A comprehensive guide to Vocoding - Cyberpunk 2077 voices

You need to know that you'll need 3 softwares to do this:

WolvenKit:

to extract and package your final files.

Download here:

CLICK ME

• Wwise Ver. 2019:

to convert .WAV to .WEM

Download here:

CLICK ME

• Any Audio editor

that allows batch processing (I used *Adobe Audition*) So this guide will be with Adobe Audition processing.

Wolvenkit

First you need to do the extraction of V female or male voices with Wkit: Or any voices on your preference, all lines are here on this path

if we talk about voices, they're in "VO" folder,

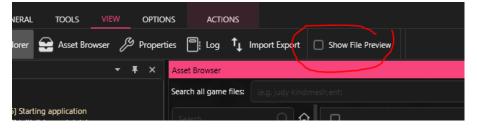
Path is: Archive/Base/Localization/{your country language}/vo

V voice lines are named as "V..." fem and male are named like "V_fgig02{...}" -->the letter F is for female, and M for man... (it maybe can also change on your local language)

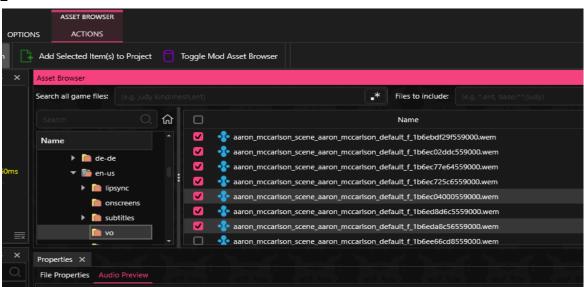
Naming Example:	
v_arroyo_m_1b68b0433544d000.wem	
v_arroyo_m_1b7871bab444d000.wem	
v_arroyo_m_1b7875ed6444d000.wem	

For adding those files to your project you need to check the files you need and use the *1 "Add selected item(s) to project" under Actions tab.

*1 First Make sure to uncheck the "Show File preview" under the View tab



2-



For replacements, we need to make some conversions, those are easy, but for many sounds, we need **batch conversions** from **wem to ogg** (or wav)³ i use divinity converter, so i can use the sounds on A. Audition.

Wolvenkit can convert .wem files to mp3, but we will not use this function for reasons. Here:

We need to convert more or less 15000 files per gender, and wolvenkit UI gets freezed doing this work and also it takes more time,

3 - Wav and Ogg are lossless audio formats than MP3.

So we will use:

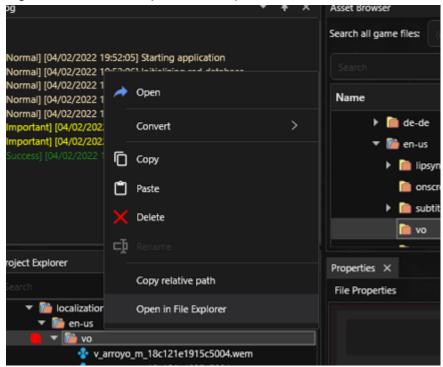
Divinity sound converter that works beautifully for me.

Here is the file on Mega:

https://mega.nz/file/s4AmgI4J#pGqUrybQAoBX0Wf6lkjweDBmhE4Zr5F7lmxMKgu3M3U

So, on your explorer depending on the path you saved your Wk project you'll have a lot of .wem files, you can also enter to the folder from the WK.

Right click on VO → Open in file Explorer



Your folder with all the wems will open on file explorer and now you can close Wolvenkit from this instance.

Divinity Sound Converter

This converter should look like this, the way to do the conversion is really easy, you just need to drop your wem files to the folder root.

Nombre	Fecha de modificación
NON-NUMBERED	07/08/2014 17:44
NUMBERED	18/01/2022 19:37
■ bnkextr.exe	21/01/2010 16:02
convert.bat	07/08/2014 17:46
divinity_converter.exe	07/08/2014 14:13
divinity_converter.rb	07/08/2014 17:48
packed_codebooks_aoTuV_603.bin	03/12/2011 23:06
revorb.exe	07/08/2014 14:36
ww2ogg.exe	04/12/2011 3:15

I've drop some files as an example:

NON-NUMBERED	07/08/2014 17:44	Carpeta d
NUMBERED	18/01/2022 19:37	Carpeta d
■ bnkextr.exe	21/01/2010 16:02	Aplicació
onvert.bat	07/08/2014 17:46	Archivo p
divinity_converter.exe	07/08/2014 14:13	Aplicació
divinity_converter.rb	07/08/2014 17:48	Archivo R
packed_codebooks_aoTuV_603.bin	03/12/2011 23:06	Archivo B
revorb.exe	07/08/2014 14:36	Aplicació
v_arroyo_m_18c12a512d5c5004.wem	11/10/2021 18:52	Archivo V
v_arroyo_m_18c12a89345c5004.wem	11/10/2021 18:52	Archivo V
v_arroyo_m_18c12a89365c5004.wem	11/10/2021 18:52	Archivo V
v_arroyo_m_18c12ab46d5c5004.wem	11/10/2021 18:52	Archivo V
v_arroyo_m_18c12ab46f5c5004.wem	11/10/2021 18:52	Archivo V
v_arroyo_m_18c12ade945c5004.wem	11/10/2021 18:52	Archivo V
■ ww2ogg.exe	04/12/2011 3:15	Aplicació

Now run divinity_converter.exe

Don't worry, it is totally safe, :)

A command line will open and you just have to wait, it will close alone when all convertions are ended:

```
C:\Users\Giselle\Desktop\Programas\Audio\divinity_sound_converter_v1\divinity_converter.exe

Converting v_arroyo_m_18c12a512d5c5004._wem to .ogg...

Converting v_arroyo_m_18c12a89345c5004._wem to .ogg...

Converting v_arroyo_m_18c12a89365c5004._wem to .ogg...

Converting v_arroyo_m_18c12ab46d5c5004._wem to .ogg...

Converting v_arroyo_m_18c12ab46f5c5004._wem to .ogg...

Converting v_arroyo_m_18c12ade945c5004._wem to .ogg...

Converting v_arroyo_m_18c12ade945c5004._wem to .ogg...

Converting v_arroyo_m_18c12a512d5c5004.ogg to a better .ogg format (?)...

Converting v_arroyo_m_18c12a89345c5004.ogg to a better .ogg format (?)...
```

Your converted files will be in the NUMBERED folder. ..\divinity_sound_converter_v1\NUMBERED

Better copy all this Ogg to a safe location, and we will continue with Adobe Audition conversions.

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Adobe Audition

here is the creative/fun part 😁

If you want, I recommend using some external VST's add-ons for better effects, but you can also achieve those "robot" effects with native tools.

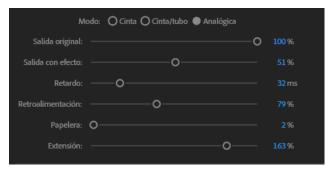
I'll not explain here every single effect or VST and how it works, but you can also check this video for more info:

Batch processing and export.

https://youtu.be/70cb4 Sx7A0

Best native tools for achieve robot effect are:

- 1. Reverb and Echo
- 2. Time and Tone
- 3. Analogic reverb



Those are more or less Reverb set up, feedback (4rth element) should be less than 100% to not have a return.

You can play around adding more effects as I show on the video.

Important: Remember to set your export adjustments to WAV. (Wave PCM) *4

Disclaimer: Please don't ask me how to do moduled like voices (Daft punk style) . They are a totally different way to do it, and you need to convert to MIDI the audio file to make slight changes to it. However you can do this but you can't automatize that process, (it needs to be done on each audio) And also, i don't recommend adobe audition for this.

4 - Adobe audition makes .pkf files from each sound on the ogg folder container, we don't need them, and you can delete them.

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Wwise

if you have your Wwise 2019 installed here is where we need to make the last conversion to .wem again.

Open the software and follow step by step.

1. Set up the conversion environment

Project → Project Settings → Source settings (Vorbis quality high)

2. Import your way files. (i recommend 5000 per each conversion, but that depends on your system capacity)

Project → Import Audio Files

3. Convert All audio files

Project → Convert all audio files →Platform (Windows) or {OS}..-->Ok

4. Pay attention to details it must say encoding VORBIS and not Encoding PCM.

If step 4 isn't right you need to start again. Made a new file (you can also clean the imported audios, but i'll not explain that here)

Your WEM files will be here:

\Users\{User}\Documents\WwiseProjects\{Project name}\.cache\Windows\SFX

\Users{User}\Documents\WwiseProjects\{Project name\\.cache\Windows\Voices\English(US)

Ok, now...

you'll see they have a random numeration on the end. So we will need to rename.

Download this 3



https://www.bulkrenameutility.co.uk

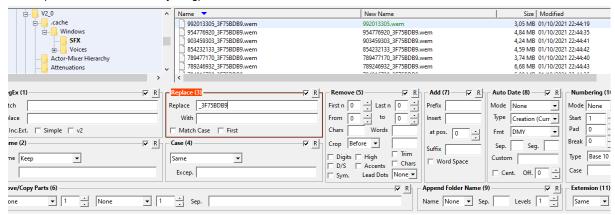
Use the Replace tool like this

The underscore is part of the Wwise naming so we need to erase that too.

Example:

Replace: _3F75BDB9

With: (Here we don't write anything)



Select all and click rename.

You can also check the "New name" tab.

We can now come back to Wolvenkit to replace and pack.

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Wolvenkit

At this instance we can just open again the App and open the folder on the explorer and erase all the old wem files (*if you didn't cutted on those others steps*)

Now copy to this folder the new wems made by you.

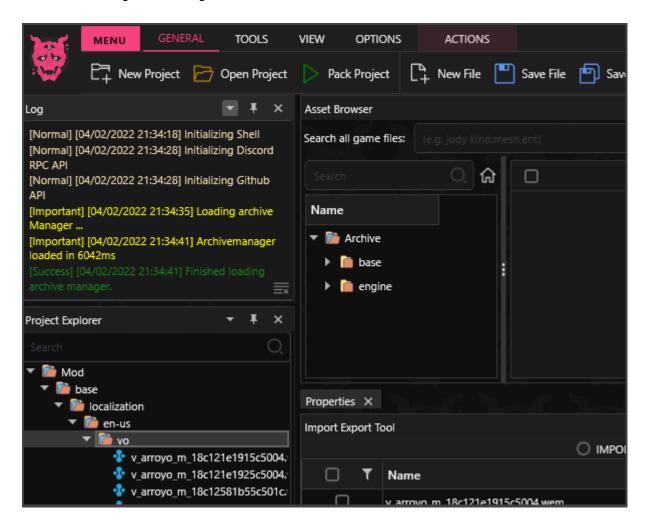
Again the path should be something like this:

\{Project Name}\files\Mod\base\localization\{language}\vo -

Go to General tab and click on "Pack Project"

The new mod made by yourself will be installed on the game.

Depending on the quantity of files to pack WK can take a few seconds, just wait for the success message on the log.



You can now close the App and test :D

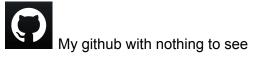


You can check some other projects here:

 ♣Projects, guides and investigation: ♣ https://bioskop.notion.site/CP2077-Narrative-Modding-b47f789f992248e08241da1a9 83912c5



Narrative RPG **Prototype** for cyberpunk side missions/missions, in-game histories



Working on: A guide to Quest design