from the current theme you have selected. If you uncheck this you can start the elias project with any possible action preset from any theme in the studio. A restart is required before this option takes effect.

### **10.1.1 Auto save**

All the settings for auto save can be found in the studio settings window. Set the number of backup saves you want to be created and in what time intervals the auto save should

be done. When the desired number of saves have been created, the oldest save will be overwritten with the newest save.

By default the auto save files will be placed ... but you can choose to have them created in any directory you want.

## 10.2 Theme - Theme Settings

Theme settings are defined per theme in your Elias project.

- Name of the Theme.
- Bars – Theme length in bars (not including tails).
- Time Signature – Time signature of this theme.
- Bpm (Beats per minute) – Set the tempo of your theme.

## 10.3 Transition Settings

The transition settings are found as one of the tabs in the main window with the default layout. You can also access them from the windows menu.

At the top you select what Transition Preset you want to edit. Create new, rename or delete transition presets in the transition presets menu.

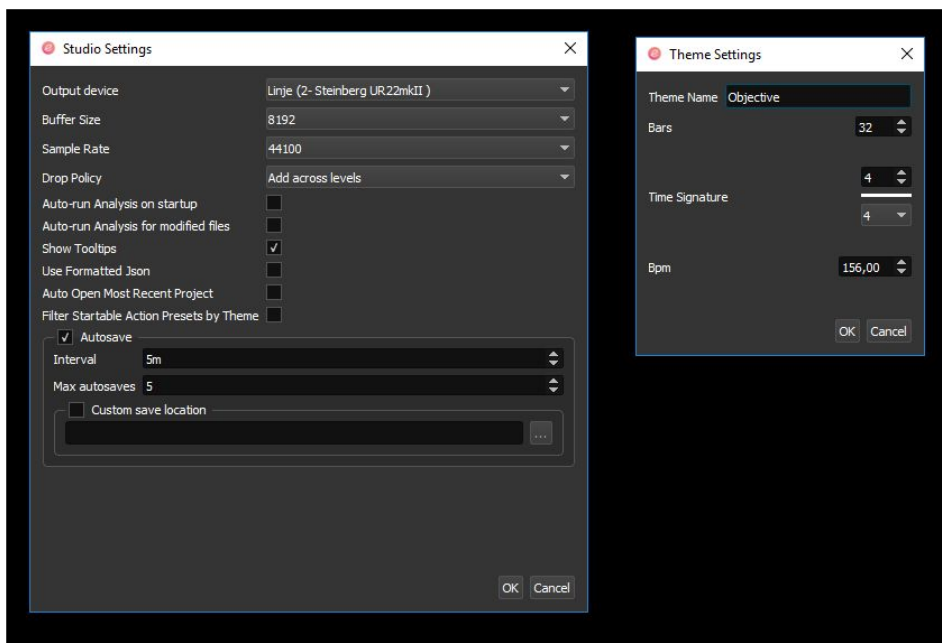
The basic settings for the selected transition preset are found below.

- Agility Settings – See [12 Agility](#). Notice that Agility Settings in the basic transition settings at the top of the Transition settings tab is not able to set when a level change or other events can happen. You can't select "Anytime" or on what bars and beats changes can be made here, since the time signature on each theme can be different. This can't be set until in the specific theme settings in the transition settings tab, or in the underlying settings, such as on track and level slot settings.
- Disable smart transitions - Smart transitions will help making transitions smoother by analysing the audio and make changes for example during a silent part very close to the agility point. Sometimes you can wish to disable this and you can do so here. Read more about smart transitions here: [16 Analyse for Smart Transitions](#)
- Jump To Bar Uses Theme Fades - When using the "Jump To Bar" function, keep in mind that overlapping audio sources should not overlap too much, since lingering too long can cause unwanted disharmony. In these cases, you can decide for each track if you want to use the theme's or project's fade settings instead of the settings on that track when using Jump to Bar, in order to enable more unison transitions.
- Fade Settings – Default values in milliseconds for fades.
  - Fade In – When fading in from silence.
  - Crossfade – When going from one audio source to another.
  - Fade out – When going from non-silence to silence.

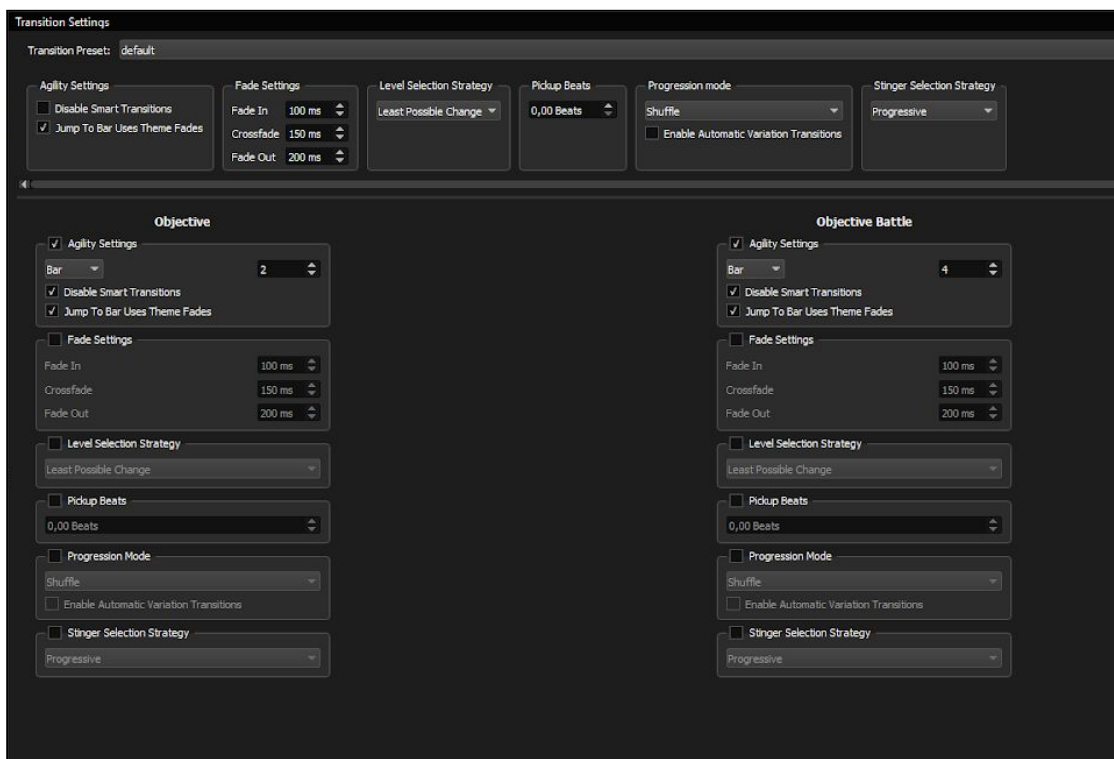
- **Level Selection Strategy** – Default setting of what method to use when transitioning to an empty level slot. This cannot be set per level slot or variation slot.
    - Closest Above - Plays the closest non-empty level above current level.
    - Closest Below - Plays the closest non-empty level below current level.
    - Closest to Current - Plays the closest non-empty level to the currently playing level on that track.
    - Least Possible Change - Does not change anything until going to a non-empty level.
    - Exact - Will only play what is in the exact level and will treat all empty levels as if there are silent triggers. (Read more about silent trigger here: [4.1 Level slots and variation slots](#))
  - **Pickup Beats** decide how many beats before a transition a stinger will start playing. Beats can also be split by writing decimals.
  - **Progression Mode** - Decide what variation should be played in a level slot that has more than one variation added to it. There are three different behaviours available.
    - Sequential - Plays every variation in order from top to bottom.
    - Random - Chooses a random variation every time it is played.
    - Shuffle - Randomizes the order the variations play but does not repeat a variation until every variation has been played.
- You can also check the box “Enable Automatic variation Transition” if you want the studio to automatically do a (Re-)Activate Level when the loop restarts. Read more about (Re-)Activate levels here: [15.4 Level](#).
- **Stinger Selection Strategy** is an extra setting for stinger variations. “Progressive” follows the set progression mode and “Tonal” follows the agility beat points that are defined in the settings for theme, stinger track or variation.

The transition settings window is divided by a line, and below the line the settings for all themes inside the loaded project will be listed. Here, the basic settings for the selected transition preset can be overridden if you want one or several of the themes to have their own unique basic settings. These settings can then be overridden by each track’s, level slot’s or variation slot’s settings in each theme.





*Studio settings and Theme Settings.*



*Transition settings tab with the basic settings at the top and this projects two themes at the bottom.*

# 11 Loop track, stinger track & level slot settings

Even though settings for Theme, Track and level slots are very similar, there are things that set them apart. You can find all these settings in the Inspector by selecting the item you want to edit.

## 11.1 Transition settings

Read about the default transition settings in chapter: [10.3 Transition Settings](#)

## 11.2 Loop Track settings

Read more about loop tracks in Chapter: [5.2 Audio Loop tracks](#) and [5.4 Midi loop tracks](#) .

### ***11.2.1 Loop Track Settings***

To edit track settings, click the colored track headers and look in the Inspector. Loop track settings are not any different from the transition settings options in the transition settings tab/window besides having no settings for Pickup Beats or Stinger Selection Strategy, since they are specific for stinger tracks. These settings will override the Transition Settings made to the project and to the themes for the track your are setting up.

### ***11.2.2 Loop level slot settings***

To edit the settings for a loop level slot, click a level slot and look in the Inspector. Loop level slots has the same settings as loop tracks, but is missing level Selection Strategy since that has to be specified for all levels in the track settings or in the transition settings window/tab. Settings here will override its loop track settings.

### ***11.2.3 Loop Track Variation Slot Settings***

To edit the settings a loop track variation slot, expand the level that contains the variation you want to edit, click on that variation slot and look in the Inspector. Loop track variations can only have unique fade settings, but you set the Agility Settings and Progression Mode that affect these variations in the inspector with its loop level slot or loop track selected.

## 11.3 Stinger track settings

Read more about what sets stinger tracks apart from loop tracks in Chapter: [5.3 Audio Stinger tracks](#) and [5.5 Midi stinger tracks](#)

### 11.3.1 Stinger Track Settings

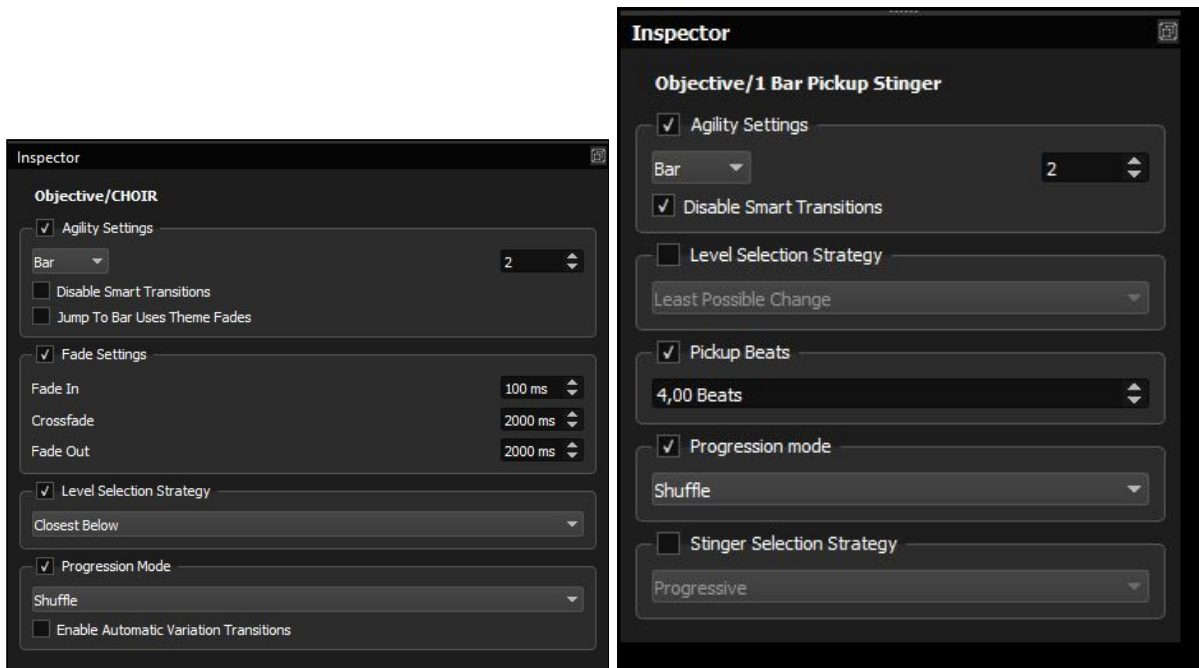
To edit stinger track settings, click the colored track headers and look in the Inspector. In Stinger Track Settings you will find all settings that are in transition settings window/tab except for the choice of Transition Preset, so be sure select the Transition Preset you want to change before editing. These settings will override the Transition Settings made to the project and to the themes for the track your are setting up.

### 11.3.2 Stinger level slot Settings

To edit the settings on a stinger level slot, click a level slot and look in the Inspector. Stinger level settings have the same settings as stinger tracks but are missing Level Selection Strategy and Stinger Selection Strategy, since they affect how the variations are selected. Settings here will override its stinger track settings.

### 11.3.3 Stinger track Variation slot Settings

To edit a stinger track variation slot setting, expand the level that contains the variation you want to edit, click on that variation slot and look in the Inspector. Stinger Track Variation Slot Settings have all the same settings as Stinger Level Slots. Notice that it is on this level that you can handle Tonal Stingers. Read more about tonal stingers in chapter: [5.3.1 Stinger Variations Custom Agility Beat Points - Tonal Stingers](#) and how to implement them in chapter: [12 Agility](#).



*Loop track settings (to the left), Stinger track settings (to the right).*

## 11.4 Midi Loop Track Settings

Midi loop track settings have all of the settings you find in an audio loop track with the addition of selecting what generator and what midi channel you want the midi track to use. Note that these settings can only be found in the track settings and not in the transitions settings window/tab since this needs to be specified for each track. Midi loop level slot settings and variation slot settings will use the generator and midi channel as you set in the midi loop track.

The midi loop level slots and midi loop track variation slot have the exact same settings as the audio counterparts.

## 11.5 Midi Stinger Track Settings

Just as midi loop track settings, the selection of generator and midi channel are the only additions from the audio stinger track settings.

## 12 Agility

The agility settings in your theme control when level changes can occur. Agility settings are used at several different places but will always look and act the same. You can find Agility Settings in the Transition Settings tab, Loop and Stinger Track Settings, Loop and Stinger level slots as well as Stinger variations slots.

To edit agility check the Agility Settings checkbox to unlock the settings.

### 12.1 Anytime

This will allow a change to occur at anytime at the same moment a level change or reactivation is made. This will ignore all beats and is non-musical.

### 12.2 Beat

Choose at which beat changes are allowed to be made. For example, set it to one beat to allow a transition at every beat in the loop. Beats can use decimals to allow transitions at a half (0,5), a fourth (0,25), and so on, of a beat. If you set beat to 0 it will automatically be changed into Anytime.

### 12.3 Bar

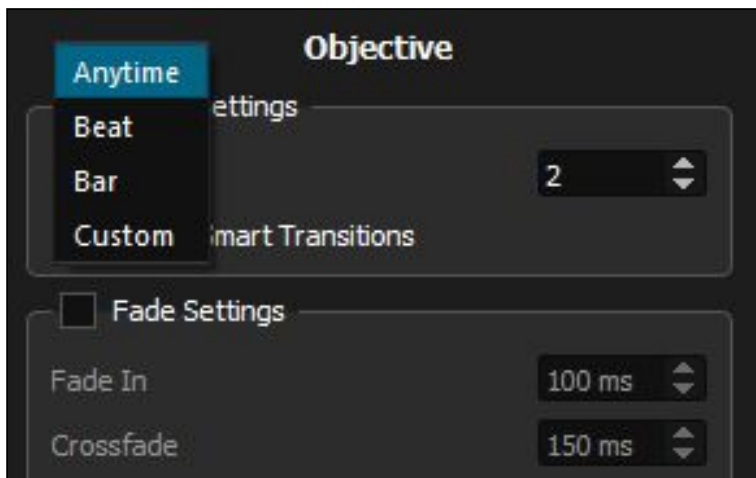
Choose at which bar changes are allowed to be made. For example, set it to two bars to allow transitions to be made every second bar.

### 12.4 Custom

Custom gives you a list where you can specify exactly every bar, beat and/or even sub-beat that is allowed for transitions to happen.

To add an agility beat point to the list, select a bar and beat and press “Add”. To remove an agility beat point, select it in the list and click “Remove”. To edit a value in the list, select it, change the bar and/or beat and click “Set”. Click “Copy” to copy the list and “Paste” to paste it into another custom agility beat point list.

Using Custom Agility Beat Points is essential when you want to use tonal stingers and you want to reuse the same stinger at irregular intervals. More about tonal stinger in chapter: [5.3.1 Stinger Variations Custom Agility Beat Points - Tonal Stingers](#).



*Different basic agility settings.*



*Example of Custom Agility Beat Points for a tonal stinger.*

## 13 Mixer & Buses

If you have a reset window layout, the mixer is found in one of the tabs below the main window. Settings for bus slots are found in the Inspector when they are selected.

### 13.1 Buses

For every loop track, stinger track or generator you create an associated channel, or bus as we will keep calling them here, will be created. The bus will also be created with the same name and color as the associated track. If you are used to other digital audio workstations or real mixers, you will recognize the basic things you can do with the Elias mixer.

### 13.2 Bus slots

You will find eight empty bus slots between “Gain” and “Send: main” in every bus where you can add effects and sends.

#### **13.2.1 Gain**

Gain is the input volume and every bus has this control at the top. Click at the gain you want to edit and adjust the volume in dB in the Inspector.

#### **13.2.2 Effects**

Effects are added to an empty slot by right-clicking on it and selecting the wanted effect. The mixer support DSP effects, and effects from Elias will also be available for purchase from the Elias webshop. The effect’s different parameters can be found in the Inspector when an Effect has been selected.

##### **13.2.2.1 Volume**

An additional basic volume control that you can set in dB.

##### **13.2.2.2 Elias Reverb**

With Elias comes a basic reverb effect to help you create that final mix, and can sometimes help you smooth out some drastic transitions. In the reverb you can set the Room Size, Damping, Mix and Stereo Width in the Inspector.

##### **13.2.2.3 Elias Compressor/Limiter**

This is your standard compressor/limiter where you can set Ratio, Threshold, Attack, Release and Makeup Gain. This effect also has a secondary input slot for sidechaining.

#### **13.2.2.4 Balance**

This effect lets you pan the audio between the left and right channels for the bus to which it is added.

#### **13.2.2.5 Filter**

There are a total of seven different types of filters to choose from in the Inspector. There are three controls you can adjust the filters with, and they will be active or inactive depending on the type of filter chosen. The parameters are Cutoff Frequency, Octaves and Gain.

#### **13.2.2.6 Equalizer**

The equalizer has 10 bands where you can set “bandwidth, octaves”, “frequency, hZ” and “Gain, dB” for each band. Each band are listed from 1 to 10 from top to bottom in the inspector.

### **13.2.3 Sends**

Sends can send the audio to either another bus or to another effect. You can for example create a new bus and add a reverb effect to one of its empty bus slots, and then use sends in other buses to send their audio into the same reverb effect. This handles the audio as a whole.

### **13.2.4 Buses**

New buses can be created by right-clicking any slot and then selecting “Create Bus”. These buses have no associated loop or stinger track but can be used to handle effects and reroute and handle your audio. You can remove these buses again by right-clicking somewhere in the bus slots and choosing “Remove Bus”. Note that you can only remove buses that have no associated track. When deleting a track, the associated bus will also be deleted. Non track-associated buses can also be renamed by right-clicking the name at the top of the bus and then selecting “Rename Bus”.

#### **12.2.4 Send main**

The last slot will always have a “Send: main” that sends the audio from that bus to the Main Bus. This way you never have to do this manually for every bus. You can remove this send if you like, and then add a separate send in order to send this audio to another bus or effect. When manually creating a new bus, you can decide to automatically add a send to main by checking the “Default Send”.



## 12.3 Progress Bar VU Meter

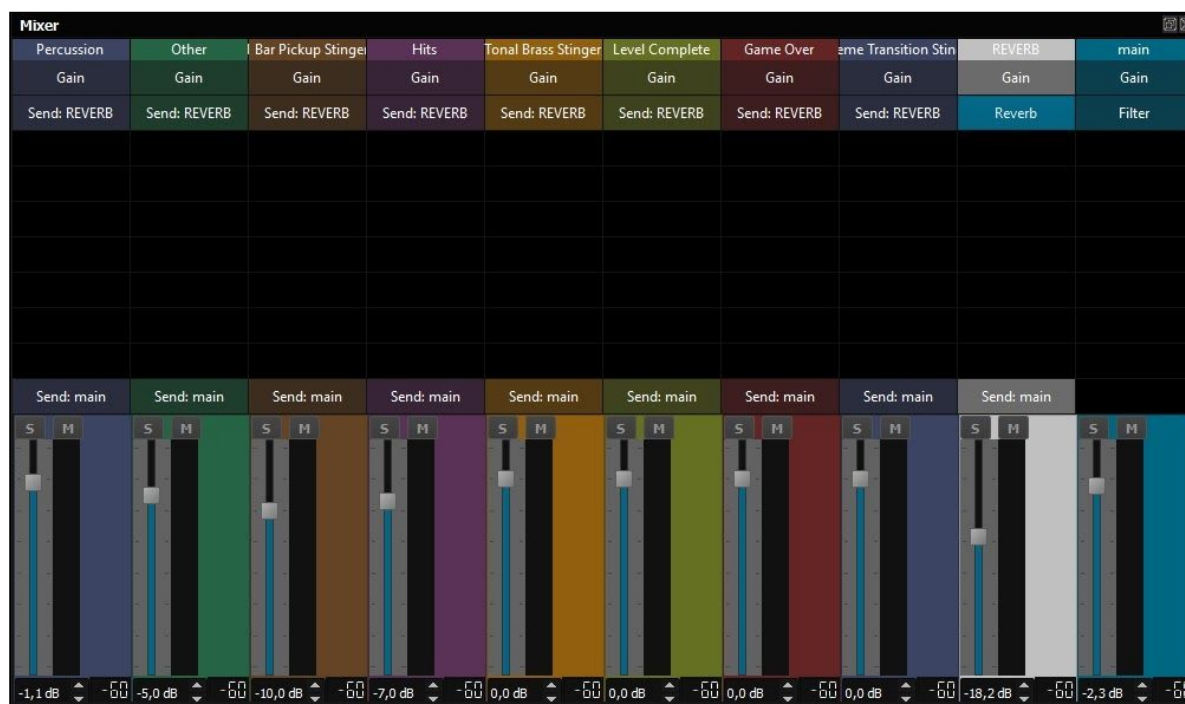
Below the last slot you will find the VU Meter and a volume slider with its associated numeric volume control below it. This volume control will affect all audio that is sent to this bus. You can also solo and mute your buses above the volume sliders and VU meters.

## 12.4 Main Bus

The Main Bus is the last bus in the bus chain and is the final audio control. All other buses from all the themes in your Elias Project will end up in this bus even if not all of them are sent directly to the Main Bus.

## 12.5 Sweeps

All effect parameters can be controlled in realtime during playback. This means you can make sweep effects and predefine them in an Action Preset. Read more about Action Presets in chapter [14 Action Presets](#).



*The Elias Studio Mixer.*

## 14 Action Presets

Action Presets are a powerful tool in Elias that gives composers more control over advanced transitions, and will save a lot of time implementing music into the actual game. Action Presets is a chain of events that has a predefined behavior and can be played with a simple press of a button.

### 14.1 Create Action Preset

Action Preset has its own view and can be found among the tabs in the main window or in the window menu.

At the top you have two buttons: “New Action Preset” and “Delete Action Preset”. Next to them you have two arrow buttons to change the order of the events inside the Action Presets. Action Presets can also be added by right clicking in the grey area below the buttons and select “New action preset”.

When you make a new Action Preset you are prompted to give it a name and it will then be added to the list of Action Presets below the buttons.

If you right-click in an Action Preset you can select Duplicate. Doing so will first ask you to name the new copy of the Action Preset and then add it to the list.

### 14.2 Initial Themes

To the right of the Action Preset Name you can choose the initial theme for the Action Preset in the Initial Theme drop-down menu. By choosing an initial theme, you can access stingers inside the presets, since stingers in the currently active theme can be played. By choosing “Any” you can make general level changes, theme changes, sweep effects and other general behaviour that is not specific to a theme. If you have specified an initial theme you can only play this Action Preset when that very theme is currently playing.

### 14.3 Action Preset Events

Clicking the arrow next to the Action Preset name will expand a list of events and will initially be empty, except for the “Add New Event” drop-down menu. Add a new event by selecting one of the four event types.

### **14.3.1 Set Level Event**

The Set Level Event handles transitions and we will go through all the controls below.

- Transition Preset - Select the Transition Preset that should be active for this Action Preset.
- Theme - Here you select the theme you want to transition into. If you do not want a theme transition, select the same theme as the the initial theme. If your initial theme is “Any” you can go from any theme to the specified theme in this event setting, but you cannot choose to play any stingers since they need an initial theme in order to be accessed.
- Level - Choose which level you want to transition to. Setting level to 0 will make the theme go to silent. This can be helpful when you want to silence the loop and play a stinger all on its own, such as a Game Over stinger, for example.
- Jump To Bar - Choose which bar in the loop to jump to. Often when transitioning into another theme you might want it to start at the first bar. Setting this value to 0 will keep playing the loop unhindered.
- Stinger - Here you can choose which stinger you want to play in conjunction with this Action Preset. You can only choose stingers from the specified initial theme. If you have stingers on different levels they will follow the currently playing loop level.
- Affected Groups - Select the affected groups you want to use. Leave empty if you do not want to use one.
- Pre Wait Time (ms) - Delay before event activation. Use this to control the flow of you Action Preset, for example if you need a stinger to take its time or if a transition with different events should match a scripted event in the game.
- Suggested Max Time (ms) - If you need an Action Preset to have a max time, you specify it here. If possible, the transition time will be below the specified Suggested Max Time. The closest agility points will be selected, but it will try to keep it under the Suggested Max Time.

### **14.3.2 Set Level on Track Event**

This event can do the exact same things as the Set Level Event but instead of choosing affected groups you have a list of the themes tracks if you only want to use one of them.

### **14.3.3 Play Stinger**

- Transition Preset - Select the Transition Preset that should be active for this Action Preset.
- Stinger - Here you can choose which stinger you want to play in conjunction with this Action Preset. You can only choose stingers from the specified initial theme.
- Level - This refers to the stinger levels if you have placed stingers on different levels.

- Urgent - By checking the “Urgent” control will bypass the event queue to perform the action as fast as possible. For example, if you know that your project will have a lot of level changes and be very busy, the event in an Action Preset can be delayed because of the overall queue of events in Elias. In those cases, be sure to check “Urgent” to prioritize this event in the queue.
- Wait for Prior Events - If this option is not checked, this event can be skipped to reach the final destination of the Action Preset as fast as possible. If you want to make longer series of events in an action preset and use multiple set level events, be sure to check “Wait for Prior Event” to make sure that the event will run before moving on to the next event in the chain.
- Pre Wait Time (ms) - Delay before event activation.

#### **14.3.4 Set Effect Parameter**

With Set Effect Parameter you can control effects in realtime. Using a Set Effect Parameter does not require an initial theme.

- Bus - Choose the bus containing the effect you want to manipulate.
- Slot - Choose the effect you want to use. You can choose from all effects you have added to that bus.
- Parameter - Parameter is a context sensitive drop-down menu containing the parameters for the currently chosen effect.
- Parameter Control - Set value of the chosen parameter. Notice that the name of this parameter will change depending on what type is chosen.
- Sweep Time - Here you can set the duration of the sweep in milliseconds.
- Urgent - By checking “Urgent” this event will bypass the event queue to perform the action as quickly as possible. For example, if you know that your project will have a lot of level changes and be very busy, the event in an Action Preset can be delayed because of the overall queue of events in Elias. In those cases, be sure to check “Urgent” to prioritize this event in the queue.
- Pre Wait Time (ms) - Delay before event activation.

#### **14.3.5 Set Send Volume**

Similar to the Set Effect Parameter you can control Set Send Volume in realtime. Using a Set Send Volume does not require an initial theme.

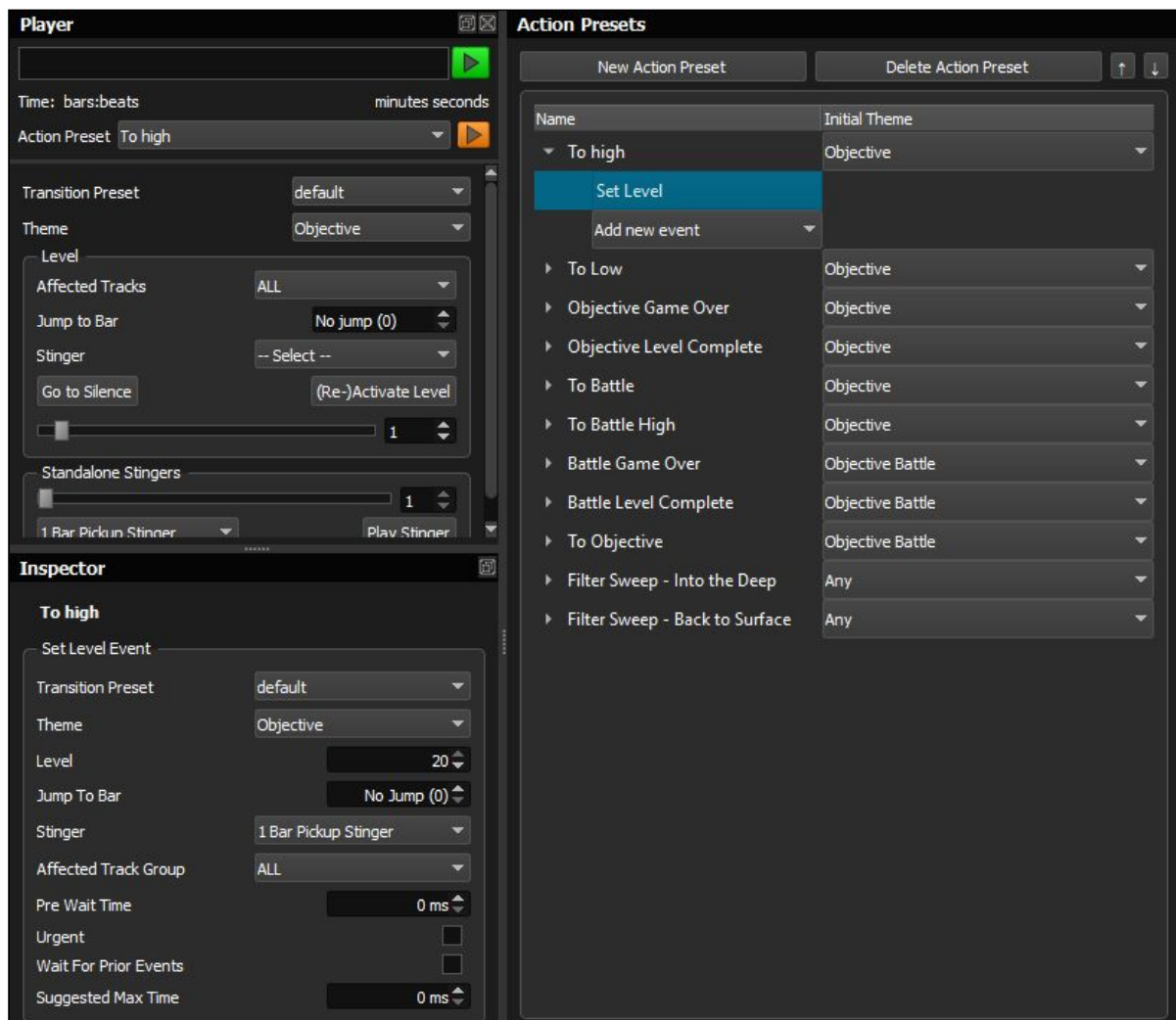
- Bus - Choose the bus containing the effect you want to manipulate
- Slot - Choose the effect you want to use. You can choose from all effects you have added to that bus.
- Volume - Set what target volume in dB to sweep to.
- Sweep Time - Here you can set the duration of the sweep in milliseconds.
- Urgent - By checking “Urgent” this event will bypass the event queue to perform the action as fast as possible. For example, if you know that your project will have a lot of level changes and be very busy, the event in an Action Preset can be

delayed because of the overall queue of events in Elias. In those cases, be sure to check “Urgent” to prioritize this event in the queue.

- Pre Wait Time (ms) - Delay before event activation.

## 14.4 Play Action Presets

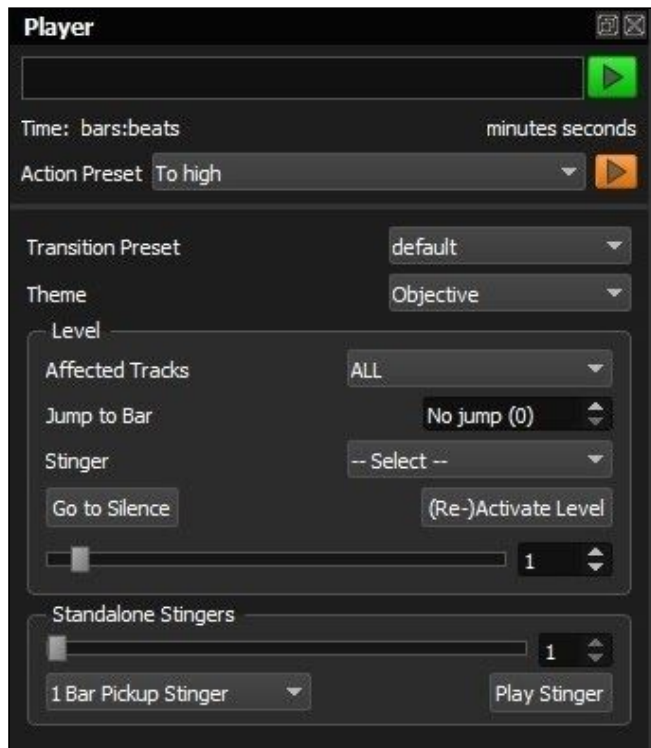
Action Presets are played by clicking the play button in the Action Preset section of the Player. To start playing a Theme with an Action Preset you press the Action Preset play button when the player is not playing. (Shortkey: A)



List of Action Presets with the Inspector showing the settings for a Set Level Event.

## 15 Player

The player is the composer's game simulator and the way to test how the music will sound during transitions. Below we will look at all the controls from top to bottom:



*The Player*

### 15.1 Playback

The Bar at the top displays the current location in the loop when playing. Jump forward or backward in the loop by clicking at the corresponding place in the loop bar. Directly below the current time is displayed in bars and beats to the left and in minutes and seconds to the right. You can also use the spacebar to play and stop.



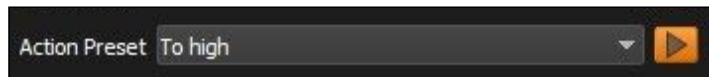
*Currently playing a Theme*

### 15.2 Action Preset

Select the Action Preset you have created and activate it with the play button next to it.

When a Theme is not playing, pressing the Action Preset Play Button will start the Theme with an Action Preset. (Shortkey: A)

Tip: If you use a stinger in an Action Preset with pickup beats, or an Action Preset that starts at the later bars in your loop, you can create an upbeat before the actual theme starts. Make sure to use a Transition Preset that won't allow changes during those last bars or beats if you want the loop track to start playing at the first bar (or the first bar or beat you want it to start at later in the loop)



*Action Preset drop down selector and the Action Preset Play Button.*

## 15.3 Transition Preset and Theme

Select a Transition Preset you want to use for the next level change. The next time you change level, the transition settings that you have made in the active Transition Preset will be used. The selected Transition Preset will be used for level changes, going to silence, and playing stingers. This setting does not apply to Action Presets as they will specify their own Transition Presets. Read more about Transitions Presets in chapter [8 Transition Presets](#).

Select theme in the list and make a level change while playing to make a transition to other themes. You can also press the (Re)Activate button to change themes, but doing so will always start the new theme at level 1. Themes can also be changed here or in the themes menu while not playing.



*Select Theme and Transition Preset in the Player.*

## 15.4 Level

Affected Tracks are selected in the drop-down list, and the group you have selected will be active for as long as it is selected. You can also select single tracks in this list. Read more about Affected Track Groups in chapter: [9 Track Groups](#)

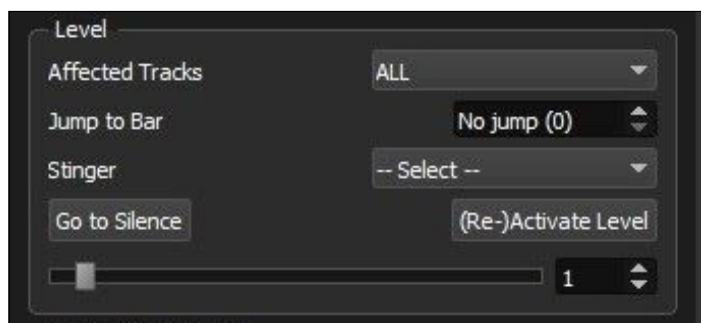
Use Jump To Bar to jump to a specific bar in the next level change or reactivation. At default, jump to bar is set to 0 which means that the loop will continue to play unhindered. If you change theme with Jump To Bar set to 0 it will transition to the closest corresponding bar in the new theme. Notice that this can cause a moment of silence depending on the settings in the active Transition Preset

In the stinger drop-down list you select a stinger to play in conjunction with a level change. If we choose to play a stinger in a level change like this, the level Selection Strategy settings on that track will decide what Stinger level to play from.

The Silence button (Shortkey: E) will silence the Theme and follow the fade out and beats points of your tracks in the currently active Transition Preset. If you choose level 0 when choosing level in an Action Preset the Theme will also go to Silent.

The (Re)Activate level button will update transition without having to change level. This is perfect if you have variations in a level slot you want to try out. Simply press the button to reactivate the level and a variation change will occur following the way you set them up in the active Transition Preset. (Shortkey: R)

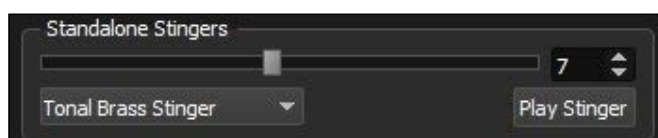
Use the slider and textbox to choose which level you want to go to. You can also use the shortcuts Page Up to increase the level or Page Down to decrease a level. Notice that level 0 will make the theme silent and works the same way as if you would put silence in all level slot on one level and play it.



*level section of the Player*

## 15.5 Standalone Stingers

In this section, stingers that are to play as standalone (outside a level change) are selected. If stingers are placed on more than one stinger level it is chosen by the level slider next to the drop-down menu. The selected stingers are played by pressing the playback button (Shortkey: S). This only works during playback and will follow the current beat point settings in the currently selected Transition Preset



*Standalone Stingers section of the Player.*



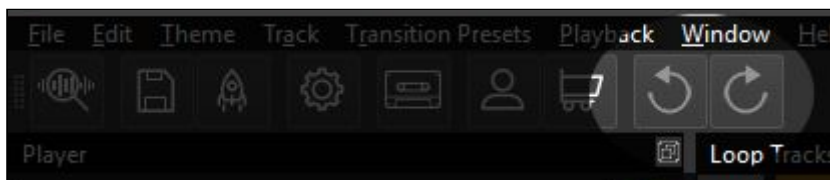
## 16 Undo/Redo Window

Undo and redo is found under the edit menu. The shortcut for undo is Ctrl+Z on Windows and Cmd+Z on macOS, while the shortcut for redo is Ctrl+Shift+Z on Windows and Cmd+Shift+Z on macOS. There are also buttons for undo and redo in the toolbar.

In the default layout you will find the undo/redo list in a tab in the same window as the player. Here are all the registered actions listed and you can jump directly to the desired action by clicking on it.

The number of undos are currently locked to 50 actions, so as soon as you exceed 50 actions, the oldest one will be removed to save memory.

All editing actions in the studio can be undone and redone except for the studio settings.



## 17 Analyze for Smart Transitions

In order to make every transition as smooth as possible, there is a function in Elias called Smart Transitions. This function will analyze all audio files in your project and will save every silent moment in each file to the project mepro file. Since the best time to make a transition is when an audio source is silent, Elias will use the silent parts when possible to make transitions between audio sources seamless and smooth.

Say for example that you are going make a level change at bar six and you have allowed the track to be able to make a change there. However, if there is a silent part at, for example, the fourth beat in the fifth bar, the engine will be choose to make the transition there instead, in order to not abruptly cut the audio in an unnatural way.

To make an analysis of your files, click the Analyze All button in the toolbar or go to the File menu and select Analyze All. Depending on the size of your project the time to analyze it will vary, but for example, if you have a total of 45 minutes of music in your project it would normally take somewhere between five to ten seconds.

Remember to run the analysis again if you add more audio files to your project after your last analysis.

In studio settings you can activate a feature to automatically run an analysis when loading a project, adding a new file, or if a file is modified on disk. Read more about it here: [10.1 Edit - Studio Settings](#)

A full analysis will also be done when you export a delivery package. Read more about exporting delivery packages here: [18 Export Delivery Package](#)

If you don't want to use Smart Transitions you can disable them with the control "Disable Smart Transitions" in the agility settings for each separate track, or in settings for the project or themes in the transition settings window/tab.

## 18 Record to File

If you want to record a sample of your theme, simply select “Record” in the Playback menu, the record button in the Toolbar or press the asterisk key (\*) on the numpad on your keyboard to put the Elias Studio in recording mode. The next time you hit play, the studio will record everything you do up until the moment you stop playback. A dialog will pop up asking you to give the Wav file a name and where to save it. When you’re done, press “Save”, and a sample will be generated on that location.

## 19 Export Delivery Package

When you want to deliver your theme to the game designers or programmers, the Elias Studio can help you collate all your files in a Zip file. Go to “File” and choose Export Delivery Package or press Ctrl+Alt+E, and this will open up the dialog for generating the package.

At the top of the dialog you can choose to add any additional files to the package. It could, for example, be a text file with instructions to the programmers. Remove files by selecting them and press the “Remove” button.

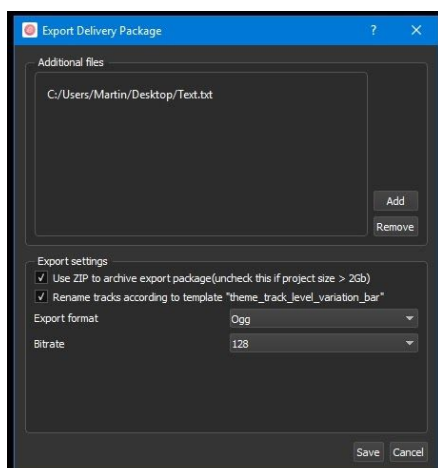
The next section is Export Settings, and first you can choose if you want to add your project to a Zip archive. Second choice is whether you want the studio to rename all your audio files depending on its position, for example:

Themeindex\_trackindex\_levelindex\_Variationindex\_Barindex - then click the checkbox.

Lastly, choose what format you want to use, either unchanged or Ogg. If you choose Ogg you can also specify what bitrate the Ogg files should be converted to. If you choose unchanged no conversion will happen and will export the audio files in the same format as they are currently at. Notice that if you work with ogg files in your project and select Ogg and another bitrate than is being used in the files no conversion will occur either to prevent double compression of the files.

If your project is using SFZ patches all the patches and their samples files will be included and sorted inside the folder you export to.

When you are done, click “Save” and give your package a name, choose directory, click Save and then wait for the package to be generated. When finished, the zip file is ready to be delivered.

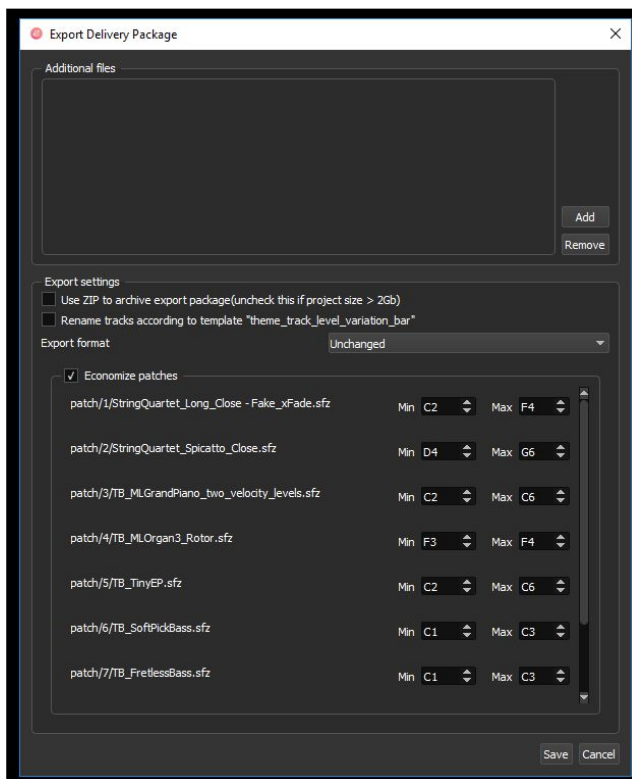


The studio will prevent you to overwrite save files so there is no risk of losing any of your files or data.*Export Delivery Package dialog.*

## 19.1 Economize patches

If the Elias project contains any generators with patches loaded, the option to economize the patches will be available at the bottom of the Export Delivery Package window. Check the “Economize Patches” checkbox to access the settings for each loaded patch. Here you can change the key range in every patch by setting its minimum and maximum keys.

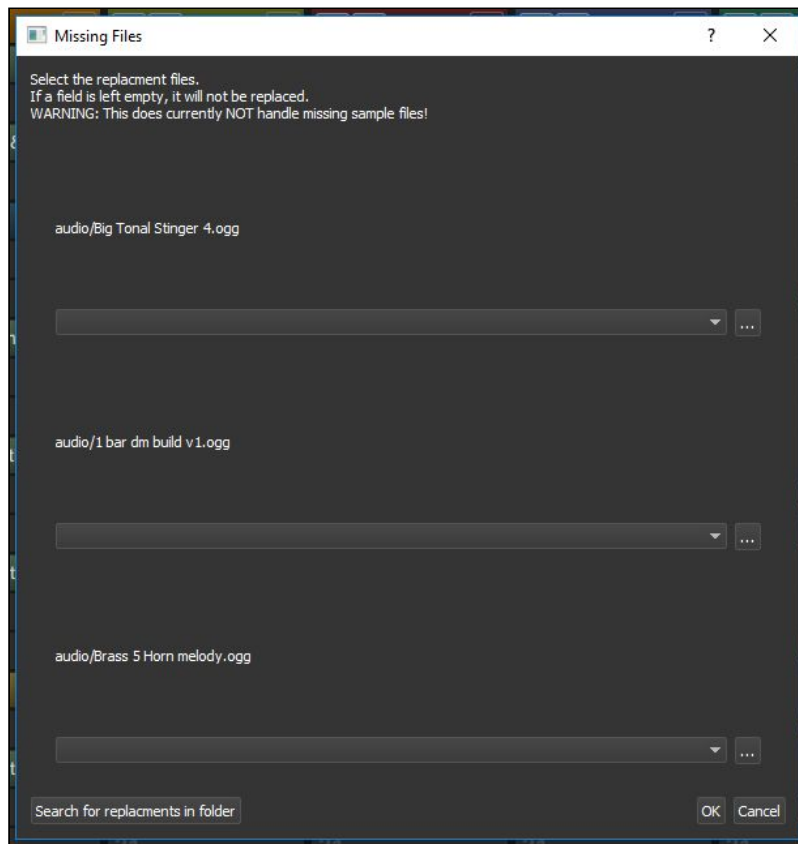
For example, if you have loaded a piano patch and you know that you only use notes between C0 and C2 you can select “Min C0” and “Max C2” and the samples that are not triggered within that key range will be excluded in the exported package. This is very useful when you want your final Elias project to take up as little disk space as possible.



*This project uses midi and have a couple of patches loaded into its generators. Two the right you see the patch and its path and to the left you can set the key range you want to export by setting the minimum and maximum key. All samples triggered within that span will be exported to that package.*

## 20 Locate Missing File

When opening, saving or exporting a project, and if a file that is referenced in the Elias Project can't be found, a popup will appear listing which files are missing. Here you can locate those missing files by clicking the dotted buttons, or you can move the files back into the correct directory manually in explorer/finder to resolve the issue. If you want to check this manually, you can find "Locate missing file" under the Edit menu. If no files are missing, the studio will let you know but if a file is missing you can locate it from popup window.



*Here there are three audio files missing. By clicking on the dotted button to the right of each drop down you can locate the audio files. When no file has been loaded that dropdown will be empty.*

## 21 Toolbar

With the default layout you can find a toolbar at the top of the main window, which will give you fast access to some core functions in Elias. This toolbar can be moved around and placed on either side or at the bottom of the main window if you prefer. Remember that you can save the current layout under the windows menu.

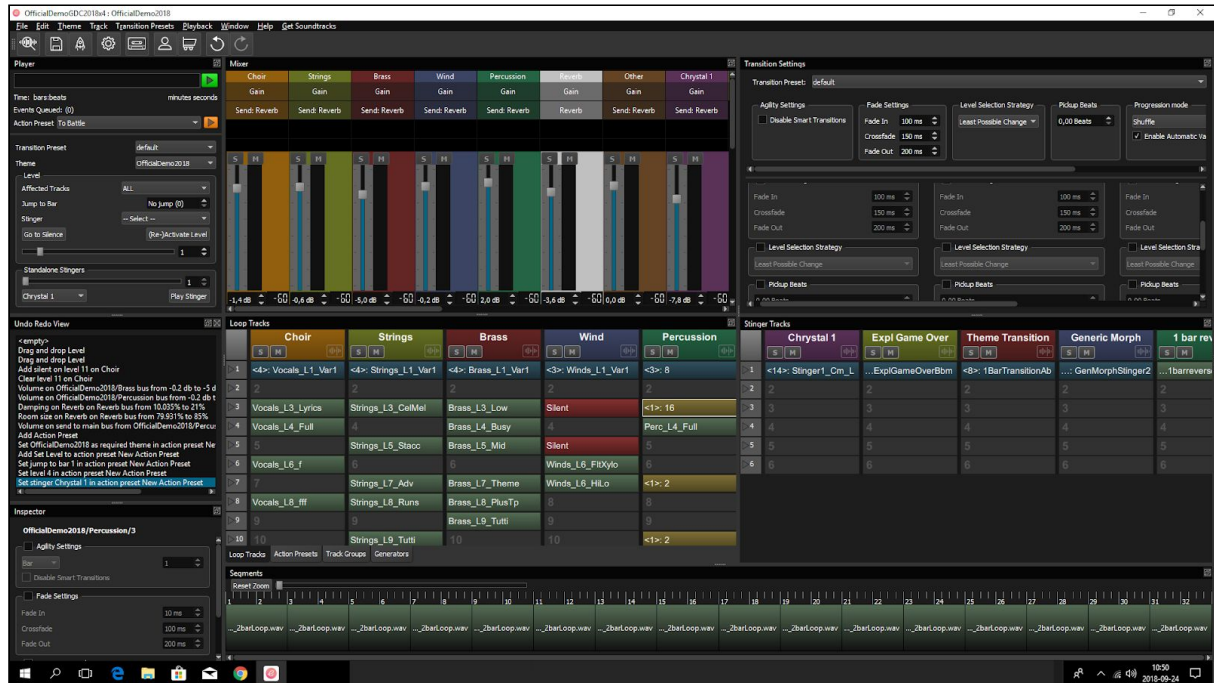


Let us go through all the buttons from left to right:

- **Analyze** - Analyze can also be accessed from the File menu. Read more about what analyze is and does here: [16 Analyze](#)
- **Record** - When record has been activated, Elias will record everything from the moment you press play until you press stop again. Also found under the Play menu.
- **Save** - Save the open project. Can also be found under the file menu or executed with the key command Ctrl+S.
- **Export Delivery Package** - Can also be found in the file menu. Read more about Export Delivery package here: [18 Export Delivery Package](#)
- **Studio Settings** - Opens up the studio settings that you also can find under the Edit menu. Read more about the settings here: [10.1 Edit - Studio Settings](#)
- **Unlock Pro** - If you are using the free version of the Elias Studio, you can activate it with a license key when pressing this button. Can also be accessed from the file menu. Read more about the free and the pro version of the Elias Studio here: [1.3 Free version vs Pro version](#)
- **My Account** - Will open your default web browser and take you to your account at [www.eliassoftware.com/shop/my-account](http://www.eliassoftware.com/shop/my-account). This option can also be accessed from the Help menu.
- **Elias Shop** - Will open your default browser and take you to the online shop at [www.eliassoftware.com/shop](http://www.eliassoftware.com/shop). This option can also be accessed from the Get Themes menu.
- **Undo** - (Ctrl+z, cmd+z)
- **Redo** - (Ctrl+shift+z, cmd+shift+z)

## 22 Windows

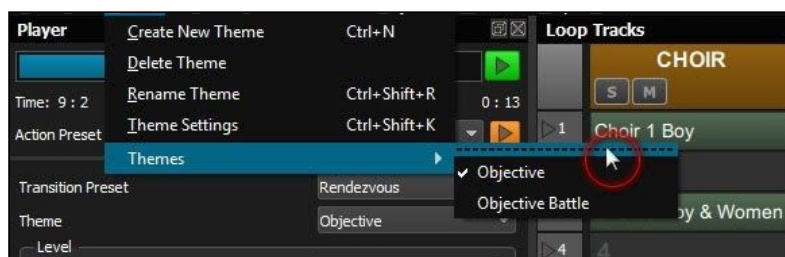
Windows can be rearranged and are dockable so you can have the layout you prefer. You can then save your layout to a file that you also can load back again in the Window menu. If you lose any window you can open them again in the Window menu or reset the layout with the Reset Layout option in the Window menu. (Shortcut: Ctrl+Shift+L)



*Although a bit cluttered, all windows can be shown at the same time and rearranged to your liking.*

### 22.1 Tear-off Menus

The lists of themes and transition presets in the Themes and Transition Preset menus can be undocked into its own window so they are always one mouse click away. Notice that this is currently only possible in the Windows version of the studio.



*Click the top bar in the sub-menu to undock it and place anywhere you choose.*



## **23 Help Menu**

If you get stuck, the first place to go is the Help menu.

### **23.1 The Player**

Here you can see all shortcuts for the player window.

### **23.2 User Manual**

Opens up the manual you are reading right now.

### **23.3 Quick Guide**

Opens up the quick guide.

### **23.4 Online Tutorials**

Opens up your default web browser and takes you to our online video tutorials.

### **23.5 About Elias**

Shows the current running version of Elias Studio.

### **23.6 Check for updates**

Select this option to check if the Elias Studio that is currently installed is up to date. If there is a newer version available you can update the Elias Studio from here.

### **23.7 My Account**

Opens up your default web browser and takes you to you account at [www.eliassoftware.com](http://www.eliassoftware.com). Note that if your account settings are not saved or if you have logged out previously you will have to log in before you can access your account.

## **24 Get Soundtracks Menu**

### **24.1 Get Demo Soundtrack**

Clicking “Get Demo Soundtrack” will open up your default web browser and bring you to the Elias webshop where you can download the Demo Soundtrack.

### **24.2 Elias Shop**

Clicking Elias Shop will open up your default web browser and take you to the Elias webshop.

## 25 Shortcuts

### 25.1 File Menu

- New Project = Ctrl+Alt+N
- Open = Ctrl+O
- Save = Ctrl+S
- Save As = Ctrl+Shift+S
- Export Delivery Package = Ctrl+Shift+E
- Reload last opened project = Ctrl + R

### 25.2 Edit Menu

- Settings = Ctrl+K

### 25.3 Theme Menu

- Create New Theme = Ctrl+N
- Rename Theme = Ctrl+Shift+R
- Theme Settings =Ctrl+Shift+K

### 25.4 Track Menu

- New track = Ctrl+T

### 25.5 Transition Presets Menu

- Create Transition Preset = Ctrl+P
- Rename Transition Preset = Ctrl+Shift+P

### 25.6 Playback and Playback Menu

- Play/Stop = Space
- (Re-)activate level = R
- Silence = E
- Play Stinger = S
- Play Action Preset = A
- Increase level = PgUp
- Decrease level = PgDn
- Record = Asterisk Key (\*) on Numpad

## 25.7 Windows Menu

- Player View = F1
- track View = F2
- Mixer View = F3
- Inspector = F4
- Segment View = F5
- Action Preset View = F6
- Track Groups View = F7
- Save Layout = Shift+L
- Load Layout = Ctrl+L
- Reset Layout = Ctrl+Shift+L

## 25.8 Help

- User Manual = F9
- Online Tutorials = F10
- Elias Shop = F12

## 25.9 Editing

- Hold Alt-key when dragging and dropping filled level slots, variation slots or segments to other slots to copy them.
- Zoom in on the segment view with the scroll wheel while holding down the shift key when hovering over the segment window.
- When segment view timeline has been zoomed in use the scroll wheel to scroll from left to right.

## 26 Changelog

### 26.1 Elias Studio 3.2.2 Features and fixes

- Fixed problem with locating folder function in missing files dialog.

### 26.2 Elias Studio 3.2.1 Features and fixes

- This version is free to use so the license check has been disabled and no license is needed to run the full version of the studio.

### 26.3 Elias Studio 3.2 Features and fixes

- Added undo and redo.
- Added a “duplicate track” function.
- Added a transition option called “Jump To Bar Uses Theme Fades”
- Fixed a bug where starting with a group track selected plays only those tracks.
- Made it possible to add action presets via the context menu.
- Changed naming in documentation; “track levels” are now called “level slots”, “variations” are now called “variation slots” and slots in the mixer are now called “bus slots”
- Added a delete button to each patch for easier removal of patches.
- Added Equalizer effect to the mixer.
- Made it possible to add an action preset by right-clicking and selecting in the context menu.
- Fixed a bug where several instances of the insert/delete level context menu could be opened at the same time.
- Other smaller fixes and optimizations.

### 26.4 Elias Engine 3.2 Fixes and updates

- Added a new transition option called `elias_transition_option_jump_to_bar_uses_theme_fades` which tells the engine to use the theme or project fade settings when jumping to a bar within the same theme (this is true by default).
- Made some significant performance optimizations in the SFZ player and the general mixer rendering chain.

## 26.5 Elias Studio 3.1.1 Fixes and updates

- Transition presets now has its own window/tab and the user can now have basic settings that each theme can inherit from. This replaces the previous option in the themes menu “Default transition settings for current theme”.
- New flag in Action Preset Events called “Wait for Prior Event” that prevents that event to be skipped when several events are in the event queue.
- New Economize Patch option is now available when exporting a delivery package. The user can set the exact key range to export for each patch loaded in the project that uses MIDI.
- Adding one or more files in the segment timeline now also gives the option to repeat that segment for as many times as the user wants.
- Adding several files at once in the segment timeline will now open up new options where the user can set where each file should go.
- New feature to help the user locate missing files if a file is missing when opening, saving and exporting. The user can also locate missing files manually at anytime from the edit menu. This feature is currently limited to locating audio files.
- Zoom controller and reset button added to the segment timeline view for easier use, in addition to the previous Shift key + mouse wheel.
- Specify Buffer size inside the Studio.
- Splitting up “Auto Run Analysis on startup” and “Auto Run Analysis for Modified Files” into two separate settings.
- The error message when a file is missing now specifies what file it is.
- Maximum pre wait time in action preset events have been increased from one minute to 100 minutes.
- Fixed a few minor bugs.

## 26.6 Elias Engine 3.1.1 Fixes and Updates

- Implemented a customizable soft voice stealing algorithm in the SFZ player, which smoothly fades out voices when a certain threshold is reached. See the functions `elias_sfz_player_generator_set_patch_soft_voice_fade_out_time()`, `elias_sfz_player_generator_get_patch_soft_voice_fade_out_time()`, `elias_sfz_player_generator_set_patch_soft_voice_limit()` and `elias_sfz_player_generator_get_patch_soft_voice_limit()` for more information.
- Added a function called `elias_register_diagnostics_callback()` which allows the user to register a callback which receives additional diagnostic information when an error or warning occurs, if such additional information is available.
- Added a new flag that can be set for events, called `elias_event_flag_wait_for_prior`. When this flag is set, the engine ensures that all prior events have finished processing before it proceeds.

- Significantly improved the loading time for large SFZ patches.
- Made the use of the terms "global" and "project" consistent in relation to transition presets and transition options in the documentation.
- Various other performance optimizations.
- Soft voice stealing is now available. The algorithm smoothly fades out SFZ voices when a certain threshold is reached. This algorithm is optional but is very useful in performance constrained environments.

## 26.7 Elias Studio 3.1.0 Fixes and updates

- Fixed noise issues when starting playback at level 0.
- Free version now properly checks and warns the user if there are generators when attempting to save.
- Removed some ? icons from titles as they were not used.
- Audio and midi files now always get their own folders when exporting if rename files is chosen.
- Insert/remove level can no longer be called while the engine is running. This would previously result in a warning.
- The max level now properly increases if a segment is added to an empty level.

## 26.8 Elias Engine 3.1.0 Fixes and updates

- Added many new functions relating to generators and the SFZ player (see the \ref generators "generators" page for more information).
- Made it possible for a specific SFZ patch to send its output to an arbitrary destination bus.
- Added an algorithm for configurable voice stealing to the SFZ player.
- Added functions to retrieve information about MIDI tracks (see the \ref project information "project information" page for more information).
- Extended the path processing in the engine to make it handle relative paths that go above the current working directory, as well as network drives on Windows where the path begins with //.
- Several performance optimizations in the rendering chain.
- Fixed a bug that would cause smart transitions to occasionally take a long time to complete.
- Fixed a few minor bugs.

## 26.9 Elias Studio 3.0.1 Fixes

- Fixed a bug where renaming a bus would cause mute and solo to break.

## 26.10 Elias 3.0.0 Major Features

- Midi support - the ability to import midi files to tracks and create generators to hold patches that will play the midi.
- The engine can now be instructed to automatically transition to the next variation in a level slot based on the given progression mode each time the loop wraps around. This is configurable by way of a new boolean transition option called `elias_transition_option_enable_automatic_variation_transitions`. This works both for audio and MIDI tracks, but only if the level in question contains no silent variations.
- Implemented so called "smart transitions" based on pre analysis of the audio files. When these are enabled, the engine will generate significantly smoother transitions between levels and variations by taking advantage of very quiet portions of the audio being rendered. Smart transitions can be disabled even if analysis data is available, by way of the `elias_transition_option_disable_smart_transitions` boolean transition option.
- Autosaves - And the options of how many, how often and where they are saved in the Studio Settings.
- New startup screen that will give you different options of what you want to do when starting the studio.
- Implemented a new "level selection strategy" called `elias_level_selection_exact` represented in the studio as Exact.
- Reworked the implementation of the "shuffle" progression mode for variations in order to remove distribution bias.
- Various smaller performance optimizations in the rendering chain.

## 26.11 Elias Studio 3.0.0 Features

- Duplicate Action Presets
- More studio settings
  - Enable and disable tooltips.
  - The option to use Json format.
  - New setting for behaviour when dropping several files onto one trigger level. You will find this setting in studio settings.
  - The option to automatically start the studio with the last open project.
  - Filter Startable Action Presets by Theme
- Updated track view
  - Separated Loop Tracks and Stinger tracks to two separate tabs.
  - With more types of tracks to choose from the way to create new tracks has been updated. When creating a new track with Elias 3 you will get a pop up window where you give the track a name and set the what type of that track it should be.
  - Create multiple tracks in one button press



- Path are no longer manually editable for a cleaner experience and minimise risk for errors.
- Locate audio files with explorer/finder by double clicking on an empty level slot or variation slot.
- Unfold all levels by clicking in the corner of the track view.
- Ability to widen tracks separately or all at once by holding the shift key.
- Changed named on Current Theme Transition Settings to Default Transitions for Current Theme as it is a more descriptive title.
- Single tracks are automatically added and available in the list of to the track groups in the group selector in the player..
- There is a new event for action preset called Set Level on Track when you want to select a single track to be affected by that event.
- Right click on level number to Insert or remove levels.
- Stinger and loop track views have separate max levels to reduce load times.
- Expand all Levels in one click by clicking in the top left corner of the track view.

## 26.12 Elias Engine 3.0.0 Features

- Added a sampler which currently implements a subset of the SFZ I format specification, allowing for playback of MIDI. This sampler is in its early stages and many additional features are in development.
- Added support for MIDI loop and stinger tracks.
- Added the ability to change the level on a single track by way of a new event called `elias_event_set_level_on_track`.
- Renamed `elias_transition_option_agility_strict` to `elias_transition_option_disable_smart_transitions` (the behavior of the option itself is unchanged).
- Implemented an optimization which avoids triggering a segment tail during a level change if the change occurs very close to a segment boundary (this improves the musical output as well as performance).
- Optimized performance in the stream cache for audio files.
- Fixed a bug in `elias_get_theme_name()` which would cause an assert if the function was given an invalid index.
- No accumulating loading times when changing between themes.
- If a tail is ringing out in the source you are going to during a transition the engine will recognize it and will not include it in the transition to make the transition more natural.