Creation of sound mods for World of Tanks

Starting from version 0.9.17.1 we're introducing an option for you to create and enable custom sound mods in the game. We tried our best to keep the process as simple and quick as possible. One of its main advantages is that you'll be allowed to replace any specific sound file without the necessity to replace the whole container from now on.

Due to the fact that all works are handled in Wwise environment, we suggest visiting their official YouTube channel (<u>https://www.youtube.com/user/AudiokineticWwise</u>) to pass relevant quick tutorial.

2. Open the project:

- 1. Download and install *Wwise* <u>https://www.audiokinetic.com/download/</u>, version 2017.1.1 (note this specific version is mandatory!)
 - 🗇 🛛 🕹 Wwise v2015.1.4 (64-bit) Project Edit Views Layouts Audio Windows Help Project Launcher ? X Update Available! 2015.1.4 build 5497 2015.1.6 build 5553 ٩ Your Wwise version: Most recent version: Wwise v2015.1 Highlights Significant Vorbis CPU performa improvement on most platforms Wwise Authoring Workflow Integration with Steinberg Nuendo 7 Multiple customizable platforms per target SDK New event out Improvements: Events and target objects are now viewable in the Advanced Profiler RTPC Tab: Watched game objects n display cursors in the RTPC graph vie Incremental SoundBank generation fr New event actions: "P 'Reset Playlist" 3ackground User Mus Incremental SoundBank gener faster build times Content filtering in certain view Batch renaming capabilities Searchable online documental erformance Ontimizat flexibility in Conversion reaming optimizations via the cache functionality 2U optimizations for RTPC gnificant Vorbis CPU perform ecovoment on most platform <u>sion overview</u> or the <u>Release Notes</u> for more detail Wwise Video - <u>Next</u> - <u>All Videos</u>

Click Open Other in the opened window, then choose WoT_sound_mod_version_<game_version>.wproj



3. Proceed to Audio tab



4. Drag the desired sound files into Actor-Mixer Hierarchy -> Default Work Unit to replace the old ones

	WoT_sound_mod_version* - Wwise v2015.1.4 (64-bit) – 🗗					
Project Edit Views Layouts Audio Windows Help			. Y			
Windows_Hig V English (US) V Start Capture 00:00:00.01	DO Follow Capture Time 00:00		Reconnect Not connected		Search	
Project Explorer Audio Events SoundBanks Game Syncs ShareSets Sessions Queries Image:		perty caltor				P V
Actor-Mixer Hierarchy	🕼 l 🖸 🕼 = l	Music Tools	SFX	- 🗆 🗙		3
Interactive Music Hierarchy	File Home Share	View Play		~ 🕐		o
Default Work Unit	🛞 🏵 🔻 🕇 퉬 « Ori	ginals → SFX	✓ C Search SFX	Q		-3
	☆ Favorites	Name	Date modified	Туре		-6
	Desktop	fire	20.01.2016 16:05	Wave Sound		-9
	Downloads	fire_EXTINGUISHER	20.01.2016 16:05	Wave Sound		-12
	Recent places This PC Control Decktop Documents Downloads Music Distance	2 wpn	21.10.2014 22:23	Wave Sound		-12 -15 -18 -21 -24
	2 items 2 items selected	< 01 MP			? X	9 ⁻²⁷
		Ohiect				-30 -33 -36
Project Explorer Audio Events SoundBanks Game Syncs ShareSets Sessions Queries Image:		ogati Fonly □ U S	 C Reset Al >> C ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕ ⊕	RTPCs Triggers		-39 -42 -45 -48

5. In the window opened you'll see the imported files. Please check that **Import as** has **Sound SFX** feature selected (please don't mistakenly select **Sound Voice**).

M	WoT_sound_mod_version* - Wwise v2015.1.4 (64-bit)		- 0	×
Project Edit Views Layouts Audio	Windows Help			
Windows_Hig 💙 English (US)	Start Capture 00:00:00.000 Folow Capture Time 00:00:00.000 M S Remote Reconnect Not connected		Search	
Project Explorer	1 ? X Property Editor		? X 🛽	? X
Audio Events SoundBanks Game Sync	s ShareSets Sessions Queries			
	Audio File Importer	? X		
Master-Mixer Hierarchy Default Work Unit Actor-Mixer Hierarchy Actor-Mixer Hierarchy	Import Mode: Create new objects V Import as: Sound SPX V Destination language: English (US) V			
Default work unit	Object destination III Lactor Aliver Hierarchy/Default Work Unit	-81		
🗹 💟 Default Work Unit				
	Add Files Add Folders Import Tab Delimited	Remove		
	Audio File/Folder Template Object Type/Action Object	Message Q		
	C:\Users\e_trubin\Desktop\FINAL_MOD\project\fire.wav >> None Sound SFX V			
	CLUSERS (2 TUDIN DESKTOP) (2 NA (TRE_EX LUNGUISHER. WAY >> None Sound SFX CLUSERS (2 NONE) SOUND SFX (2 NONE) SOUND SFX CLUSERS (2 NONE) SOUND SFX CLUSER			
			? X	
	C			
Design to Surglasses	Template match mode: Match all	Cancel	9 ? X	
Project Explorer				
Audio Events SoundBanks Game Synd Master-Mixer Hierarchy 17 ① Default Work Unit Actor-Mixer Hierarchy V ② Default Work Unit	s ShareSets Sessions Queries PFOnly UUC S Ut C C Switches Triggers			42 45 48

6. To make things easy, you may rename the files via pressing F2 key. Add «_mod» for example, to get wpn_mod

WoT_sou	ound_mod_version* - Wwise v2015.1.4 (64-bit)	_ 0	×
Project Edit Views Layouts Audio Windows Help			
Windows_Hig V English (US) V Start Capture 00:00:00.000 Follow Capture Time 0	00:00:00.000 M S Remote Reconnect Not connected		
Project Explorer 1 ? X	🕽 🔀 wpn - Sound Property Editor	12 12 ? X	? X
Audo Events SoundBanks Game Synce ShareSets Sessions Queries ■ Master-Hister Hierarchy ■ ✓ O Default Work Unit ■ ✓ ✓ free_BritKon (LBHER_mod ✓ ✓ worn_mod ■ Interactive Music Hierarchy ✓ ① Default Work Unit	Name PF Notes Wpn M S General Settings Effects Postoning RTPC Voice Output Bus Initial Delay Volume Low-pass filter Initial Delay Volume Usernde parent Initial Delay Usernde parent Usernde parent Isone-Defined Auxiliary Sends Volume User Defined Auxiliary Sends Volume User Defined Auxiliary Sends Volume Isone-Defined Auxiliary Sends User Defined Auxiliary Sends Volume Isone-Defined Auxiliary Sends ID Auxiliary Bus Volume Isone-Defined Auxiliary Sends		P 6 3 0 -3 -6 -9 -12 -15 -18 -21 -24
	🔉 wpn - Contents Editor - 1 child	? X	
	Name Audo File Make-Up Gain Duration Notes SFX Add File Add File Add Add Add Add Add Add Add Add Add Ad	dd Source :	
Project Explorer 2 ? X	Wpn - Transport Control	9?X	
Audio Events SoundBanks Game Syncs ShareSets Sessions Queries ■ Master-Hirearchy α Φ) Δefault Work Unit α α Δ) Δefault Work Unit α α α	Original O U Ø Reset Al >> States RTPC_sxt_menu_volume_master PF_Only O U Ø Ø Switches Triggers		-39 -42 -45 -48

7. In **Out Bus** section you have to choose the bus where we'll have our sound directed to (bus structure description is available in bus *Notes*). Correct selection is necessary for the volume tweaking by appropriate sliders (*Interface, Vehicles, Voices* etc) in the game settings. By default, the sound will be

directed into Master Audio Bus - i.e. it will be responsive to the master volume slider.

Martin and a second	WoT_sound_mod_version* - Wwise v2015.1.4 (64-bit)	- • ×
Project Edit Views Layouts Audio Windows Help		
Windows_Hig 🗸 English (US) 🗸 Start Capture 00:00:	000 Folow Capture Time 00:00:00.000 M S Remote Reconnect Not connected	
Project Explorer 1 ? X	wpn_mod - Sound Property Editor	
Audo Events SoundBarks Game Syncs ShareSets Sesso I ■ Master-Mixer Hierarchy ■ O Default Work Unit ■ Actor-Hixer Hierarchy ■ Actor-Hixer Hierarchy ■ Actor-Hixer Hierarchy ■ Actor-Hixer Hierarchy ■ ✓ Sync, ENTINGUER_mod ■ ✓ Sync, ENTINGUER_mod ■ Interactive Husic Hierarchy ■ Interactive Husic Hierarchy ■ Ø Default Work Unit	nne PF Notes pr_mod PF Notes Protocope PF Notes Protocope PF PF Notes PF Notes	C C
Project Explorer 2 ? × Audio Events SoundBarks Game Syncs ShareSets Session ■ Master-Mixer Hierarchy A ■ Actor Hierarchy A	spr_mod - Transport Control Drignal DIDOO Reset All >> States RTPCs If RTPC_ext_camera_height F Only DIDOO States Triggers RTPC_ext_camera_height rel RTPC_ext_camera_height rel RTPC_ext_menu_volume_effects If RTPC_ext_menu_volume_master RTPC_ext_speed_rel_global	• ? × -36 -39 -42 -45 -45
Project Explorer 2 ? × Audio Events SoundBanks Game Syncs ShareSets Sessiof ▼ ■ Master-Mixer Hierarchy ■ ① Defail Work Unit ■ Actor-Hixer Hierarchy □ V Defail Work Unit *	Name Audo File Make-Up Gan Duraton Notes X Add Source: Add Source: Impn wpn.wav 0 1.349 Notes	

8. Proceed to Source Settings tab and define conversion settings (Vorbis, Quality High).

	wo1_sound_mod_version* - wwise v2015.1.4 (64-bit)	
Project Edit Views Layouts Audio Windows Help		
Windows_Hig 🗡 English (US) 🗸 Start Capture 00:0	0:00.000 Folow Capture Time 00:00:00.000 M S Remote Reconnect Not connected	Search
Project Explorer 1 ?	K fre_mod - Sound Property Editor	12 N2 ? X ()
Audo Events SoundBanks Game Syncs ShareSets Sessor	Name PF Notes Hre_nod M S General Settings Effects Positioning Conversion Settings Effects Positioning Override overst Edit Edit Mode Default (Custom) Edit Loudness Default (Custom) PCM Make-Up Gan Vorbis Auto Detect High Vorbis Auto Detect High Vorbis Auto Detect Low Vorbis Auto Detect High Vorbis Auto Detect High Vorbis Auto Detect High Vorbis Auto Detect High Vorbis Auto Detect High Vorbis Quality Low Vorbis Quality Low Vorbis Quality High Vorbis Quality Low Vorbis Quality Medium Vorbis Quality Medium	7 × 30
	SFX SFX Image free free.wav Image op Gain Durabori Durabo	Add Source >>
Project Evolorer	Fre_mod - Transport Control	•-36 •-36
Audio Events SoundBanks Game Syncs ShareSets Session ■ Master-Mixer Hierarchy ■ Actor-Mixer Hierarchy ■ Actor-Mixer Hierarchy ■ Actor-Mixer Hierarchy □ Ø Default Work Unit*	Original O Image: Constraint of the sected all the	100

Press **Edit** then to define the desired quality by dragging the slider. The higher the quality set – the bigger will be the size of the resulting soundbank. We suggest using values between 4 and 6.

	Conversion Settings Editor —						Ξ×		
E	B Default Conversion Settings - Conversion Settings Editor							12 V2 3 X	
	Name Shared by: Default Conversion Settings 2 armor_not_pierced_by_player_02 3 Steep_long 2 target_lost_01 0								~
-	Platform Channels L.R. mix Sample Rate Min Sample Rate Max Sample Rate Windows_HighRes As Input As Input None None None Windows_LowRes As Input As Input None None None	e Format Vorbis Vorbis	Quality 4	Adv. Edit Edit				Options Sample rate con High (Slower) Insert filena Remove DC Apply dithe Apply dithe	iversion quality) V ame marker C offset r nel upmix
	Audio Sources (3) Audio Source amor not pierced by player_02	Language Russian	Orig. Chan. 2.0	Conv. Chan.	Original SR Converted S	Show I R Original Size Conv 292.1 KB -	Name 💙 erted Size Size -	Convert e Ratio Duration 1.695	Copy to Clipboard Bandwidth
	beep_long target_lost_01								

9. Proceed to the Events tab. Here, you'll have to find the event you want to be replaced; please pay attention to the Notes field that contains descriptions of the events. Add a "play" rule to wpn_huge_PC_mod event, then right click on the rule and select Browse. In the dialog window opened you need to find the required sound file (wpn_mod).

	WoT_sound_mod_version* - Wwise v2015.1.4 (64-bit)	- 🗇 🗙
Project Edit Views Layouts Audio Windows Help		
Windows_Hig ✓ English (US)	:00.000 Follow Capture Time) 00:00:00.000 M 5 Remote Reconnect Not connected	
Project Explorer	Expn_huge_PC_mod - Event Editor	? X 🖪?)
Audo Events SoundBanks Game Syncs ShareSets Sessor () 1 10 Plane 1 10 Plane 1 10 Plane 1 10 Plane 1 10 Plane 1 10 Treads 1 0 Treads 1 0 Turret 1 0 Turret 1 0 Turret 1 0 Turret 1 0 Utilie_events 1 0 Utilie_events 1 0 Indicators_de 1 1 monficators_de 1 1 monficators_de 1 1 monficators_lo_ 1 1 monficators_lo_ 1 1 monficators_lo_ 1 monficators_PC 1 won_lung=_PC 1 won_large_PC 1 won_large_PC	Name: Notes: wpn_huge_PC_mod Event ID Event Actions Browse Remove Notes No. PF Actions Objects Scope Notes 1 >> Play wpn_mod Game object 2 2 >> Location In Herarchy	 □ □
Upnamic Dialogue Default Work Unit		-33
Project Explorer 2.7 X	wpn_huge_PC_mod - Transport Control	•?× -36
Audio Events SoundBanks Game Syncs ShareSets Session	Original O Image: States RTPC Image: RTPC_ext_camera_height Image: PF Only Image: States RTPC_ext_camera_height_rel Image: RTPC_ext_camera_height_rel Image: RTPC_ext_camera_height_rel Image: RTPC_ext_camera_height_rel Image: RTPC_ext_camera_height_rel	0 0 -39 -42
□ Master-Mixer Hierarchy ∧ □ Default Work Unit □ □ Actor - Mixer Hierarchy □ □ Actor - Mixer Hierarchy □ □ × □ □ Cefault Work Unit* ✓	RTPC_ext_menu_volume_inetsb RTPC_ext_menu_volume_master RTPC_ext_speed_rel_global RTPC_ext_viewPlayMode	

10. Open the SoundBanks tab. Create new .bnk file in the Default Work Unit (for example, call it mod).



11. Press F7 and proceed to **SoundBank Manager.** Drag the event (*wpn_huge_PC_mod*) into **Hierarchy Inclusion** field (note – checkboxes for *Events, Structures, Media* should be on)

	WoT_sound_mod_version* - WWise V2015.1.4 (64-bit)	
Project Edit Views Layouts Audio Windows Help		
Windows_Hig ▼ English (US) ▼ Start Capture 00:00:00.000 Follow	Capture Time 00:00:00.000 M S Remote Reconnect Not connected	fire
Project Explorer 1 ? X	SoundBank Manager	? 🗙
Audo Events SoundBarks Game Syncs ShareSets Sessions Queries	SoundBanks Tree lat New User Settings Generate Show Log SoundBanks Data Size Free Space Typ Platforms Windows_HighRes Windows_LowRes Setect All Select None Select Sele	ngusges Q Danish Dutch Engleh (UK) Engleh (UK) Engleh (UK) French (Canada) French (Canada) French (Canada) Greek Hebrew Endersen Indonesian
won_hous_PC won_large_PC won_large_PC won_main_UPC won_main_UPC won_main_PC won_medum_PC won_medum_PC	S mod - SoundBank Editor Name Modes Mod Add Game Syncs Edit Details Herarchy Inclusion Events Events Events Events Events Events Events	2 X Structures Media Q X X
Event viewer 1.7 x Filtered Current Selection Orphans (853) Filter Show All advance [Missing] aim [Missing] aiming [Missing]	Events Weapons (upn_hüge_PC* * : Manually added	Remove

Enable all necessary checkboxes in **Platforms** and **Languages** groups.

12. Proceed to the **User Settings.** Enable the **Override Project SoundBank Paths** checkbox and define the path for the .bnk to generate.



13. Once the .bnk generated, click Close.

	WoT_sound_mod_version* - Wwise v2015.1.4 (64-bit)	- 0 ×
Project Edit Views Layouts Audio Win	dows Help	
Windows_Hig 🗡 English (US) 🛛 🗸 🗸	Start Capture 00:00:00.000 Folow Capture Time 00:00:00.000 K S Remote Reconnect Not connected	
Project Explorer	1 ? X SoundBank Manager	? X
Audio Events SoundBanks Game Syncs S	hareSets Sessions Queries SoundBanks	
	Tree Ist V New User Settings Generate Show Log	
🖬 🚺 Impacts	SecondBanks Data Size May Size Free Space Typ Q Platforms Q	Languages
II U Modules		🗹 Danish
Di Objects	Generating SoundBanks - Completed	🗹 Dutch
🖬 🛄 Pass_By	Operation Progress Details	English (UK)
O Physical_Collision	Operation Progress Decails	English (US)
		French (Canada)
🖬 🚺 Treads		French (France)
II U Turret		German
Utilite events		Greek
Voiceover_old*		Hebrew
E 🕖 Weapons*		 Hungarian Indonesian
wpn_automatic_NPC		
wpn_huge_NPC	Results I Select None	Select All Select None
wpn_huge_PC	SoundBanks Platforms Language/SFX Created	? X
won large PC	mod Windows High SFX Yes	
wpn_main_NPC		
wpn_main_PC		
won_meduim_NPC		
wpn_small_NPC	Events	Structures Media
wpn_small_PC		
Event Viewer	Log	
Filtered Oursent Selection Orehans (852)	Time ID Message Platform Parameters	
Pintered Current Selection Orphans (855)	17:54:22 - Evaluation mode: SoundBanks contain 3 media item(s) out of Windows_High	
Filter >> Show All	Copy To Clipboard Close	
advance [Missing]		0
aim [missing]	*: Manually added	
(about 5)		

- 14. Create folder <game_folder>/res_mods/<game_version>/audioww/, copy the generated mod.bnk there both with audio_mods.xml provided in the same archive with the project.
- 15. Open audio_mods.xml and specify there our mod.bnk:

```
<loadBanks>
<bank> mod.bnk </bank>
</loadBanks>
```

Add default event *obj_bicycle* and event, that should be replaced by *obj_bicycle_mod*



It is time to save your audio_mods.xml

16. The mod is good to go \odot .