

OFFLINETRANScribe

DOCUMENTATION



VERSION
2024.08.29.1603

[OFFLINETRANScribe.COM](https://offlinetranscribe.com)

COPYRIGHT ©2024 TADELSUCHT UG (LIMITED LIABILITY)

1 Introduction	3
1.1 Supported recording/audio file formats	3
1.2 Selection of transcription software	4
1.2.1 OpenAI Whisper	4
1.2.2 Whisper.cpp	6
1.3 Whisper.cpp BLAS	6
2 Installation	7
2.1 Installation via the graphical interface	8
2.2 Installation via the command line	9
2.3 Licensing of the Application	9
2.3.1 Single-user licenses	10
2.3.2 Multi-User/Terminal Server Licenses	10
2.4 Limitations of selection options	11
2.5 Provide transcription models in the installation folder	11
3 User interface in detail (GUI)	13
3.1 Transcription	14
3.2 Transcription queue	15
3.3 Completed transcriptions	16
3.4 Program settings	17
3.5 Initializing program resources	19
3.6 Technical information	19
4 Command lines (CMD)	20
4.1 Parameter list	21
4.2 Call examples	21
5 Configuration file	23
6 Frequently Asked Questions (FAQ)	24
6.1 What are the system requirements for OfflineTranscribe?	24
6.2 OfflineTranscribe cannot be installed. [Windows SmartScreen]	24
6.3 If my files or data are uploaded or left in my computer in any way?	25
6.4 How many users may use a license simultaneously? the?	25
6.5 On how many computers can a license be used?	25
6.6 I get the following message "The license key is currently already used by multiple devices". What does that mean?	25
6.7 A transcription process does not start. What can I do?	26

6.8 The transcription on my computer is too slow for me. What can I do?	26
6.9 The program tells me that there is not enough memory for my selection of transcription software and transcription model. What can I do?	26
6.10 Troubleshooting program resource access problems Folder	27
7 References	28

1

Introduction

With **OfflineTranscribe**, recordings/audio files, such as MP3 files, can be an Internet connection on your own computer from speech to text, i.e. transcribed. It is a program that allows a simple User interface for a selection of transcription software and models and automates the provision and use of these.

1.1 Supported recording/audio file formats

The program supports various file formats. **MP3** and WAV files are natively supported, while other audio file formats are only supported within the program will automatically convert them into a compatible audio file. converted files are stored under the path %appdata%\OfflineTranscribe\ConvertedAudioFiles are temporarily stored with a name such as "Recording_5d2d3b9c-a360-4f52-a335-093e3d9d5c98.mp3". This is done using the included software "ffmpeg"[3].

Conversion software supports many audio file formats. More information: https://www.fosshack.net/wiki/FFmpeg_supported_formats (other formats may also be supported, as the included.)

• MP3

• MP3

• OGG

• MP3

• M4A

1.2 Selection of transcription software

This section discusses the supported selection of transcription software and models. These are briefly described and pointed out to potential

detailed details.

1.2.1 OpenAI Whisper

Whisper is a general-purpose model for speech recognition. It was developed using a large dataset with different audio data and is a multitasking model that can perform both multilingual speech recognition and language translation and language identification.[2]

Models The following models can be used for the included transcription software

Whisper can be selected:

Model name	Speed	Error rate	Description
tiny	+++++	+	Fastest / most errors
base	++++	++	Fast
small	+++	+++	Normal
medium	++	++++	Better
large	+	+++++	Best / Least Errors
tiny_en	+++++	+	English only - Fastest/most errors
base_en	++++	++	English only - Fast
small_en	+++	+++	English only - Normal
medium_en	++	++++	Only English - Better

Supported Language Language support and error rate may vary depending on

Language varies greatly (More information: <https://github.com/openai/whisper/blob/eff383b27b783e280c089475852ba83f20f64998/language-breakdown.svg>).

Here is the list of supported languages:

- English
- Russian
- Portuguese
- Chinese
- Korean
- Turkish
- German
- French
- Polish
- Spanish
- Japanese
- Catalan

- | | | |
|--------------|---------------|----------------------|
| • Dutch | • Hindi | • Hindi |
| • Arabic | • Welsh | • Sinhalese |
| • Swedish | • Slovak | • Thai |
| • Italian | • Hindi | • Shona |
| • Indonesian | • Persian | • Yoruba |
| • Hindi | • Latvian | • Somali |
| • Finnish | • Bengali | • Afrikaans |
| • Vietnamese | • Serbian | • Occitan |
| • Hebrew | • Azerbaijani | • Georgian |
| • Ukrainian | • Slovenian | • Belarusian |
| • Greek | • Hindi | • Tajik |
| • Malay | • Estonian | • Sindhi |
| • Czech | • Macedonian | • Hindi |
| • Romanian | • Breton | • Amharic |
| • Danish | • Basque | • Yiddish |
| • Hungarian | • Icelandic | • Lao |
| • Tamil | • Armenian | • Uzbek |
| • Norwegian | • Nepali | • Faroese |
| • Thai | • Mongolian | • Haitian-
Creole |
| • Urdu | • Bosnian | • Pashto |
| • Croatian | • Kazakh | • Turkmen |
| • Bulgarian | • Albanian | • Norwegian |
| • Lithuanian | • Swahili | • Maltese |
| • Latin | • Galician | • Hindi |
| • Maori | • Hindi | • Luxembourgish |

- Myanmar
- Assamese
- Hausa
- Tibetan
- Tartar
- Bashkir
- Tagalog
- Hawaiian
- Javanese
- Malagasy
- Lingala
- Indonesian

1.2.2 Whisper.cpp

This software is an alternative implementation of OpenAI's Whisper. It is written in the C++ programming language, which can lead to faster transcription depending on the system.

[4] It uses reformatted Whisper models.

det and natively only WAV files are supported. OfflineTranscribe takes care of

However, for other audio file formats, as with OpenAI's Whisper, it is a matter of internal conversion to the compatible audio file format. Apart from the one just mentioned, the software behaves exactly like OpenAI's Whisper with the given models and supported languages (see [1.2.1](#)).

1.3 Whisper.cpp BLAS

This software is Whisper.cpp (see [1.2.2](#)) with just an implementation that uses the BLAS library for transcription calculations.[5]

On some systems, this is faster than the normal implementation. It behaves exactly like Whisper.cpp and uses the same models.

2

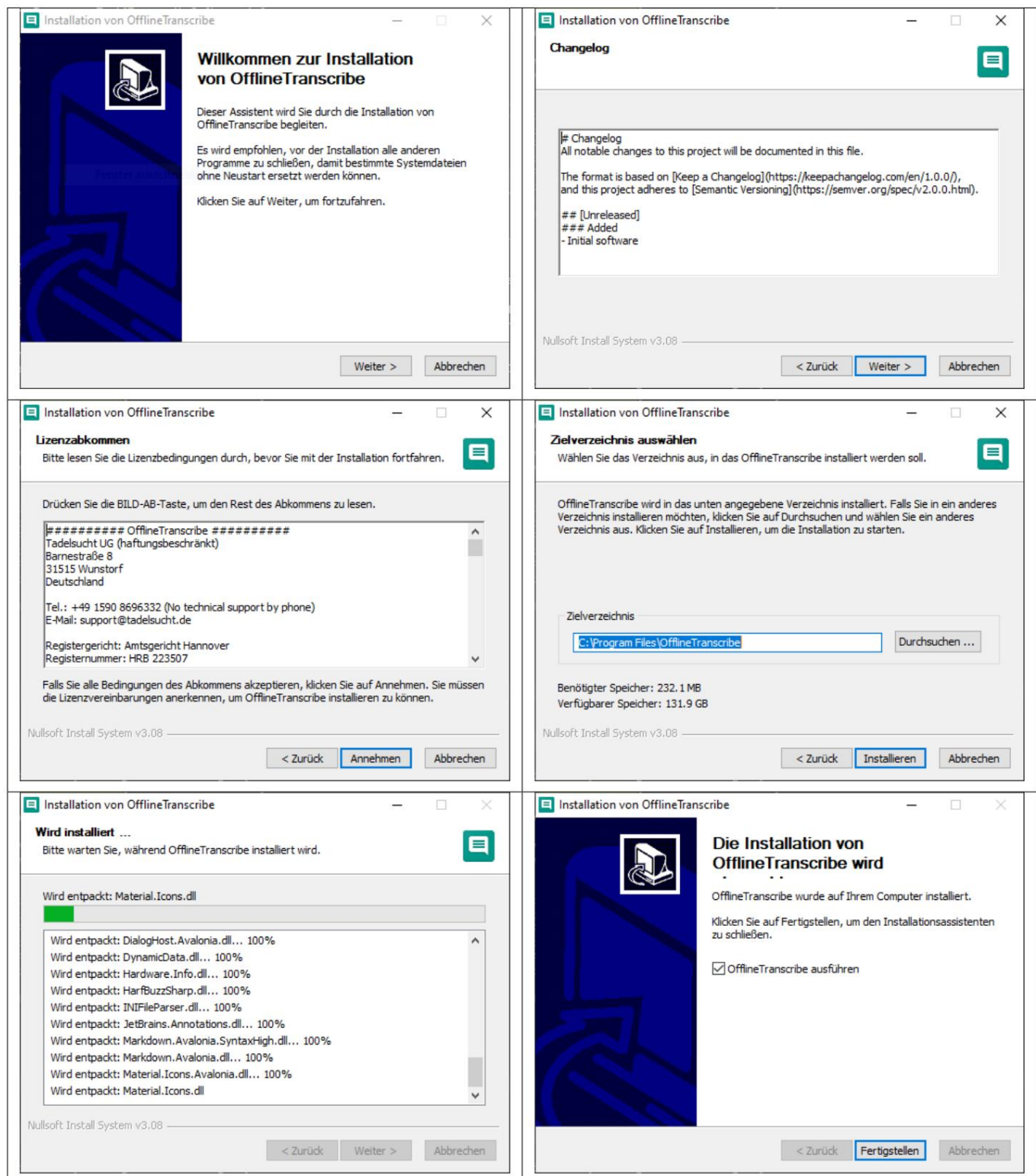
installation

The program can be downloaded from <https://OfflineTranscribe.de> available executable file "OfflineTranscribe-Setup.exe". Depending on the source, this may be packed in a compressed zip file.

The graphical installation is discussed in section [2.1](#) and the command line installation is discussed in section [2.2](#) .

Section [2.3](#) also explains how to license the application with a license key.

2.1 Installation via the graphical interface



2.2 Installation via the command line

The "/S" parameter allows an unattended installation. If the installation path should be specified, this can be done using the /D=C:\NewInstallDir\ parameter .

Example 1: OfflineTranscribe-Setup.exe /S

Example 2: OfflineTranscribe-Setup.exe /S /D=C:\NewInstallDir\

2.3 Licensing of the application

To license the application, a license key must be used once to Online activation of the installation can be carried out. The maximum number of activations is limited and depends on the license purchased. During activation, after successful communication with the license server, a "LicenseConfirmation" file is created on the computer, which contains the license key, the expiration date and the device ID. This file is updated every time Start the application to check the validity of the license. This Testing also works without an internet connection.

The license settings can be found under the program settings. These license-related settings are discussed below in their various forms, with a brief explanation where appropriate.

No license key entered


License key not recognized

A screenshot of a software license activation interface. It features a label "Software license:" followed by a text input field containing the key "AB-CD-EF-GH-1". To the right of the input field is a red "X" icon, indicating an error. Further right is a button labeled "Activate online".

Software license:  Activate online

A license key will be shown as invalid if it does not contain the correct license key structure, the key is unknown to the license server or the license server is not reachable.

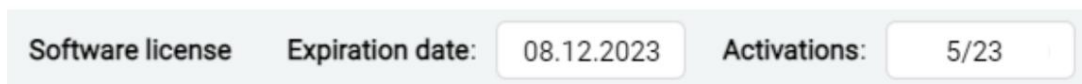
License key was recognized as valid

A screenshot of the same software license activation interface. The text input field now contains a blurred, valid license key. To the right of the input field is a green checkmark icon, indicating success. The "Activate online" button remains visible.

Software license:  Activate online

In this case, the activation button becomes active and the online activation can be done with a click on the button.

View after successful online activation

A screenshot showing the license information after successful activation. It displays four fields: "Software license", "Expiration date:" with the value "08.12.2023", "Activations:", and a field showing "5/23".

Software license Expiration date: Activations:

After activation, you can see the date on which the license expires and the number of activations performed as well as the maximum number of possible Activations are displayed.

2.3.1 Single user licenses

The "LicenseConfirmation" files of single-user licenses must always be in the

Working folders such as %appdata%/OfflineTranscribe/.

These "LicenseConfirmation" files of the single-user license are computer-specific and cannot simply be copied to another computer in order to to license the program. An online activation must be carried out again on the new computer using the license key specifically for this computer. be carried out.

2.3.2 Multi-user/terminal server licenses

The "LicenseConfirmation" file for multi-user/terminal server licenses can

in the working folder, such as %appdata%/OfflineTranscribe/, or in the program Installation folder. These "LicenseConfirmation" files of the multi-user/terminal

Server licenses are not computer-specific and can be easily copied to another computer to license the program on that computer. This

changed behavior compared to single-user licenses is especially intended for the widespread automated distribution of the application within companies.

2.4 Limitations of the options

In the new version, certain software and model options can be restricted by a special text file in the installation folder. Create a

File named HideSoftwareAndModelFiles.txt in the installation folder

of the application. In this file you can list the names of the software and models that should not be displayed. Each item must be on its own

line.

Example:

Whisper

Whisper.cpp

Whisper.cpp BLAS

tiny_en

base_en

small_en

medium_en

tiny

base

small

medium

large

(If all models are hidden, the application will not start and an error message will appear.)

2.5 Provide transcription models in the installation folder

To deploy the transcription models locally in the installation folder, you can copy the AI model files to the WhisperCPP folder in the application's installation directory. Additionally, you must create an empty file named ModelFilesAreInTheInstallationFolder in the installation folder. This signals the application to load the models from the installation folder instead of the

user directory.

Example:

- C:\Program Files\OfflineTranscribe\WhisperCPP\ggml-model-whisper-tiny.
am

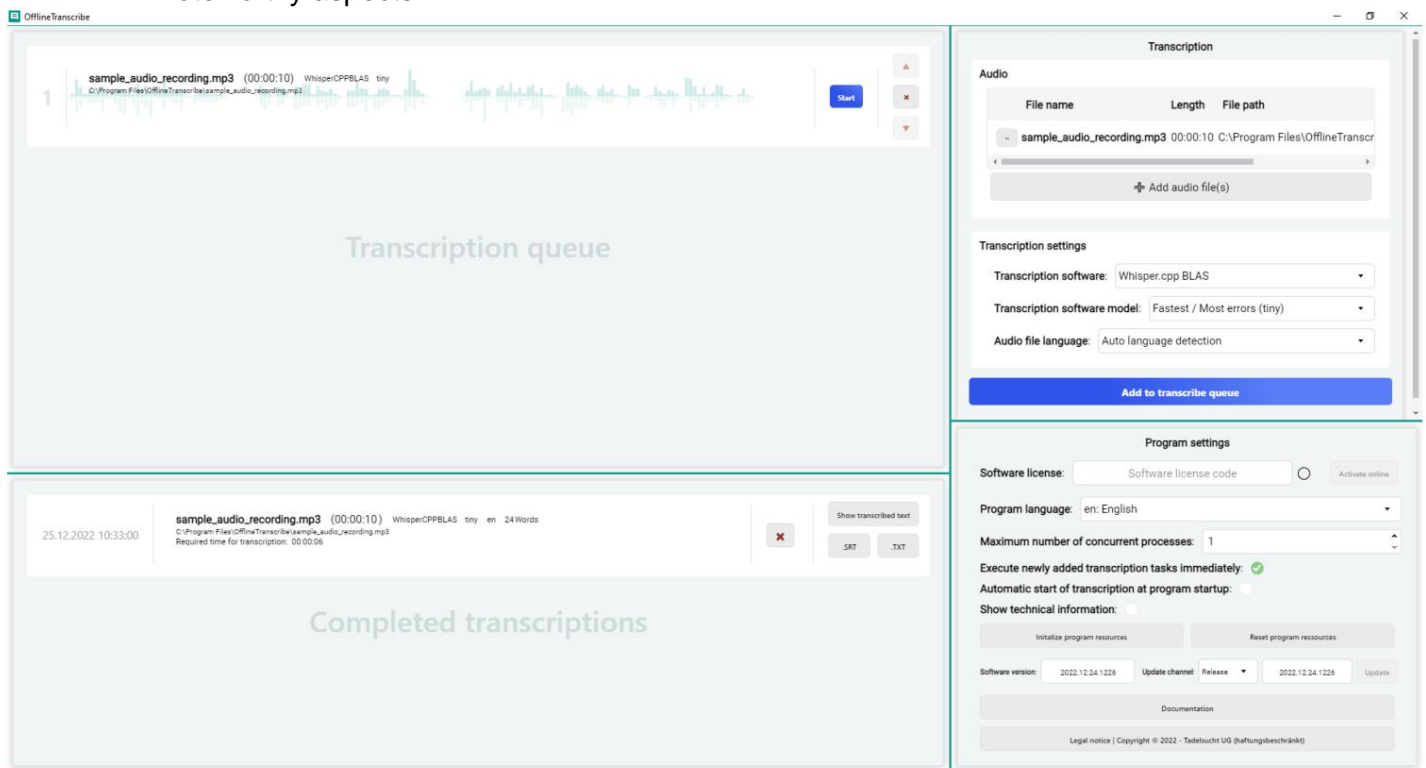
- C:\Program Files\OfflineTranscribe\ModelFilesAreInTheInstallationFolder

(Without the ModelFilesAreInTheInstallationFolder file, the application will continue to access the user directory.)

3

User interface in Details (GUI)

This chapter discusses in detail the user interface, its individual elements and noteworthy aspects.



In the screenshot of the application shown, entries are already made by

the user, for example, to demonstratively fill the list of audio files, the transcription queue and the list of completed transcriptions with elements. Changes have also been made to the settings for transcription and for the application in general.

Below, excerpts from this image are taken to explain the individual parts of the user interface:

3.1 Transcription

The screenshot displays a web application interface for transcription. It is divided into two main sections: "Audio" and "Transcription settings".

The "Audio" section contains a table with the following columns: "File name", "Length", and "File path". A single row is visible with the file name "sample_audio_recording.mp3", a length of "00:00:10", and a file path starting with "C:\Users\tadel\Github\OfflineTrans". Below the table is a horizontal scrollbar and a button labeled "Add audio file(s)".

The "Transcription settings" section contains three dropdown menus:

- "Transcription software:" set to "Whisper"
- "Transcription software model:" set to "Fastest / Most errors (tiny)"
- "Audio file language:" set to "English"

At the bottom of the settings section is a prominent blue button labeled "Add to transcribe queue".

This element group contains the two sub-element groups "Audio" and "Transcription Settings".

In the "Audio" sub-element group, you can select audio recordings from your hard drive to be transcribed into text. You can select multiple audio files at once. The selected files will then appear in the list, which displays the name, length and file path of the audio file.

Under the "Audio" sub-element group you will find the "Transcription Settings". In these settings you can select the type of transcription.

First, you can select the software you want to use for transcription.

Depending on the software selected, the following selection of "transcription software models" changes. These models are differently trained Storage for the software used for transcription. The models differ, for example, in the accuracy of the transcription, the speed of the transcription and the range of language. As a simplified example: A

Model that is only trained in English would, with an English audio recording, be much faster in transcription than one that is used for 6 different languages because the individual words would have to be compared with more words to see if they match.

The last option is to select the language of the audio file. Some Software and model selection combinations provide automatic detection

the language in the audio file. Others do not. In this case, you must manually the correct language must be selected, otherwise the software will try to

Transcription with the wrong language selected. The result

In this case it would be maximally entertaining but not very useful.

Once the relevant audio files and transcription settings have been specified, the transcription can be started by clicking on "Add to transcription queue". Depending on the application settings, the transcription process will start automatically and

processing can be tracked in the transcription queue.

3.2 Transcription queue

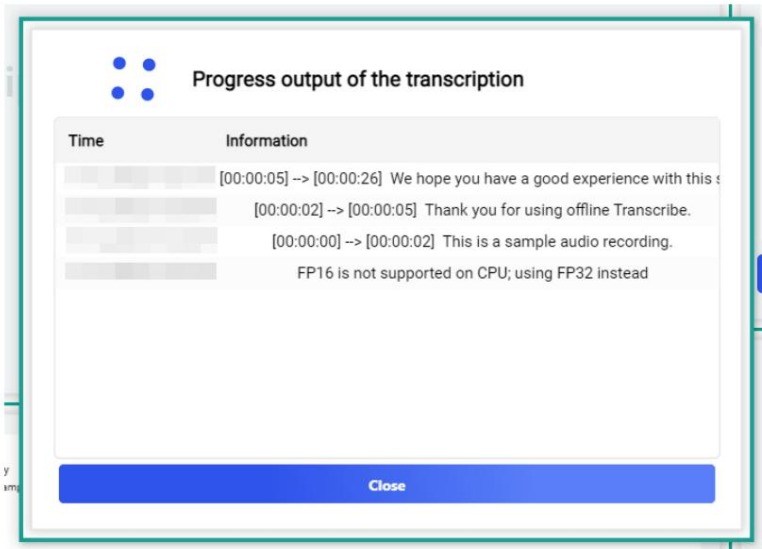
This element group displays the transcription jobs that are currently executed or to be executed next.



The orders that have not yet been started contain the information the current position number in the list, the file name, the length of the recording, the selected transcription software, the selected transcription model and the selected or automatically determined language of the audio file. Below this is the complete file path of the audio file. In the background of the order there is also a graphic representation of the highs and lows of the audio file. On the right is the start button, which starts the transcription starts. This is followed by buttons that can be used to move the orders in the list or remove them completely.



Jobs that have been started and are not yet completed differ in some aspects of the interface. For example, the Start button has been replaced by a Stop button and an additional button has been added below it. This button opens an output window that displays the previous process outputs and technical data of the transcription software. Such a process output is shown in the following image.



Other changes include a percentage of transcription progress, the Number of minutes transcribed, the total number of audio minutes, a visual The loading bar and the time that the transcription has already taken are visible. For longer transcriptions, the probable remaining time in minutes is also shown. This can be seen in the following image.



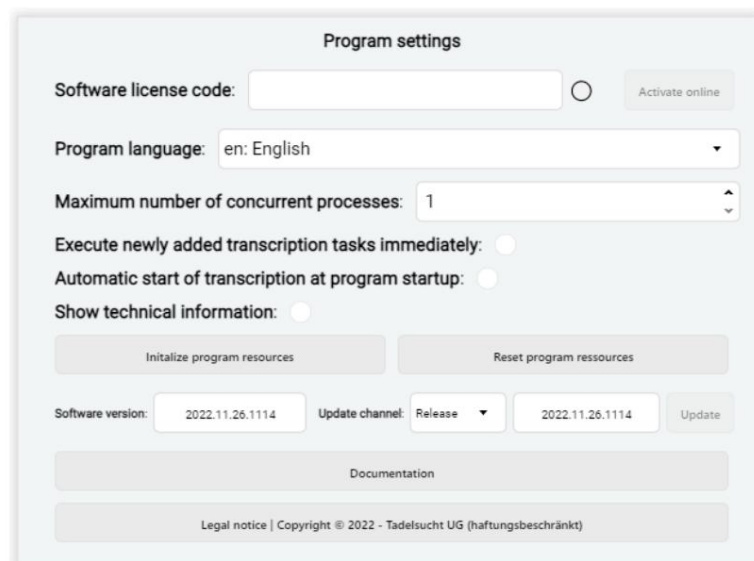
3.3 Completed transcriptions

This element group displays the transcription jobs that have been completed are.



The jobs first show the time at which the transcription was completed. This is followed by the name of the audio file, the duration of the audio file, the transcription software used, the model, the language of the audio file and the number of words found during the transcription. Below this information, the path to the audio file and the time required for transcription are shown. Next to all this information about the transcription job, there is a button that allows you to remove the job from the list. Then there is a button that allows you to view the transcribed text within the application. The buttons below offer the option of saving the transcribed text to the hard drive in the available file formats.

3.4 Program settings



Software license: The license code can be entered and activated here. The Activate button becomes active when a valid license code has been entered and a green check mark appears next to the license code field. A detailed explanation of how licensing works can be found in section [2.3](#).

Program language: Here you can select the language of the user interface become.

Execute newly added transcription tasks immediately: Here you can specify whether transcription tasks are executed immediately when added to the queue.

be started.

Automatic start of transcription when program starts: Here you can specify whether the transcription tasks are automatically included in the program when it starts. the queue should be processed.

Maximum number of simultaneous processes: Here you can specify the maximum number of concurrent processes that are started automatically ("Automatic start of transcription when program starts") simultaneously be carried out.

Show technical information: Here the sub-element group for technical information can be displayed. This includes the number of currently running transcription processes, CPU and memory utilization.

Initialize program resources: Here you can manually initialize the program resources. These include the transcription software and the transcription model that are currently selected in the "Transcription" sub-element group (see section 3.1). Clicking on the button opens the window described in section 3.5 described windows.

Reset program resources: This button deletes all initialized Data from all transcription software and deletes all downloaded transcription model data. This can help if an error occurred during initialization.

Software version: This shows the version number of the currently installed software. program version is displayed.

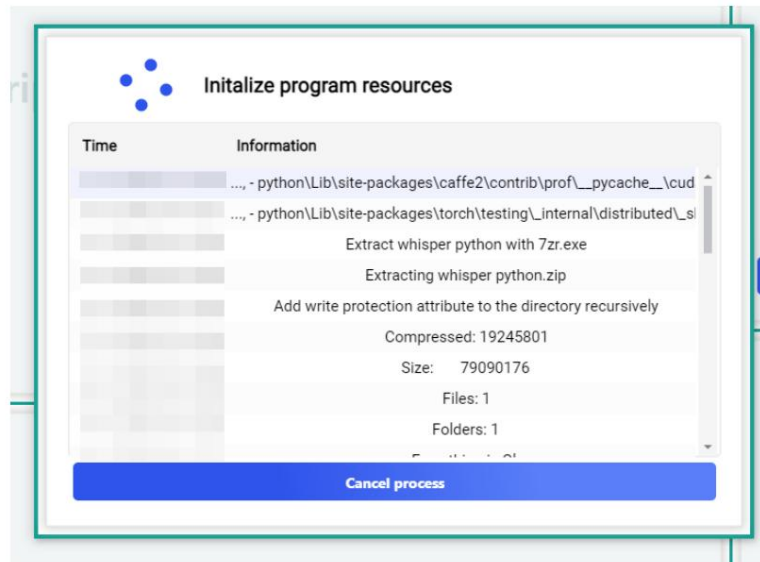
Update channel: The update channel can be set here. The following are available for selection: hen "Release" and "Test".

Update: This button can be used to update the software. If no newer version is available, the button is gray, slightly transparent and cannot be selected. If a new version is available, the button with the Color orange highlighted and selectable.

Documentation: Clicking this button will attempt to display this documentation. mentation in the operating system's default web browser.

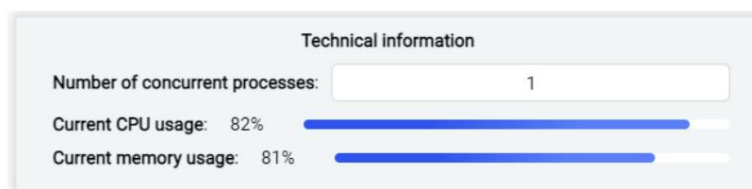
Legal information: Here you can view the imprint, the general terms and conditions and other legal texts.

3.5 Initialize program resources



After manually starting the initialization of the program resources or when starting a transcription that is still missing program resources, this loading window opens. It shows the steps taken and allows you to follow the progress of the initialization.

3.6 Technical information

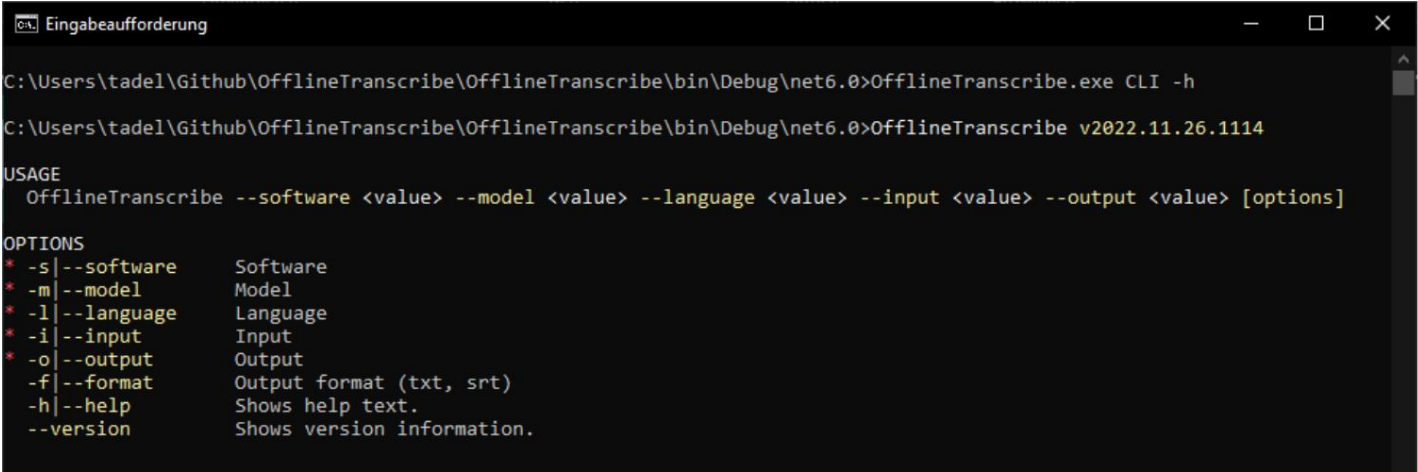


This sub-element group displays technical information such as the number of transcription processes currently running, CPU and memory usage.

4

Command line (CMD)

OfflineTranscribe can also be used via the command line. The following explains how to use it via the console and what special features you should pay attention to.



```
C:\Users\tadel\Github\OfflineTranscribe\OfflineTranscribe\bin\Debug\net6.0>OfflineTranscribe.exe CLI -h
C:\Users\tadel\Github\OfflineTranscribe\OfflineTranscribe\bin\Debug\net6.0>OfflineTranscribe v2022.11.26.1114

USAGE
  OfflineTranscribe --software <value> --model <value> --language <value> --input <value> --output <value> [options]

OPTIONS
* -s|--software      Software
* -m|--model         Model
* -l|--language      Language
* -i|--input         Input
* -o|--output        Output
* -f|--format        Output format (txt, srt)
* -h|--help          Shows help text.
* --version          Shows version information.
```

The command line functionality (CLI) is based on the same program structures that the graphical interface uses, which leads to the special feature that When calling the CLI, the program must be explicitly waited for, otherwise the Command line immediately expects the next command, while OfflineTranscribe

runs in the background. Therefore, the program must always be started with "start /w OfflineTran-scribe CLI" to wait for the application to finish.

and the output is displayed correctly. An example call can be seen in the "OfflineTranscribe-CLI-Example.bat" in the installation folder or in section 4.2 . Furthermore

It should be mentioned that the file paths that the program accepts also support Windows environment variables, if these are to be used.

4.1 Parameter list

The following table lists all available parameters that can be used individually or in combination:

Parameter	Abbreviation	Description
CLI		Required parameter for using the CLI.
-software	-s	Transcription software [Whisper, WhisperCPP, WhisperCPPBLAS]
-model	-m	Transcription model (depending on the software) [tiny, base, small, medium, large, tiny_en, base_en, small_en, medium_en]
-language	-l	Language of the audio file. auto = Automatic speech recognition ISO 639-1 code [en, zh, de, es, ru, ko, fr, ..]
-input	-i	Path to the audio file. (Example: C:\recording.mp3)
-output	-o	Path to the output file. (Example: C:\output.txt)
-format	-G	Output format [txt, srt]
-help	-h	Displays the current help text.
-version		Displays the current version number.

4.2 Call examples

The following examples show the use of the parameters:

```
1 chcp65001
2 start /w "C:\Program Files\OfflineTranscribe\OfflineTranscribe.exe"
    CLI -s WhisperCPP -m tiny -l en -i sample_audio_recording.mp3 -o
    "%USERPROFILE%\Downloads\sample_audio_recording.txt" -f txt
3 pause
```

```
1 chcp65001
2 start /w "C:\Program Files\OfflineTranscribe\OfflineTranscribe.exe"
    CLI -s WhisperCPPBLAS -m small -l de -i
    "C:\sample_audio_recording.mp3" -o "C:\sample_audio_recording.srt"
    -f srt
3 pause
```

```
1 chcp65001
2 start /w "C:\Program Files\OfflineTranscribe\OfflineTranscribe.exe"
    CLI -s Whisper -m large -l zh -i "C:\sample_audio_recording.mp3"
    -o "C:\sample_audio_recording.srt" -f srt
3 pause
```



Configuration file

When the application starts, it creates the "Configuration.ini", which is used to settings made in the user interface. This file is in the folder %appdata%\OfflineTranscribe\ . In this folder are also temporary files, if applicable the license verification file and the results of the transcription process.

The following is an example of the maximum configuration of the "Configuration.ini":

```
1  [UI]
2  Language = en
3  SelectedTranscriptionSoftware = Whisper
4  SelectedTranscriptionModel = tiny
5  UpdateChannel = Release
6  LastAudioFilesOpenFileDialogPath = C:
7  SelectedTranscriptionLanguage = auto

8
9  [BackgroundWorker]
10 NumberOfConcurrentProcesses = 1
```




Frequently Asked Questions (FAQs)

6.1 What are the system requirements for OfflineTranscribe?

Compatibility has been tested with Windows 10 and Windows 11. Approx. 500 MB of storage space is required for installation. Depending on the transcription software and model selected, up to 20 GB of storage space may be used during use. The program requires a one-time Internet connection for license activation. An Internet connection may also be required once for OfflineTranscribe to automatically download the selected transcription model. The transcription models can also be placed in the appropriate folder beforehand so that the application does not need to download them.

6.2 OfflineTranscribe cannot be installed. [Windows SmartScreen]

If a double-click on the downloaded installation file displays a Messages such as "Your computer has been protected by Windows" or "Windows SmartScreen prevented an unknown app from starting" must be Installation clicked on the text "More information" within the window and then click "Run anyway".

Such a message is displayed by Microsoft when an executable program

program was created relatively recently and Microsoft does not yet know about it. Microsoft will automatically upload the exe file in the background, analyze it and no longer display this message to others as soon as the program has been used by many users for a longer period of time. Therefore, the problem can unfortunately occur again with each new version of the program.

6.3 If my files or data are uploaded or left my computer in any way?

No! Your data remains on your computer alone. OfflineTranscribe does not download of your data to any server. The program only establishes a connection to the OfflineTranscribe servers in a few cases. These cases include the one-time license activation required, the search for program updates, the check whether a license is currently being used on several computers at the same time, and the required transcription model data.

6.4 How many users may use a license simultaneously? be detected?

This depends on the offer selected. Single-user licenses may only be used by one user at a time, while multi-user/terminal server licenses, depending on the offer, may be used by several users at the same time.
may be used.

6.5 On how many computers can a license be used?

A license can be installed on multiple computers, but can only be used by one of those computers at a time. When the application is started and during use, a check is made to see if the license is already being used on more than one computer. If this is the case, the program is thrown back into demo mode until the computer is again the only one using the software license. Until then, no progress is lost and the program does not close automatically or anything like that. The only difference is that the limitations of demo mode are switched on again.

6.6 I get the following message "The license key is currently already used by multiple devices". What does that mean?

This means that the license is currently installed on multiple computers in the last 15 minutes and not on another computer at the same time

may be used. If you have used the license on several computers simultaneously in the last 15 minutes and the program has now been closed again, OfflineTranscribe will be able to run on the current computer after 15 minutes at the latest. If this is not the case and you do not know of another computer on which the program is currently running, license code theft cannot be ruled out. In this case, please contact support so that we can find a solution together so that you can work again.

6.7 A transcription process does not start. What can I do?

In this case, please try resetting the program resources. If this does not work and you have "Automatic language detection" enabled, please select the correct language yourself. If this does not work either, or you have already selected a language, try another transcription software from the selection.

6.8 The transcription on my computer is too slow for me.

What can I do?

Since the transcription takes place completely offline on your own computer, only your CPU and RAM are used. Depending on the transcription software and transcription model you choose, your computer may not be powerful enough to meet your transcription speed requirements. In this case, we recommend testing different transcription software and transcription models within the program and, if that doesn't help, getting a faster computer. Otherwise, you can of course switch to a cloud-based transcription service from another provider, such as Google.

6.9 The program tells me that for my choice of transcription software and transcription model, the memory is not enough. What can I do?

In this case, you can manually increase the virtual memory. To do this, enter "increase Windows virtual memory" in a search engine or read this article, for example: <https://www.makeuseof.com/tag/virtual-memory-low-heres-fix/>.

6.10 Troubleshooting program resource access problems

Folder

If you encounter difficulties because the program reports that the Program resources folder (%AppData%\OfflineTranscribe) not accessed

There could be various reasons for this. This could indicate that a transcription is still in progress, whereby depending on the selected Transcription software either "python.exe" or "main.exe" in the Task Manager with high CPU usage. These processes can be terminated via the Task Manager if necessary. Another possibility is that multiple instances of OfflineTranscribe are running simultaneously, or your Virus scanner is currently checking the folders.

In any case, restarting the computer can help to ensure that there is no longer any access to the folder. Before you carry out this step, however, it is recommended to search for the mentioned processes in the Task Manager and check whether they are active and may need to be terminated manually.

7

References

- [1] OfflineTranscribe
<https://OfflineTranscribe.com/>
- [2] OpenAi Whisper
<https://github.com/openai/whisper>
- [3] OpenAi Whisper
<https://en.wikipedia.org/wiki/FFmpeg>
- [4] whisper.cpp <https://github.com/ggerganov/whisper.cpp>
- [5] BLAS https://en.wikipedia.org/wiki/Basic_Linear_Algebra_Subprograms