OFFLINE TRANSCRIBE

DOCUMENTATION

VERSION
2024.04.07.0923

1

Introduction

With **OfflineTranscribe** you can record/audio files, such as MP3 files, without
an internet connection can be converted from speech to text on your own computer, i.e.
transcribed. It is a program that is simple
User interface for a selection of transcription software and models
offers 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 be converted into a compatible audio file. The
The converted files are saved under the path %appdata%\OfflineTranscribe\
ConvertedAudioFiles with a name such as "Recording_5d2d3b9c-a360-4f52-
a335-093e3d9d5c98.mp3" are temporarily stored. This is done with the included software
"ffmpeg"[3].

Conversion software supports many audio file formats [More information: https://
en.wikipedia.org/wiki/FFmpeg#Supported_formats].

• MP3 • WAV • OGG • FLAC • M4A

1.2 Selection of transcription software

This section looks at the supported selection of transcription software and models. These will be briefly described and pointed out if they may be of interest.

detailed details were included.

1.2.1 OpenAI Whisper

Whisper is a general-purpose model for speech recognition. It was based on one trained on a large dataset with various audio data and is a multitasking model that does both multilingual speech recognition and language translation and can perform 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 Defects
tiny_en	+++++	+	English Only - Fastest/Most Errors
base_en	++++	++	English only - Fast
small_en	+++	+++	English only - Normal
medium_en	++	++++	English only - Better

Supported language Language support and error rate may vary depending on

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

Here is the list of supported languages:

- English
- Chinese
- German
- Spanish

- Russian
- Korean
- French
- Japanese

- Portuguese
- Turkish
- Polish
- Catalan

- Dutch
- Arabic
- Swedish
- Italian
- Indonesian
- Hindi
- Finnish
- Vietnamese
- Hebrew
- Ukrainian
- Greek
- Malay
- Czech
- Romanian
- Danish
- Hungarian
- Tamil
- Norwegian
- Thai
- Urdu
- Croatian
- Bulgarian
- Lithuanian
- Latin
- Maori

- Malayalam
- Welsh
- Slovak
- Telugu
- Persian
- Latvian
- Bengali
- Serbian
- Azerbaijani
- Slovenian
- Kannada
- Estonian
- Macedonian
- Breton
- Basque
- Icelandic
- Armenian
- Nepali
- Mongolian
- Bosnian
- Kazakh
- Albanian
- Swahili
- Galician
- Marathi

- Punjabi
- Sinhala
- Khmer
- Shona
- Yoruba
- Somali
- Afrikaans
- Occitan
- Georgian
- Belarusian
- Tajik
- Sindhi
- Gujarati
- Amharic
- Yiddish
- Lao
- Uzbek
- Faroese
- Haitian Creole
- Pashto
- Turkmen
- Nynorsk
- Maltese
- Sanskrit
- Luxembourgish

- Myanmar
- Tibetan
- Tagalog
- Malagasy

- Assamese
- Tatar
- Hawaiian
- Lingala

- Hausa
- Bashkir
- Javanese
- Sundanese

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 result in faster transcription depending on the system.[4] Reformatted Whisper models are used

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

However, other audio file formats, such as OpenAI's Whisper, require internal conversion to the compatible audio file format. Apart from what has just been 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) only with an implementation that uses the BLAS program library for the transcription calculations.[5]
On some systems this is faster than the normal implementation. It behaves exactly like Whisper.cpp and uses the same models.

6

2

installation

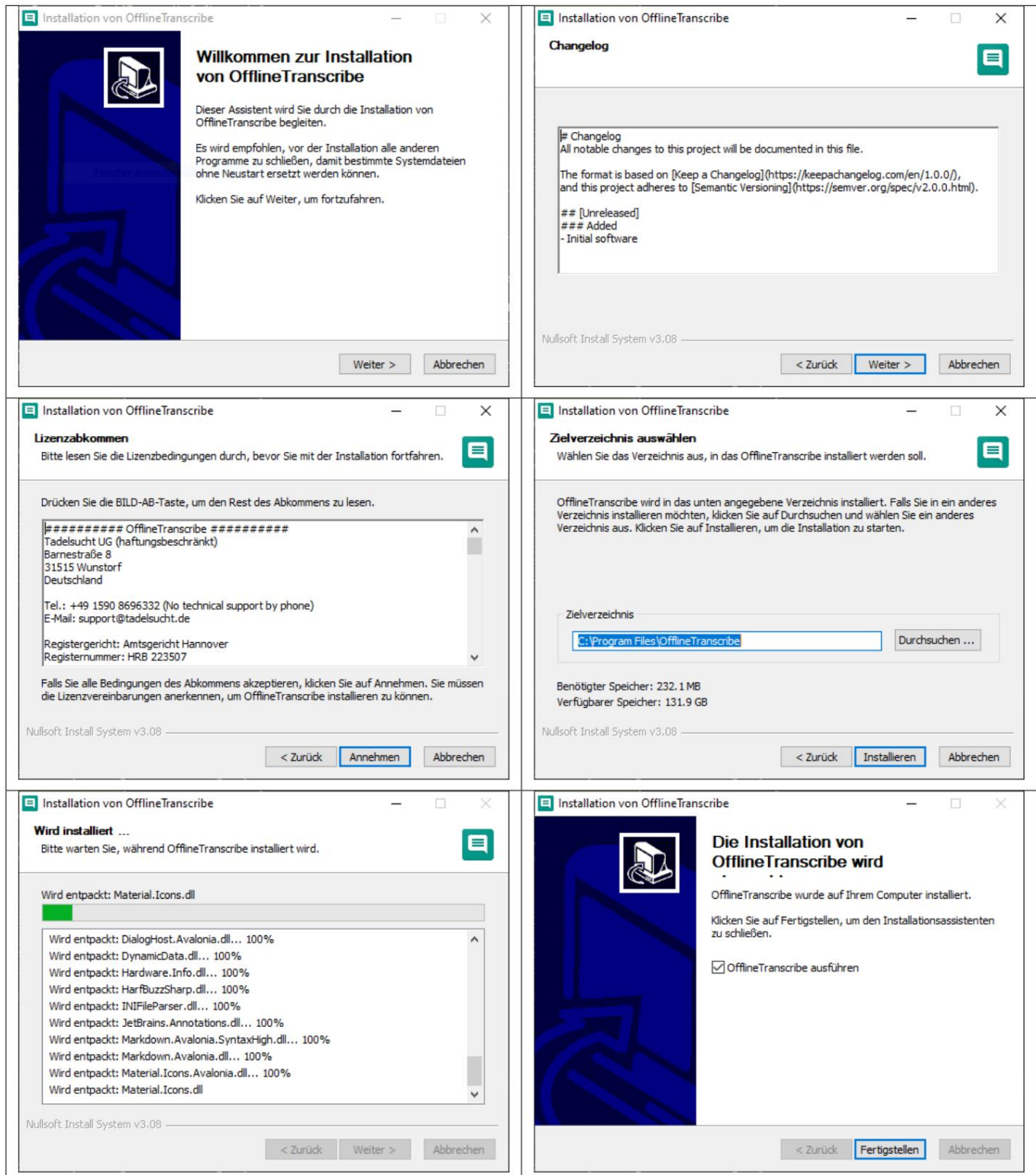The program can be accessed via https://OfflineTranscribe.de The available executable file "OfflineTranscribe-Setup.exe" can be started. Depending on the source, this may be packed in a compressed zip file.

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 you can license the application with a license key.

2.1 Installation via the graphical interface

Installation von OfflineTranscribe

Willkommen zur Installation von OfflineTranscribe

Dieser Assistent wird Sie durch die Installation von OfflineTranscribe begleiten.

Es wird empfohlen, vor der Installation alle anderen Programme zu schließen, damit bestimmte Systemdateien ohne Neustart ersetzt werden können.

Klicken Sie auf Weiter, um fortzufahren.

Weiter >   Abbrechen

Installation von OfflineTranscribe

Changelog

```
# Changelog
All notable changes to this project will be documented in this file.

The format is based on [Keep a Changelog](https://keepachangelog.com/en/1.0.0/),
and this project adheres to [Semantic Versioning](https://semver.org/spec/v2.0.0.html).

## [Unreleased]
### Added
- Initial software
```

Nullsoft Install System v3.08

< Zurück   Weiter >   Abbrechen

Installation von OfflineTranscribe

Lizenzabkommen

Bitte lesen Sie die Lizenzbedingungen durch, bevor Sie mit der Installation fortfahren.

Drücken Sie die BILD-AB-Taste, um den Rest des Abkommens zu lesen.

```
########## OfflineTranscribe ##########
Tadelsucht UG (haftungsbeschränkt)
Barnestraße 8
31515 Wunstorf
Deutschland

Tel.: +49 1590 8696332 (No technical support by phone)
E-Mail: support@tadelsucht.de

Registergericht: Amtsgericht Hannover
Registernummer: HRB 223507
```

Falls Sie alle Bedingungen des Abkommens akzeptieren, klicken Sie auf Annehmen. Sie müssen die Lizenzvereinbarungen anerkennen, um OfflineTranscribe installieren zu können.

Nullsoft Install System v3.08

< Zurück   Annehmen   Abbrechen

Installation von OfflineTranscribe

Zielverzeichnis auswählen

Wählen Sie das Verzeichnis aus, in das OfflineTranscribe installiert werden soll.

OfflineTranscribe wird in das unten angegebene Verzeichnis installiert. Falls Sie in ein anderes Verzeichnis installieren möchten, klicken Sie auf Durchsuchen und wählen Sie ein anderes Verzeichnis aus. Klicken Sie auf Installieren, um die Installation zu starten.

Zielverzeichnis

C:\Program Files\OfflineTranscribe   Durchsuchen ...

Benötigter Speicher: 232.1 MB
Verfügbarer Speicher: 131.9 GB

Nullsoft Install System v3.08

< Zurück   Installieren   Abbrechen

Installation von OfflineTranscribe

Wird installiert ...

Bitte warten Sie, während OfflineTranscribe installiert wird.

Wird entpackt: Material.Icons.dll

```
Wird entpackt: DialogHost.Avalonia.dll... 100%
Wird entpackt: DynamicData.dll... 100%
Wird entpackt: Hardware.Info.dll... 100%
Wird entpackt: HarfBuzzSharp.dll... 100%
Wird entpackt: INIFileParser.dll... 100%
Wird entpackt: JetBrains.Annotations.dll... 100%
Wird entpackt: Markdown.Avalonia.SyntaxHigh.dll... 100%
Wird entpackt: Markdown.Avalonia.dll... 100%
Wird entpackt: Material.Icons.Avalonia.dll... 100%
Wird entpackt: Material.Icons.dll
```

Nullsoft Install System v3.08

< Zurück   Weiter >   Abbrechen

Installation von OfflineTranscribe

Die Installation von OfflineTranscribe wird

OfflineTranscribe wurde auf Ihrem Computer installiert.

Klicken Sie auf Fertigstellen, um den Installationsassistenten zu schließen.

☑ OfflineTranscribe ausführen

< Zurück   Fertigstellen   Abbrechen

2.2 Installation via the command line

An installation can be carried out unattended using the "/S" parameter. If the installation path should be specified, this can be done using the parameter /D=C: \NewInstallDir\\ .
Example 1: OfflineTranscribe-Setup.exe /S
Example 2: OfflineTranscribe-Setup.exe /S /D=C:\\NewInstallDir\\

2.3 Licensing the Application

To license the application, you must use a one-time license key
Online activation of the installation can be carried out. The number of maximum 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 shared with everyone
Starting the application is used to check the validity of the license. This
The exam also works without an internet connection.

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

No license key entered

License key not recognized

Software license:	AB-CD-EF-GH-1	✗	Activate online

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

License key was recognized as valid

Software license:	▬▬▬ ▬▬▬ ▬	✓	Activate online

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

View after successful online activation

Software license	Expiration date:	08.12.2023	Activations:	5/23

After activation you can see the date on which the license expires and the number of
activations carried out as well as the maximum number of possible ones
Activations displayed.

2.3.1 Single User Licenses

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

Working folders are located like %appdata%/OfflineTranscribe/.
These single user license "LicenseConfirmation" files are computer specific and cannot
be easily copied to another computer
to license the program. An online activation specifically for this computer must be carried
out again on the new computer with the license key.
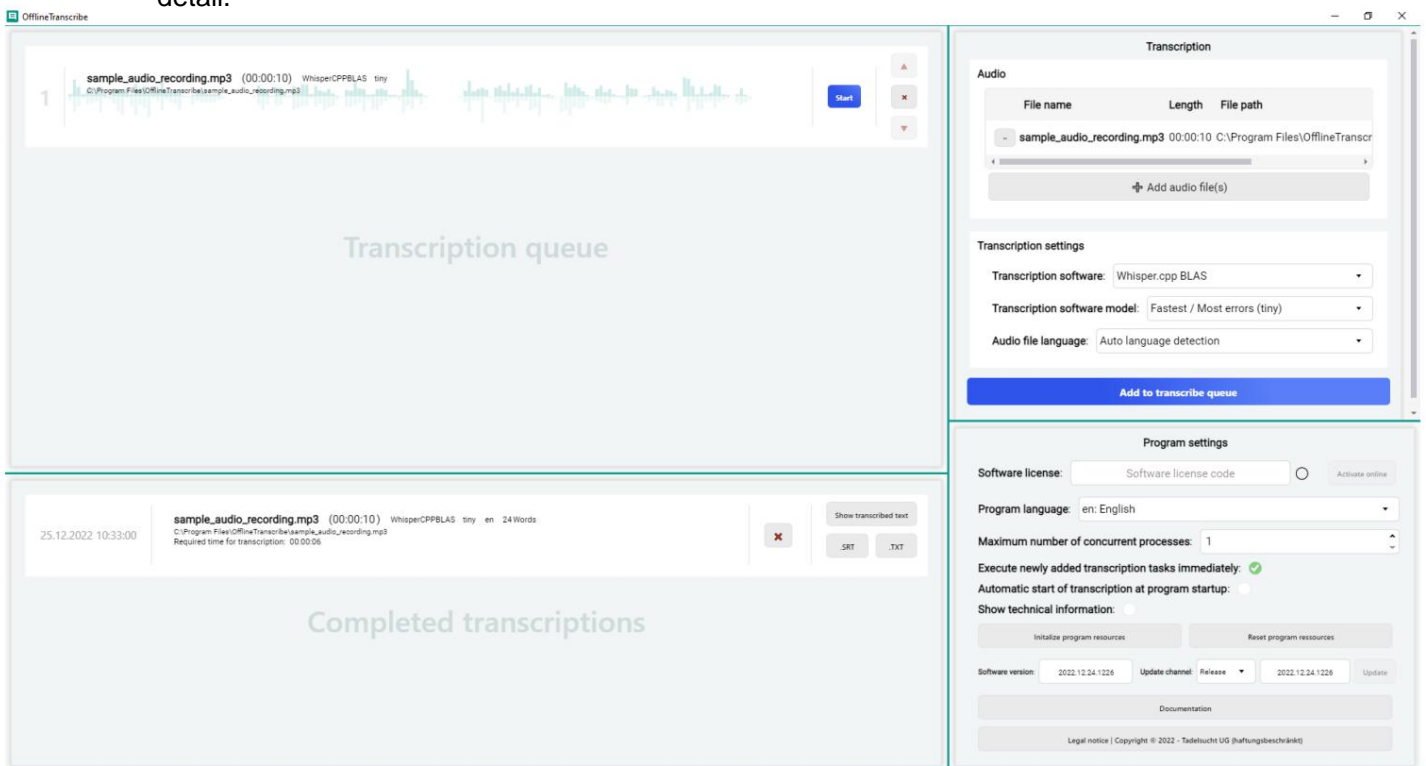be led.

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 folder
Installation folder. These "LicenseConfirmation" files of the multi-user/terminal
Server licenses are not computer specific and can simply be copied to another computer
to license the program on that one. This

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

3

User interface in

Details (GUI)

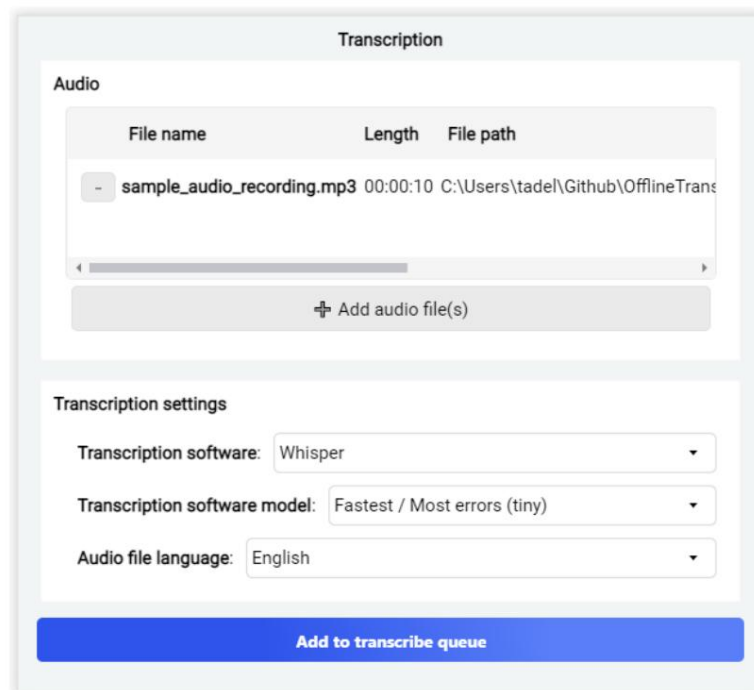This chapter discusses the user interface, its individual elements and notable aspects in detail.

Entries have already been made in the screenshot shown of the application

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

The following excerpts from this image are taken to explain the individual parts of the user interface:

3.1 Transcription

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

In the "Audio" sub-item group, audio recordings from the hard drive can be selected to be transcribed into text. Several audio files can be selected at the same time. The selected files are then in the listing, where the name, length and file path of the audio file are displayed.

Under the "Audio" sub-item group is the "Transcription Settings". In these settings you can select the type of transcription.
First, you can choose the software that should be used for the transcription.

Depending on the software selected, the subsequent selection of "transcription software models" changes. These models are trained differently

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

A model that is only trained in English would be able to record English audio

be significantly faster when transcribing than one that does the same thing for 6 different ones

Languages were learned because the individual words would have to be compared with more words for matches.

The last option is to select the language of the audio file. Some

Software and model selection combinations provide automatic recognition

the language in the audio file. Others don't. In this case you have to do it manually

the correct language must be selected, otherwise the software will try

Transcribing with the wrong language selected. The result

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

When the appropriate audio files and transcription settings have finally been specified, the transcription can be started by clicking on "Add to transcription queue". Depending on the application settings, the transcription process starts automatically

processing can be tracked in the transcription queue.

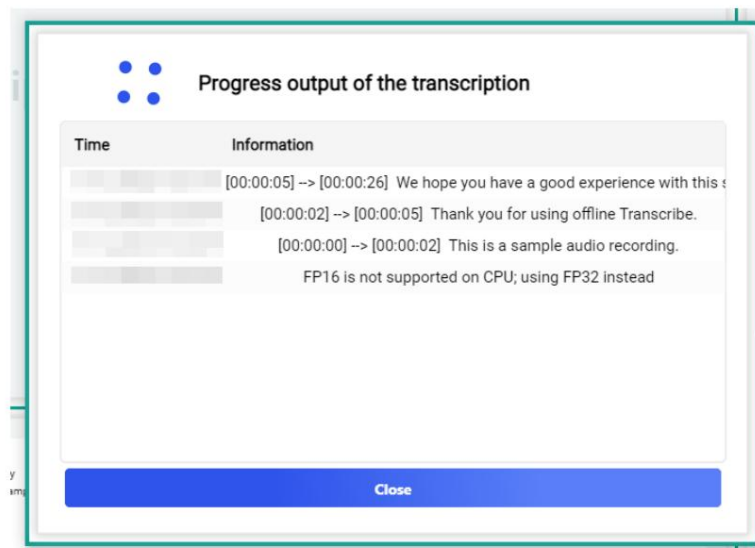## 3.2 Transcription Queue

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

The orders that have not yet been started contain the information

the current place 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 is the complete file path of the audio file. The background of the order is also a graphical representation of the highs and lows

visible in the audio file. On the right is the start button that starts the transcription starts. This is followed by buttons that can be used to move the orders in the list or remove them completely.

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Orders that have been started and not yet completed have a few differences in the interface. The start button was replaced by a stop button and an additional button was added underneath. This button opens an output window that shows 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
Number of minutes transcribed, the total number of audio minutes, a visual
Loading bar and the time the transcription is already taking are visible. For longer transcriptions, the probable remaining time in minutes is also displayed. This can be seen in the following image.

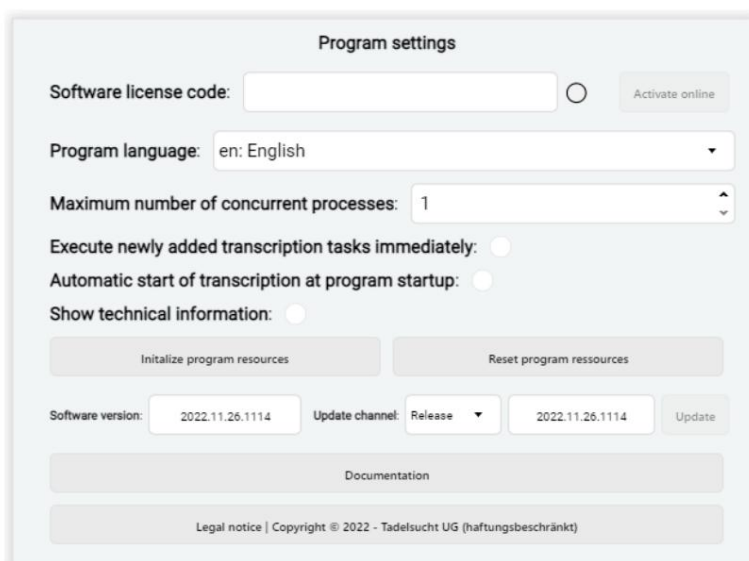## 3.3 Completed transcriptions

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

The jobs initially 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. The path to the audio file and the time required for transcription are displayed under this information. Next to all this information about the transcription job there is a button with which you can remove the job from the list. There is then 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 appears next to the license code field. A detailed explanation of how licensing works can be found in Section 2.3.

Program language: The language of the user interface can be selected here become.

Run newly added transcription tasks immediately: Here you can specify whether transcription tasks should be added to the queue immediately

be started.

Automatic start of transcription when the program starts: This can be set here whether the transcription tasks are automatically started when the program starts the queue should be processed.

Maximum number of simultaneous processes: The maximum number can be set here of simultaneous processes can be selected by automatic start ("Automatic start of transcription when the program starts") at the same time be led.

Show technical information: The sub-element group for technical information can be displayed here. These include the number of currently ongoing transcription processes, CPU and memory usage.

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

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

Software version: The version number of the currently installed program is displayed here. gram version displayed.
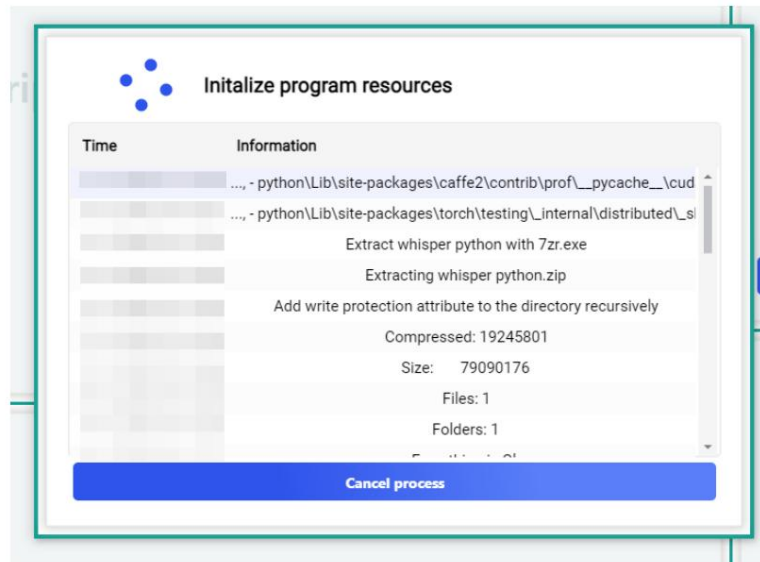
Update channel: The update channel can be set here. To choose from hen "Release" and "Test".

Update: The software can be updated using this button. Provided no newer version is available, the button is gray, somewhat transparent and not available. When a new version is available, the button with the Color orange highlighted and selectable.

Documentation: Clicking on this button attempts to download this documentation mentation in the operating system's default web browser.
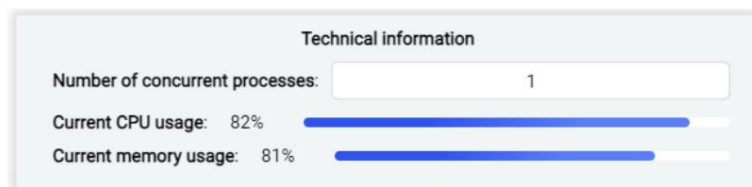
Legal information: The imprint, the general terms and conditions and other legal texts can be viewed here.

3.5 Initialize program resources

This loading window opens after a manual start of the initialization of the program resources or when starting a transcription for which program resources are still missing. It shows the steps taken and allows you to track the initialization progress.
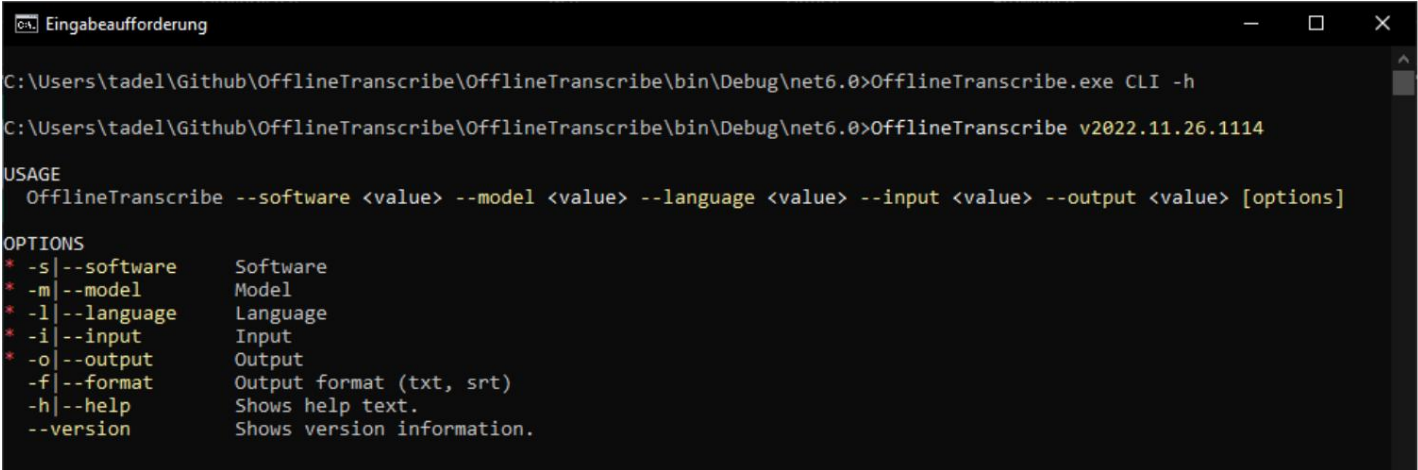
3.6 Technical information

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

4

Command lines (CMD)

OfflineTranscribe can also be used via the command line. The following explains how to use it via the console and special features that should be taken into account.

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 must explicitly wait for the program, otherwise the
Command line immediately expects the next command while OfflineTranscribe

running 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. A call example 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 they 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		Necessary 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   chcp 65001
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   Break
```

```
1   chcp 65001
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   Break
```

```
1   chcp 65001
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   Break
```

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Configuration file

When the application starts, it creates the "Configuration.ini", which is there for it to save settings made in the user interface. This file will
created in the folder %appdata%\OfflineTranscribe\ . Located in this folder
also temporary files, if necessary the license verification file and the results of the transcription process.

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

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

89   [BackgroundWorker]
10   NumberOfConcurrentProcesses = 1
```

6

frequently asked Questions
(FAQ)

6.1 What are the system requirements of OfflineTranscribe?

Compatibility has been tested with Windows 10 and Windows 11. There will be approx. 500 MB disk space required for installation. Depending on the transcription software and model you choose, 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 in order to have the selected transcription model automatically downloaded by OfflineTranscribe. 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]

When you double-click the downloaded installation file, a appears
Messages such as "The computer was protected by Windows" or "Windows Smartscreen prevented an unknown app from starting" must be returned 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 is

gram was created relatively recently and Microsoft doesn't know it yet. Microsoft will automatically upload the executable file in the background, analyze it and no longer display this message to others once the program has been used by many users for a long time. Therefore, unfortunately, the problem may reoccur with each new version of the program.

6.3 Will my files or data be uploaded or left

in any way my computer?

No! Your data remains on your computer alone. OfflineTranscribe is not loading

Upload 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 required license activation, the search for program updates, checking whether a license is currently being used on multiple computers at the same time, and required transcription model data.

6.4 How many users can use a license at the same time?

be det?

This depends on the offer you choose. Single user licenses may only be used by one user at a time, while multi-user/terminal server licenses may be used by multiple users at the same time, depending on the offering
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 the same time. When you start the application and during use, a check is made to see whether the license is already being used on more than one computer. If this is the case, the program will be 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 being used

already used by several devices". What does that mean?

This means that the license is currently running on several computers in the last 15
Minutes was used and not on another computer at the same time

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

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

In this case, please try resetting the program resources. If this doesn't work and you have "Automatic Language Detection" enabled, please select the correct language yourself. If this doesn't 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 for 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 still have the option of switching to a cloud-based transcription service from another provider, such as Google.

6.9 The program tells me that there is no RAM for my choice of transcription software and transcription model suffices. What can I do?

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

6.10 Troubleshooting access problems to the program resources page Folder

If you encounter difficulties because the program reports that the

Program resources folder (%AppData%\OfflineTranscribe) not accessed

can be caused by various reasons. This could indicate that a transcription is still in progress, depending

on which one is selected

Transcription software either "python.exe" or "main.exe" in Task Manager

might be visible with high CPU usage. If necessary, these processes can be ended via the task

manager. Another possibility is that

multiple instances of OfflineTranscribe running at the same time, or your

Virus scanner is currently checking the folders.

In any case, restarting the computer can help to make sure

There is no longer access to the folder. However, before performing this step, it is recommended to

search for the mentioned processes in Task Manager

and to check whether these are active and may need to be ended manually.

7

References References

[1] Offline Transcribe

  https://OfflineTranscribe.de/

[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] BLOW   https://en.wikipedia.org/wiki/Basic_Linear_Algebra_
  subprograms