Elias Software

Elias 2 plugin for Unity

Plugin version 2.1.1

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www.eliassoftware.com

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1   Important Information

If you use Elias in a commercial product you will also need to buy a licence for the Elias Engine. For more information on engine licences and prices visit https://www.eliassoftware.com/licensing/.

A license for the Elias plugin for Unity is for a company, and not bound to a specific project.

2   Install the Elias Plugin

If you have an Elias plugin older than 2.0 already installed to your Unity project, be sure to remove it before installing the Elias plugin 2.0 or later.

Install the Elias Plugin for your Unity Project by running the "EliasUnityPlugin.unitypackage" while your project is open. This will add three folders to the Assets folder associated with your opened project.

The Elias Demo folder contains a demo scene that you can open up and see an example of Elias in action.

The Plugins folder contains the Elias Unity Plugin scripts and engine binaries.

The StreamingAssets folder is a place for you to place your Elias Themes.

3   Add Elias to Your Unity Project

3.1   Elias Player Component

The EliasDemoEventTrigger that comes with the Elias Demo is an example of how you can use Elias in a Unity project and is not guaranteed to be compatible between versions.

Add the Elias Player Component to a gameobject in your scene.

First, make sure to use the same output sample rate for your project as for your Elias Project. In the demo scene for example, we have an Elias project in 48000Hz, so to match this in Unity go to Edit, Project Settings and Audio. Here you can set the output sample rate and by default it is set to 0, resulting in Unity deciding on the sample rate based on the device. So, if your music is going too fast or too slow it is most likely the sample rate that is not set correctly.

If you want Elias to start playing as soon as you run the scene, check the Play On Start checkbox.
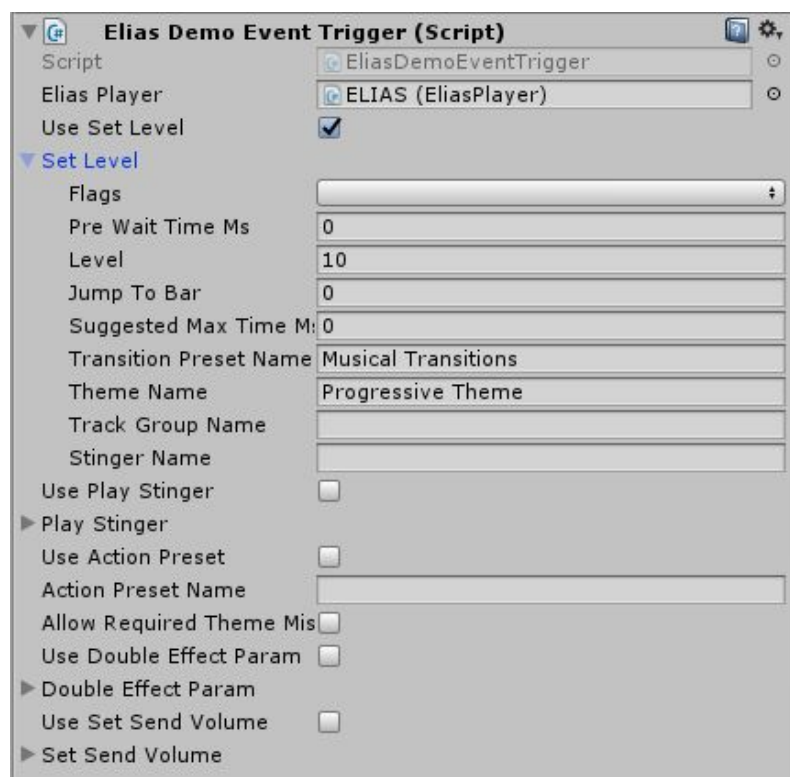Set the number of channels that Elias uses with the Elias Channel Count.
To adjust the buffer size for each frame, select the desired size with the option to have 1024, 2048, 4096 or 8192

Select the Elias Project you want to use in the Project selection list. Remember to remove the example theme when you no longer need it so it is not packaged with your final build of your game. (Unity copies all files in the "Streaming Assets folder"!)

To add a new theme to your scene you can put it in the "Elias_Themes" folder that you will find in the "StreamingAssets" folder in your "Assets" folder for your Unity Project.

The next choices in the Elias Player Component are to start the Theme with an Action Preset and if you want any wait time (defined in milliseconds)

Next, the initial Transition Presets and Theme are selected. If the Theme should start playing at a specific bar

Elias Demo Event Trigger (Script)	
Script	EliasDemoEventTrigger
Elias Player	ELIAS (EliasPlayer)
Use Set Level	☑
▼ Set Level	
Flags	
Pre Wait Time Ms	0
Level	10
Jump To Bar	0
Suggested Max Time M:	0
Transition Preset Name	Musical Transitions
Theme Name	Progressive Theme
Track Group Name	
Stinger Name	
Use Play Stinger	☐
▶ Play Stinger	
Use Action Preset	☐
Action Preset Name	
Allow Required Theme Mis	☐
Use Double Effect Param	☐
▶ Double Effect Param	
Use Set Send Volume	☐
▶ Set Send Volume	

this is selected at Jump To Bar. Select a Track Group if you don't want all tracks to be affected by level changes.

If your theme does not play, make sure you have set a starting level in the Elias Player Component.

Lastly you can choose the Suggested Max Time and Stinger if you want to start the Elias Player with a stinger.

Pausing the AudioSource that Elias uses will not pause the playback. To pause the playback you will need to use the pause/unpause functions, or the pause parameter of the Elias Component.

For more detailed information about these options we suggest that you read the Elias Studio Quick Guide or Manual that you can find here: https://www.eliassoftware.com/elias-studio.

3.2   Elias Demo Event Trigger

WARNING: This component is a part of the Demo Code and not guaranteed to be compatible between versions of the plugin! It is meant as an example on how to queue different types of events.

Add this component to an object or event to give instructions to the Elias Project on what you want to change. Here you can set level, play stingers, use Action Presets, set effect parameters and set volumes. Check the associated check box and allow the Event Trigger to make the changes you want it to make.
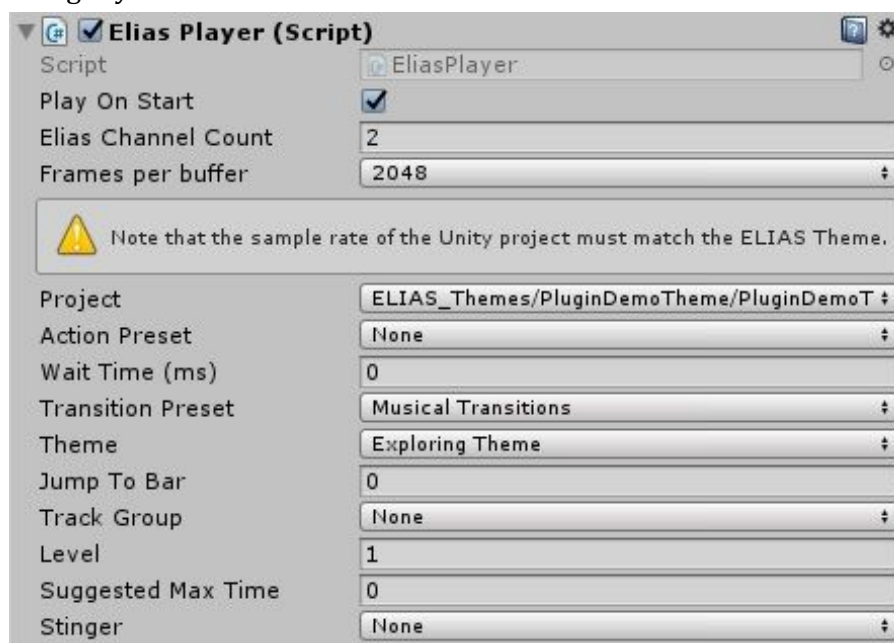

In this example screenshot we can see that this trigger will make the theme go to level 10, using the Musical Transitions Transition Preset and will do this in the Progressive Theme in the Plugin Demo Theme Project.

4   Demo Scene

In your assets folder, locate the Elias Demo folder that contains a demo scene with examples. If it sounds like the music is running too fast or too slow, make sure you have set your System Sample Rate to 44100 in Project Settings / Audio.

Moving between the rooms will switch themes, and the switch occurs quickly when going through the triangle doorway, and more slowly yet more musically when going through the doorway with an arch.
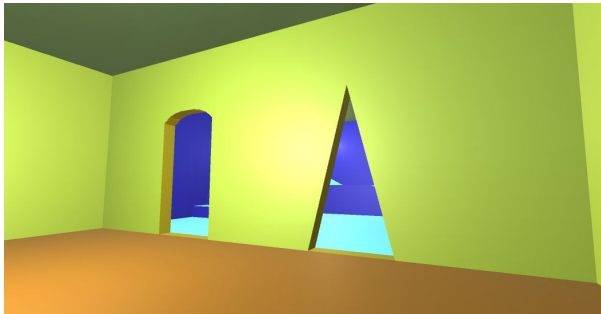
When slopes have three green parts, the floor level will bring the theme to Level 3, the middle one to Level 7 and the top one to Level 10.
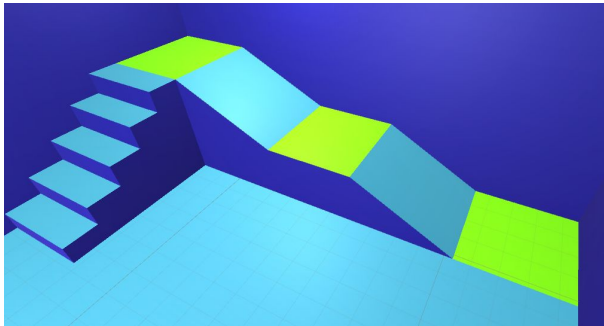
The blue room also has two spheres that will either play a tonal stinger or a Game Over Action Preset upon colliding with them. The Game Over Action Preset will bring the theme to level 0 making it go silent. The theme will start playing again if you walk onto any of the green parts or change theme if you go through one of the doorways.
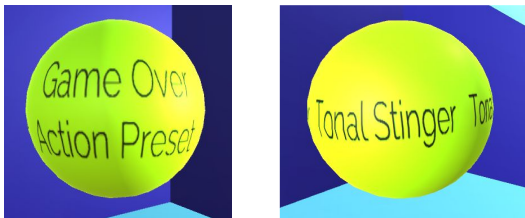
Feel free to make changes to this scene and experiment with the settings to learn more about using Elias with Unity.

5   Change Log

Updates from version 2.0.0 to 2.1.1.

5.1   Plugin 2.1.1 Updates

- The Frames per Buffer can now be set from the inspector for every Elias Player.
- Improved internals of getting audio from ELIAS.
- Added experimental function to the wrapper: elias_read_samples. (Due to its experimental nature its signature/functionality may change between versions!)
- Fixed a bug that occurred when there was more than one Elias Project.

5.2   Plugin 2.1.0 New features

- Elias now pauses when the game is paused. This pause function can also be called and used while the game is playing.
- Updated the Elias Engine to 2.1.0.
- iOS development and simulator support.
- MacOS x86 support.
- Fixed Windows x86 support.

5.3   Plugin 2.1.0 Bugfixes

- Fixed a bug where stinger names were taken from the target theme instead of the active theme.
- When failing, Elias is now shut down instead of spamming error messages.
- In low latency mode the wrapper no longer uses audio clip: this allows the audio source controls like pause, volume and pitch to work for Elias.