

# **FMOD Designer**

Release Notes for Version 4.33



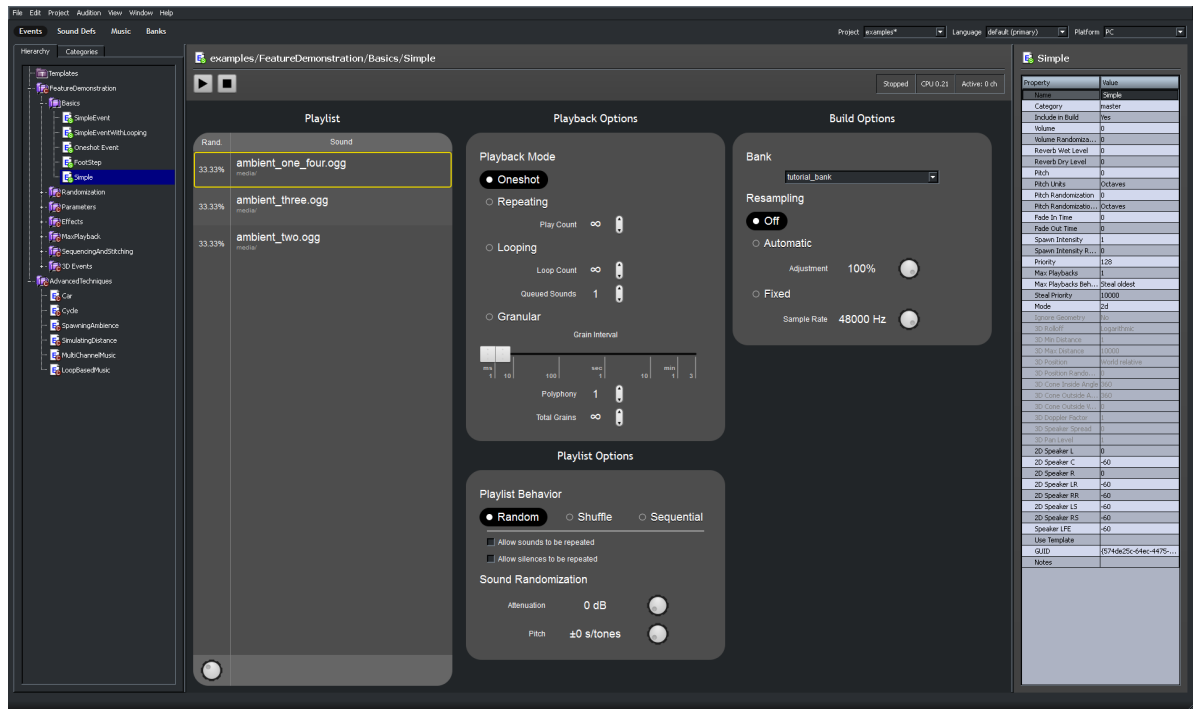
## Welcome

Thanks for downloading FMOD Designer version 4.33! For this release we've added a simplified editor for basic sound effects and made improvements to the way multiple languages and sample rates are handled.

Enjoy!

*The FMOD Designer Team*

## The Simple Event Editor



The goal of the simple event editor is to make creating basic sound effects easy.

## What is a simple event?

As opposed to regular 'Multi-Track' events, simple events are basic sound effects consisting of one or a few audio files. Most oneshot sound effects could be simple events.

For example –

- Basic weapon sounds

- Character sounds
- Basic environment sounds
- UI sounds

## **What isn't a simple event?**

Simple events don't have –

- Layers
- Parameters
- Effects
- More than one playlist
- Programmer sounds
- User Properties

## **Why use simple events?**

Simple events have a couple of advantages over regular 'Multi-Track' events –

- An easy-to-use, streamlined interface
- A smaller memory footprint in the game

## **A Walkthrough of the Simple Event Editor**

This quick walkthrough will guide you through the simple event interface.

1. Right-click on a folder in the event hierarchy and select 'Add Simple Event...'
2. Type in a name for the simple event, like 'My Simple Event', and press enter

You'll notice a brand new interface for editing your simple event.

3. Find an audio file on your hard drive and drag it into the playlist
4. Press the space bar to audition the event

By default, simple events are oneshot – but there are a number of playback modes to choose from.

5. Click on the 'Looping' mode and press the space bar to audition the change
6. Press the stop button to stop auditioning

The stepper on the right of 'Loop Count' allows you to adjust number of times the event loops. You can also type in a value by double-clicking on the current value.

7. Set the loop count to 3
8. Press space bar to audition

Most of the time, simple events will only have one sound. You can add more sounds to the playlist to make more interesting events.

9. Drag in two more sounds from your hard drive into the playlist
10. Press the space bar to audition

By default, sounds are chosen randomly from the playlist, but there are two other behaviors to choose from – shuffle and sequential. Click on each of the other options and audition the event to hear the difference.

Under the 'Playlist Behavior' options, there are a few controls to randomize the attenuation and pitch of the sounds each time they are played in the playlist.

The dials next to the attenuation and pitch properties allow you to adjust the amount of randomization. You can also type in a value by double-clicking on the current value.

11. Set the pitch randomization to  $\pm 20$  s/tones
12. Press space bar to audition

The build options allow you to easily assign your simple event to a bank and specify the resampling method for all sounds in the playlist.

13. Set the resampling method to 'Automatic' and set the 'Adjustment' property to 80%
14. Right-click on a sound in the playlist and select 'Show In Bank'

Notice that all the sounds that are in the simple event's playlist have the same bank settings.

## Changes to Language Support

We've made a number of changes to make dealing with multiple languages easier.

- You can now build for multiple languages from within the build dialog
- You can change the language in the game using the `EventSystem::setLanguage()` API call (see the API docs for more details)

## A Walkthrough to Using Multiple Languages

This quick walkthrough will guide you through setting up and building for multiple languages.

1. Create a new folder on your hard drive called 'New Project'
2. Open up Designer and create a new project in the 'New Project' folder

By default, Designer will look for assets within the folder the project is saved under. This is also the base directory for the default language – English in this walkthrough.

For other languages, you'll need to create sub-folders to store your translated assets. Let's create a folder for German assets.

3. Create a sub-folder called 'de' inside the 'New Project' folder.

The name of the sub-folder is the 'language prefix'. We'll discuss this later.

4. Click on the 'Language' drop down box in the top right corner of the Designer window

You'll notice that there is already a 'default' language – we'll use this for English. Let's add a German language to the project.

5. Select 'Edit languages...'
6. Click the 'Add...' button, type in 'German' and press enter
7. Click 'Ok' in the dialog to commit the change

Now that we've got a German language, we need to set up the banks to point to the translated assets. This is where our 'language prefix' comes in.

8. Click on the 'Banks' tab
9. Right-click on the bank list and select 'Add Bank'
10. Select the new bank 'untitled\_bank00'
11. Click on the language drop down box again and this time select 'German'
12. Click on the 'Filename Prefix' bank property and type 'de/'

Now that we've set up our banks, we can build one for each language.

13. Select 'Build...' from the 'Project' menu

You'll notice two banks in the list – 'untitled\_bank00 (default)' and 'untitled\_bank00 (German)'.

After building these banks, Designer will name them 'untitled\_bank00\_def.fsb' and 'untitled\_bank00\_Ger.fsb' respectively – appending the first 3 characters from the language name to the name of the bank.

## Changes to Sample Rate

Now you can adjust the sample rates for audio files –

- In the banks screen (via the 'Adjust Sample Rate' context menu)

- In the simple event editor (via the 'Build Options')

## **New Resample Modes**

You can choose between three different resample modes.

### **Automatic Rate**

This mode analyses the audio file to determine the lowest rate possible without affecting fidelity. Additionally –

- The rate can be further reduced –
  - Using the adjustment slider in the banks screen
  - Using the adjustment dial in the simple event editor
- This mode was previously called 'Sample Rate Optimization'
- This is the default resample mode for new audio files

Note that the analysis required to calculate the automatic rate will increase build time.

### **Fixed Rate**

This mode allows the sample rate to be set explicitly for each audio file.

### **No Resampling**

This mode maintains the original sample rate of the audio file.

## **Changes to the Banks Screen**

We've made some changes to the way resample modes are set for audio files in the banks screen.

- Two new columns, 'Resample Rate' and 'Original Rate', have been added to the table
- The 'Optimize Sample Rate' option has been removed from the bank properties

## New Columns

Resample Rate	<ul style="list-style-type: none"><li>• This column shows the resampling settings for the audio files</li><li>• 'No Resampling' indicates that the original rate will be maintained</li><li>• 'Automatic Rate' indicates that designer will determine the best rate for the file</li><li>• For automatic rate the percentage of adjustment is displayed</li><li>• For fixed rate the final sample rate is displayed</li></ul>
Original Rate	<ul style="list-style-type: none"><li>• This column shows the sample rate of the original file</li><li>• This column was formally labelled 'Frequency'</li></ul>

## Removal of the 'Optimize Sample Rate' Bank Property

To simplify the interface we've removed 'Optimize Sample Rate' from the bank properties. To enable the automatic resample mode on all audio files in a bank –

1. Select an audio file in the table
2. Press Ctrl-A (Command-A on Mac) to select all files
3. Right-click on the selection and select 'Adjust Sample Rate' from the context menu
4. Select 'Automatic Rate'

## Changes for Version 4.33

### New Features

- Added simple editor for simple events
- Added 'Add Template' to the template folder context menu
- Added fixed sample rate option for waveforms. This option is available through the 'Adjust sample rate' item in the waveform context menu
- Dropping files onto the event hierarchy now creates simple events. This behavior can be changed in the 'Preferences' dialog
- Improved the build speed of banks

### Bug Fixes

- Fixed the build progress dialog that was showing negative values
- Fixed the 'Change wavetable...' menu item that was adding files to the wrong bank

- Fixed a crash that occurred when changing the plugins directory while no projects were loaded
- Fixed non-plugin files in the plugins directory that were causing plugin discovery to halt or crash
- Fixed an application focus glitch that occurred when switching between platforms
- Fixed a crash that occurred when trying to build empty banks
- Fixed the VST dialog that was not displaying when the show config button is pressed (Mac)
- Fixed VSTs that were not loading when using the browse button via 'Add effect' (Mac)

## General Notes

- **The .FEV file format has been updated. If you build with FMOD Designer 4.33, you must use FMOD version 4.33 or higher**
- Changed 'Add Event...' to 'Add Multi-Track Event...' in the event hierarchy context menu
- Removed the 'Optimized Sample Rate' bank option. This option can now be set per waveform
- Waveform resampling mode is now platform specific
- Changed 'Adjust sample rate optimization' to 'Adjust sample rate' in the waveform context menu
- Moved the 'Rebuild' item from the 'Project' menu to the build dialog

## FEV Compatibility Table

	FMOD API 4.33	FMOD API 4.32	FMOD API 4.30	FMOD API 4.28	FMOD API 4.26
Designer 4.33	✓	✗	✗	✗	✗
Designer 4.32	✓	✓	>= 4.30.07	>= 4.28.07	>= 4.26.17