

CLAAUDIA

RESEARCH DATA SERVICES



Basic use guide for Transcriber 1.1

By CLAAUDIA

DeiC Interactive HPC

UCloud Platform

Table of Contents

Indhold

1	<i>Introduction to UCloud</i>	3
1.1	What is UCloud?	3
1.2	Referencing and attribution of DeiC Interactive HPC resources in research	3
1.3	Log on to UCloud	3
1.4	If this is your first time on UCloud	4
1.5	The landing page: You are now logged on to UCloud	5
1.6	Basic information and documents	5
1.6.1	Username/ID	5
1.6.2	UCloud docs.....	5
1.6.3	SDU Data protection	5
1.7	Menu Items	5
1.7.1	Files.....	5
1.7.2	Shares.....	6
1.7.3	Resources	6
1.7.4	Apps	6
1.7.5	Runs.....	7
1.8	Upload your files	7
1.8.1	Make sure you are working in the right “workspace”.....	7
1.8.2	Select the drive	7
1.8.3	Create a folder for your files	8
1.9	Create an output folder (optional)	9
2	<i>Using the Transcriber application:</i>	10
2.1	Find the application	10
2.2	Using the application	10
3	<i>Other options</i>	16
3.1	Option: --output_format	16
3.2	Optional: --output_model.....	17
3.3	Optional: --output_language.....	17

1 Introduction to UCloud

1.1 What is UCloud?

UCloud is what is called type 1 HPC – High performance Computing or DeiC Interactive HPC. It is a national service that all Danish universities have access to via DeiC. It is SDU who hosts it, but at AAU we are also responsible for some elements. We at CLAUDIA are the front office and help the users of UCloud if they need help, and at the same time, we are the back office, where we help keep UCloud running.

1.2 Referencing and attribution of DeiC Interactive HPC resources in research

If you use Ucloud please remember to reference and attribute DeiC who makes the service available and free for you to use at all universities.

[Read how to acknowledge the use of DeiC HPC resources on the DeiC information page on their website.](#)

1.3 Log on to UCloud

UCloud is accessed via your browser using this link: <https://cloud.sdu.dk/app/login>

This will take you to the login page where you need to press the green button to login with WAYF.



It leads to the WAYF login page, where you must select Aalborg University (you can either search or scroll).

1.4 If this is your first time on UCloud

When you have clicked on Aalborg University, you will be asked to confirm that you want to use UCloud and that it is you, who is about to log in.




English



Du er ved at logge ind på *UCloud*.

Formålet er at give adgang til de cloud computing- og storageløsninger som SDU tilbyder.

SDU  

Oplysningerne herunder er nødvendige for at tilgå tjenesten.

Klik [her](#) for en detaljeret beskrivelse af oplysningstyperne.

Visningsnavn	Dennis Aagaard Pedersen
Niveau af autentitetssikring	2
Primær tilknytning	employee
Bruger-ID	LX42JV@aau.dk
Gruppemedlemskab	staff@aau.dk staff@its.aau.dk employee@aau.dk member@aau.dk
Dit tjenestespecifikke pseudonym	WAYF-DK-9c69c31f2fe607f3c6b84b76f95225d530380e9c
Formavn	Dennis Aagaard
Emailadresse	dennisap@its.aau.dk
Institutionens domænenavn	aau.dk
Institutionstype	urn:mace:terena.org:schac:homeOrganizationType:eu:higherEducationalInstitution
Efternavn	Pedersen

Hvis oplysningerne om dig ikke er korrekte, skal du kontakte Aalborg Universitet, hvor de stammer fra.

Nedenstående tjeneste/institutions-par er registreret i denne browser. Det betyder

- at du er blevet oplyst om de data der bliver leveret fra institutionen til tjenesten
- at institutionen måske automatisk bliver valgt når du logger ind fra den tilhørende tjeneste

Hvis du ønsker at benytte en anden institution for en given tjeneste, kan du slette registreringen for et tjeneste/institutions-par ved at klikke på **X**

- X** DeiC DMPonline / Aalborg Universitet
- X** UCloud / Aalborg Universitet

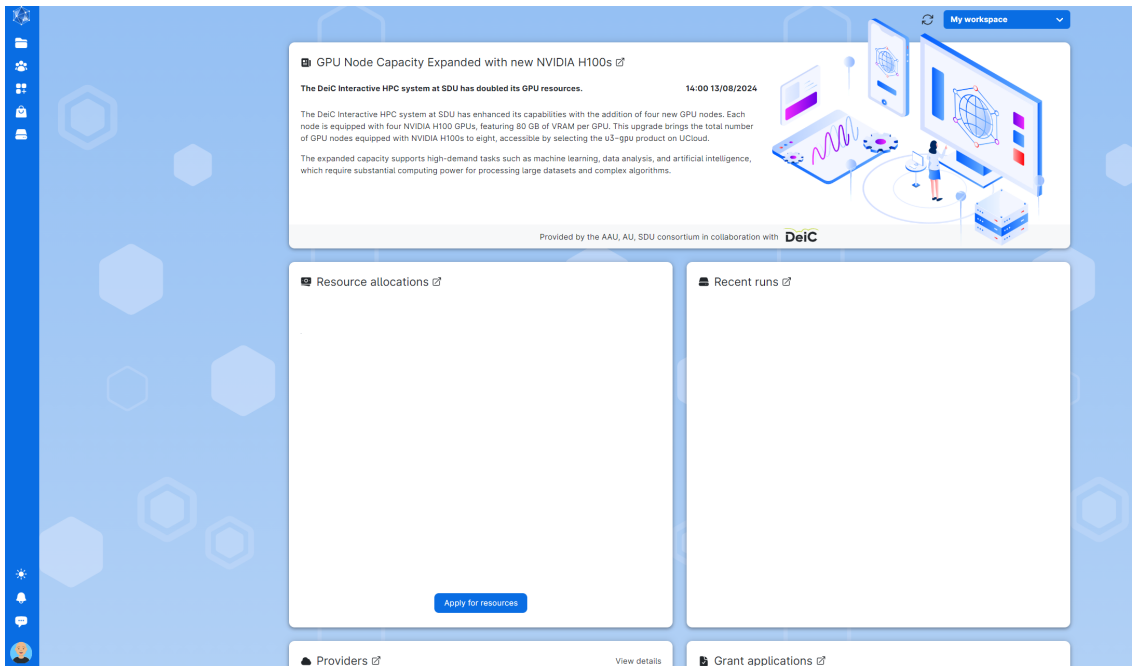
Du kan til enhver tid gå til my.wayf.dk for at se hvilke par der er registreret i denne browser.

Here you need to press OK.

The Terms of Service will then appear. They must be accepted in order to use UCloud. The Accept button is at the bottom, which you must scroll down to and then a pop-up window will appear, where you must confirm that you accept the terms.

1.5 The landing page: You are now logged on to UCloud

You will then be taken directly to the front page of UCloud. It looks like this if you haven't used it before.



1.6 Basic information and documents

1.6.1 Username/ID

Your username, also called ID, is at the bottom of the screen on the left (see the red marking on the image above). It will most often be your name square/hashtag and a four-digit number in the form YourName#0000.

If you click on your ID name, you copy it and you can then send it to eventual collaborating partners you want to share files with or who wants to share files with you.

1.6.2 UCloud docs

This is a link to the UCloud documentation.

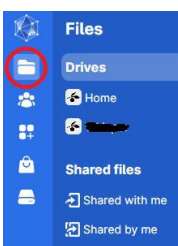
1.6.3 SDU Data protection

This is a link to the SDU data protection policy.

1.7 Menu Items

1.7.1 Files

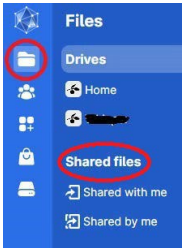
To find files on UCloud, you must look at the menu on the left-hand side of the screen, where "Files" is at the top.



The first time you use UCloud, there is only the "Home" folder in here, but this is where you can find all your files in the future.

You have to upload all the files you need to use on UCloud yourself. This is therefore also where the files you create on UCloud must be located.

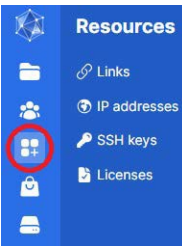
1.7.2 Shares



Under “shares” In the menu at the left, it is possible to see if others have shared files or projects with you and you get an overview of what you have shared with others.

If you wish to share a file with someone, you must find the file in “files” press the three dots in the right and choose share, then write the user ID of the person(s) you want to share the file(s) with.

1.7.3 Resources



In “resources” you can search for public IPs, public links, Licenses or available SSH(Secure Shell) keys.

1.7.4 Apps

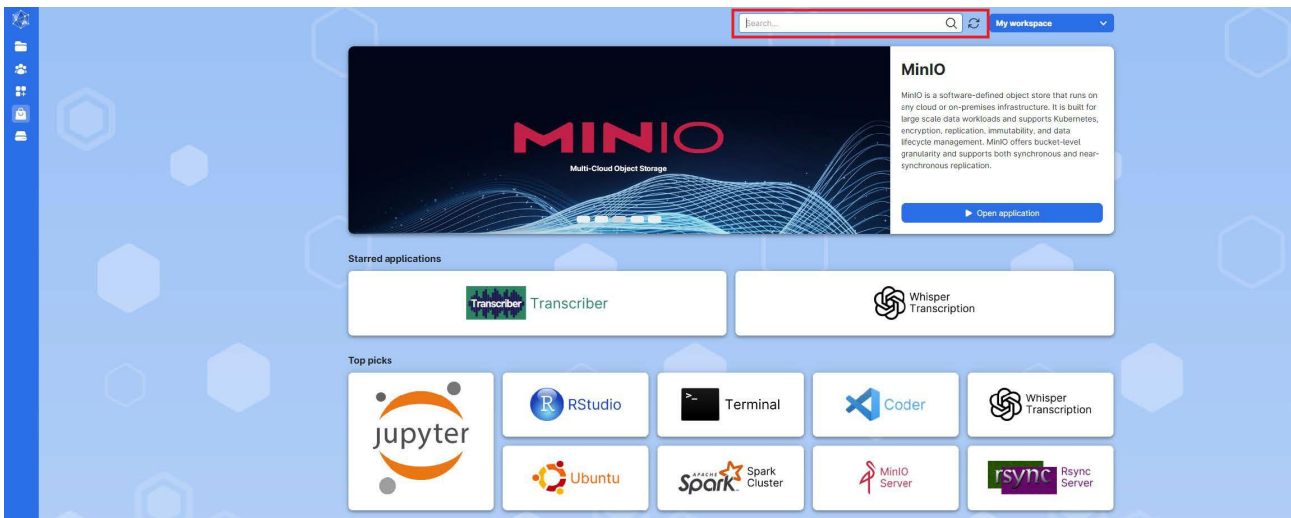


The UCloud platforms provides a large collection of ready to use applications that are hosted on the platform and presented to you via your web browser.

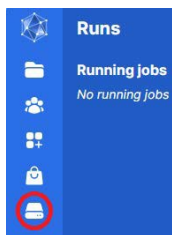
To find all applications you can either click on the “Apps” menu item in the left-hand navigation menu:

This will present a variety of summarized views of the applications that are available on the UCloud platform. You can select and run an application by clicking on the application box.

Or you can simply search for an application that you know in the search field at the top right of your browser window:



1.7.5 Runs



In the section “Runs” in the menu bar, you can see the jobs you have run in Ucloud and their status, if it was a success, expired or if it is running.

1.8 Upload your files

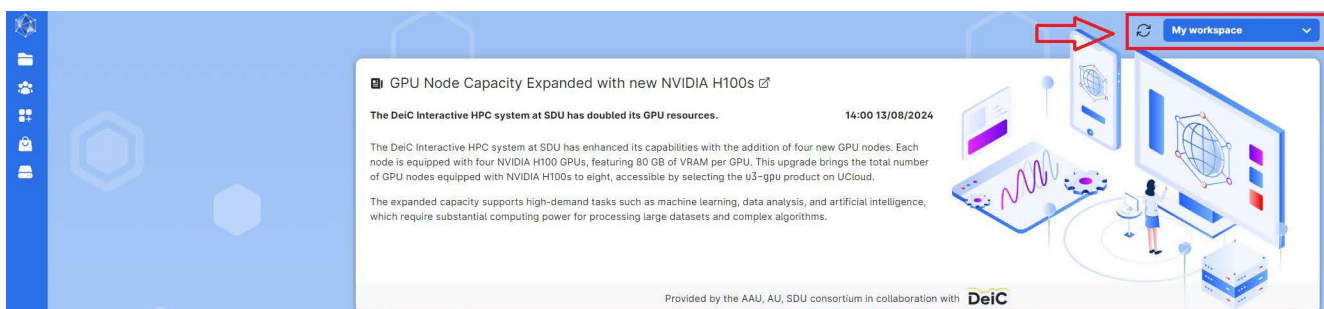
Before you can transcribe your files, you have to upload them to Ucloud.

1.8.1 Make sure you are working in the right “workspace”

When you start using projects or are invited to shared workspaces in UCloud it is important to check what workspace you are in. This can be checked at the top of the screen in the blue banner.

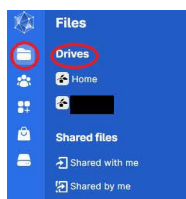
If you click the dropdown box, next to the UCloud logo, you will see a list of all “other” projects you are a part of, and the item in the blue header is the workspace you are currently in.

If this is your first time using UCloud, then you won’t have any projects listed beneath “My Workspace”.



1.8.2 Select the drive

Go into the drive where you wish to upload your files. For this example we will be using the "Home" drive.

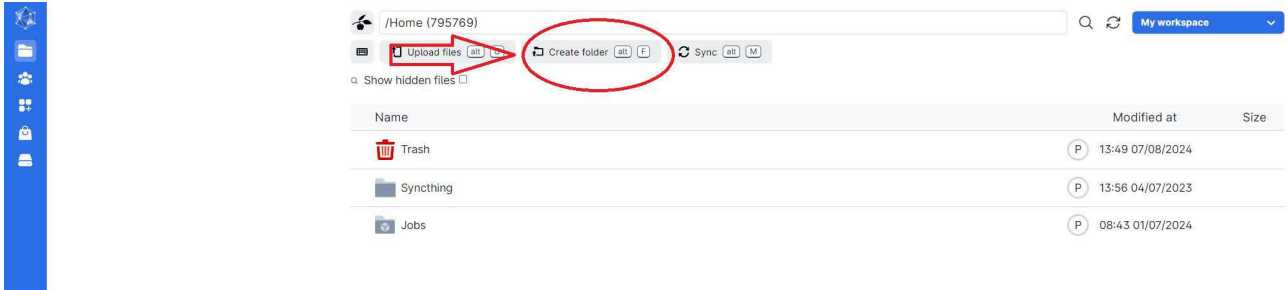


Drive name	Provider	Created by	Created at
Home	SDU/K8		
	SDU/K8		

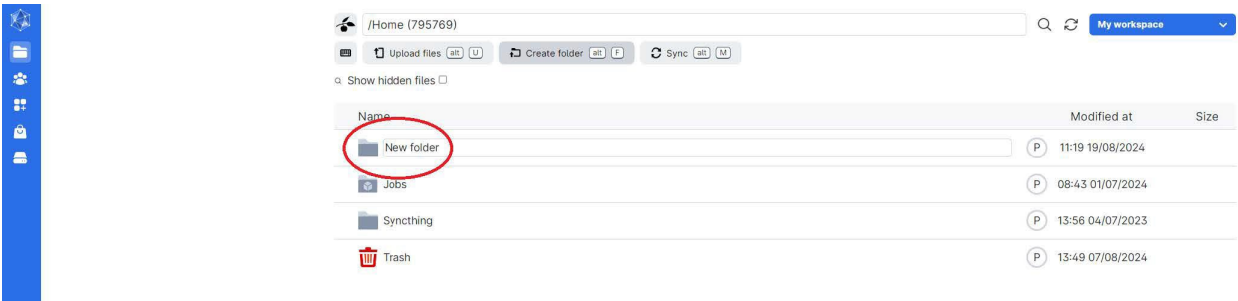
1.8.3 Create a folder for your files

Inside our selected drive, we now have a few options. We can upload our files directly to the drive or create a folder for the files. In this example we will first create a folder for our files, for easy navigation.

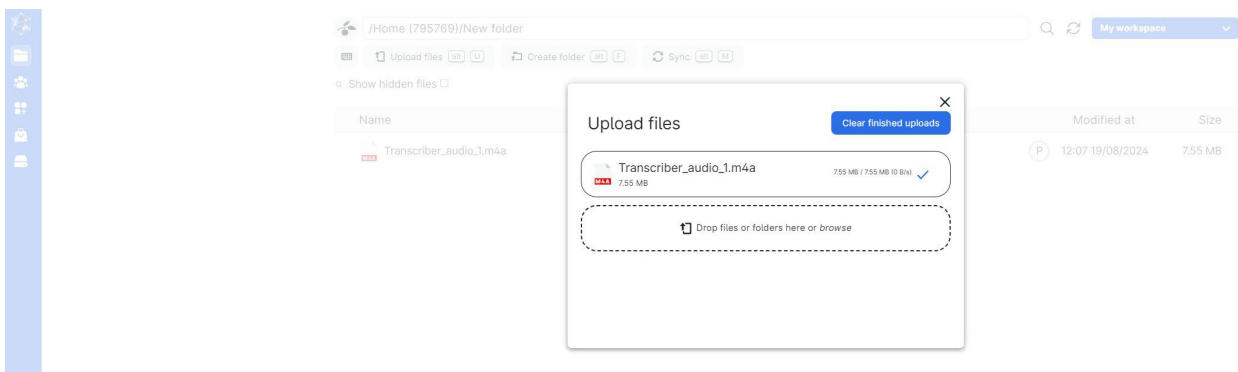
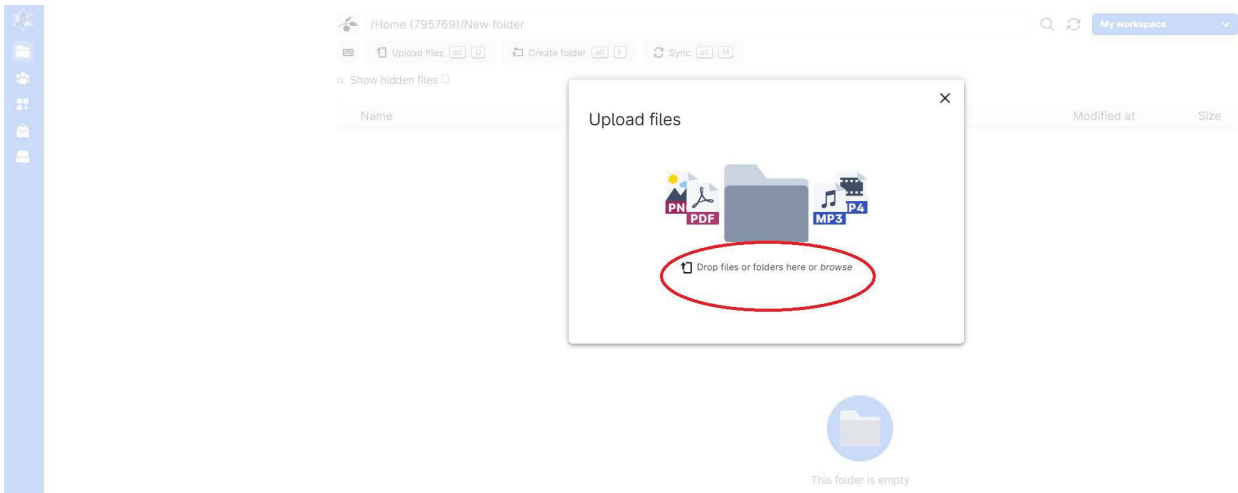
We begin by clicking on the "create folder" option:



We then name the folder, click on it, and are now ready to upload our files.



In our new new folder, we click on "upload files". We can now either "browse for file" or simply "Drop" the file over.



1.9 Create an output folder (optional)

Following the same procedure as for creating your files folder, you can create an output folder.

If you would rather just have the output in the standard location, you can ignore this step.

If you use an output directory (or folder) all files will be placed in that folder.

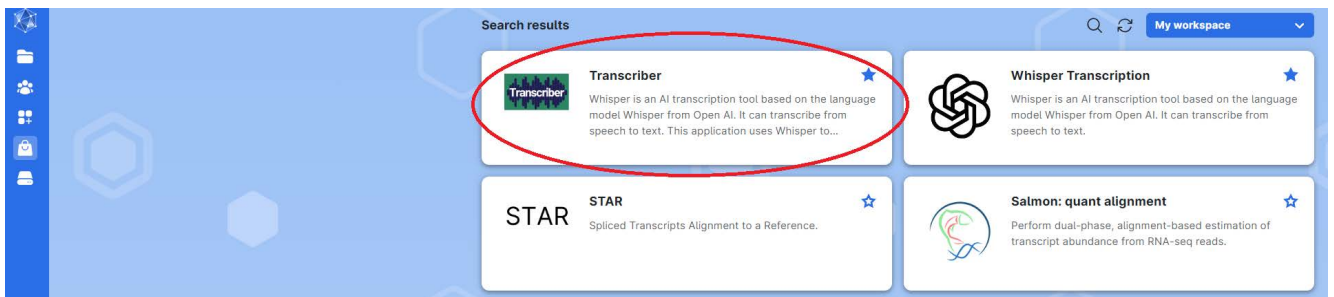
2 Using the Transcriber application:

2.1 Find the application

1. Go into application.
2. Use the search function to find Transcriber.

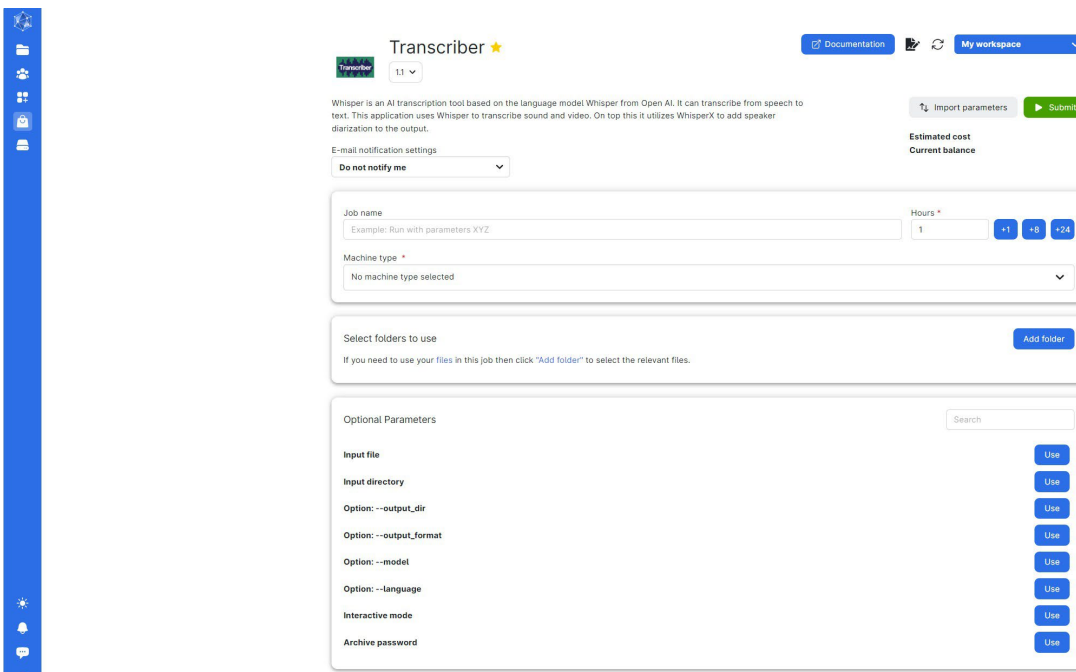


3. Click on Transcriber.



2.2 Using the application

You should now have the following screen:



There are several options here and it can seem a bit overwhelming. For this example, we will show the "quickest" way to start a transcription.

1. Choose a name for your job, pick something that will make it easy to find your data later on, and distinguish between different jobs: example: **“Transcriber demo 1”**.

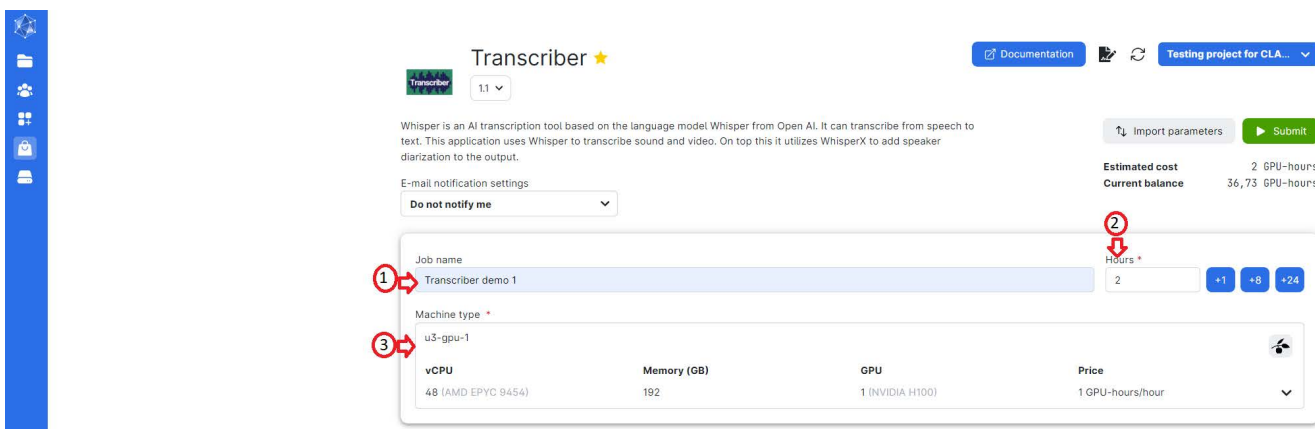
Note: Job and file names cannot include any special characters such as "æøå".

2. Select the duration of your job in hours. Rule of thumb: The application can transcribe in 1:1 time, meaning that 1 hour audio file will take approximately 1 hour to transcribe. However, we recommend allocating double the length of the audio file, so 1 hour audio file= 2 hours in the application. This is just a safety precautions to ensure that the transcription will not stop during the process. This will not affect your amount of resources.

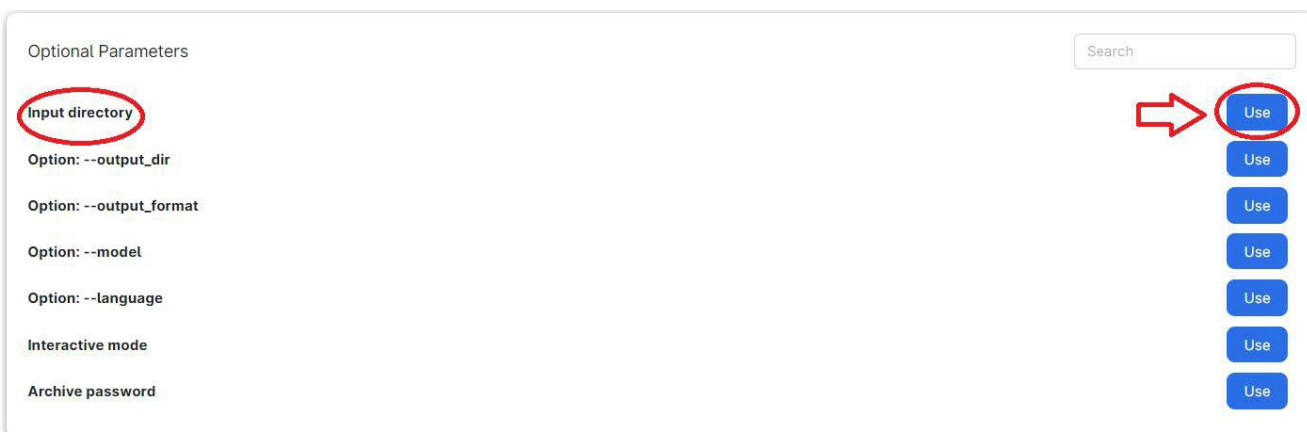
Note: If you run out of allocated time before your job is finished, the file that is being transcribed at that point will fail to be processed. You can allocate more time after starting the job if you suspect to run out of time.

3. Pick a machine to use.
We recommend the machine with called u3-gpu-1, as that option performed best in the tests we ran.(also, better than bigger machines)

Note: Feel free to play around and test this with a few sample files.




4. Select input file by clicking the "use" button.



Click on the text box to select a file

Additional Parameters

Input file Remove x

No file selected 

Select file to transcribe.

Optional Parameters Search

Input directory Use

Option: --output_dir Use

Option: --output_format Use



Option: --model Use



Option: --language Use

Interactive mode Use




Archive password Use

You will be navigated to your "drives" Here you can click on the folder that have your file or if the fil is already here, simply click on "use" on the file you wish to use. In this example we have clicked on the folder "New folder" from previously and selected our audio file.

  /Home (795769)/New folder Refresh My workspace

 Create folder  Favorites

🔍 Show hidden files

Name	Modified at	
 Transcriber_audio_1.m4a	P 19/08/2024 	Use 

5. We could begin our transcription now, but we recommend that you also selected where your output will end up. To do this click "use" on "option: --output_dir

Additional Parameters

Input file Remove x

/Home/New folder/Transcriber_audio_1.m4acli

Select file to transcribe.

Optional Parameters Search

Input directory

Option: --output_dir **Use**

Option: --output_format Use


Option: --model Use

Option: --language Use

Interactive mode Use





Archive password Use

Then click on the "text box" like before and select which folder you want your transcription to be. For this example, we want to output to be in our folder "New folder"

▼  /Home (795769) ↻ My workspace ▼

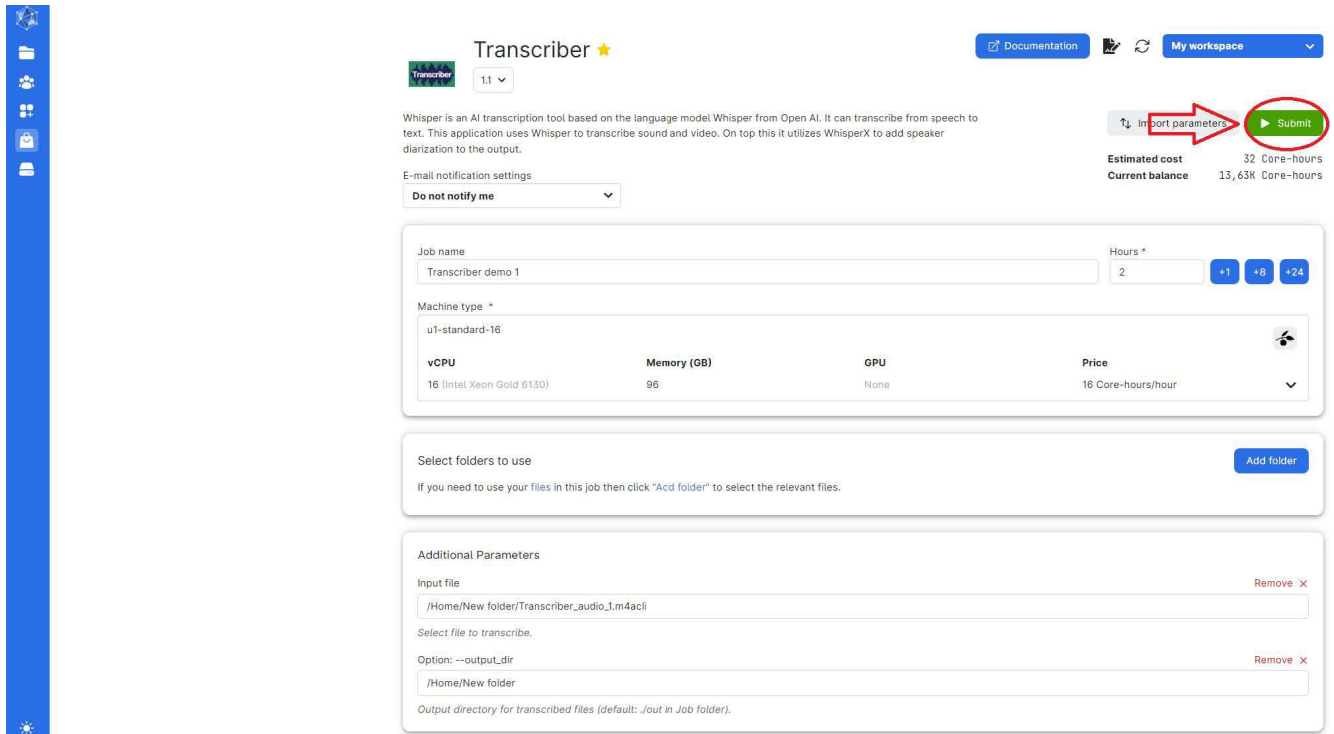
✓ Use this folder 📁 Create folder ★ Favorites

🔍 Show hidden files

Name		Modified at	
 Trash	(P)	08:49	Use
 Synchting	(P)	04/07/2023	Use
 New folder	(P)	08:48	Use
 Jobs	(P)	01/07/2024	Use

6. We are now ready to begin our transcription. Click on "submit" and your transcription will begin.

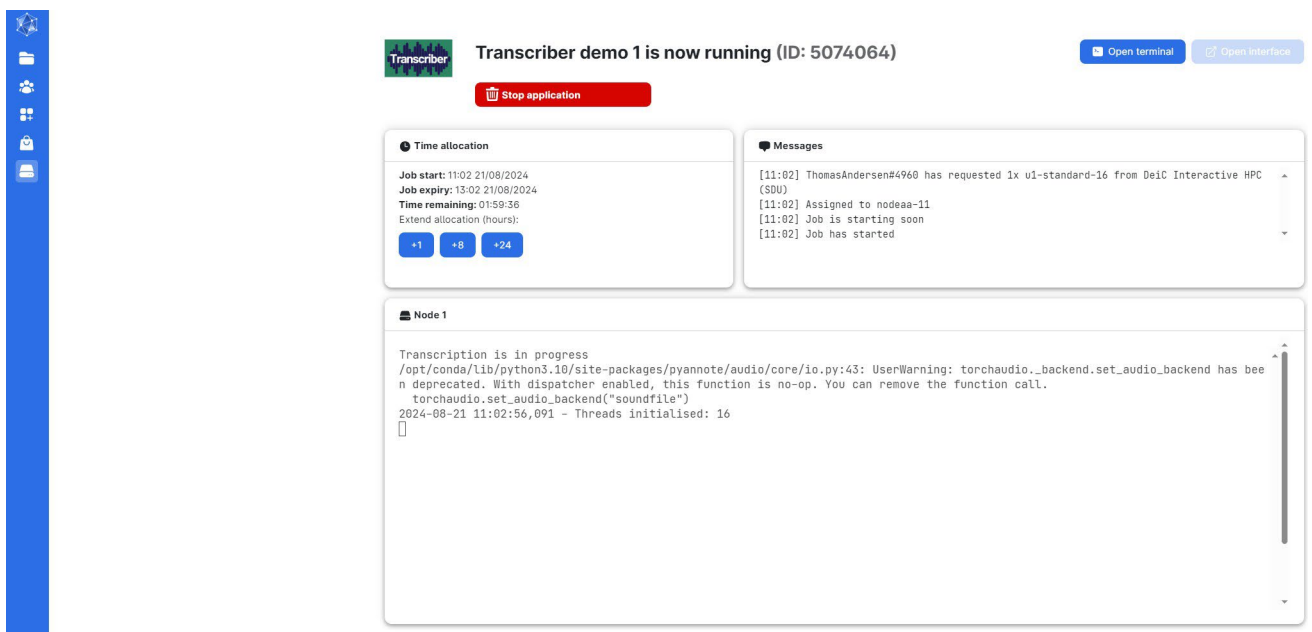
Note: There are other things you could do, but you can read more about these options in the "other options" section.



The screenshot shows the 'Transcriber' interface with the following elements:

- Header:** 'Transcriber' logo, version '1.1', 'Documentation' link, and 'My workspace' dropdown.
- Description:** A paragraph explaining that Whisper is an AI transcription tool based on Open AI's language model, which can transcribe speech to text and utilize WhisperX for speaker diarization.
- Notification Settings:** A dropdown menu set to 'Do not notify me'.
- Job Configuration:**
 - Job name:** 'Transcriber demo 1' (with a search icon).
 - Hours:** A numeric input set to '2', with '+1', '+8', and '+24' buttons.
 - Machine type:** A dropdown menu showing 'u1-standard-16'.
 - Table:** A table with columns for vCPU, Memory (GB), GPU, and Price. The selected row shows: 16 (Intel Xeon Gold 6130), 96, None, and 16 Core-hours/hour.
- Select folders to use:** A section with an 'Add folder' button and a note: 'If you need to use your files in this job then click "Add folder" to select the relevant files.'
- Additional Parameters:**
 - Input file:** A text input containing '/Home/New folder/Transcriber_audio_1.m4acfl' with a 'Remove' button.
 - Select file to transcribe:** A text input containing '/Home/New folder' with a 'Remove' button.
 - Option: --output_dir:** A text input containing '/Home/New folder' with a 'Remove' button.
 - Output directory for transcribed files (default: .out in Job folder):** A note below the option input.
- Cost Summary:** 'Estimated cost 32 Core-hours' and 'Current balance 13,63K Core-hours'. A red arrow points to the 'Submit' button.

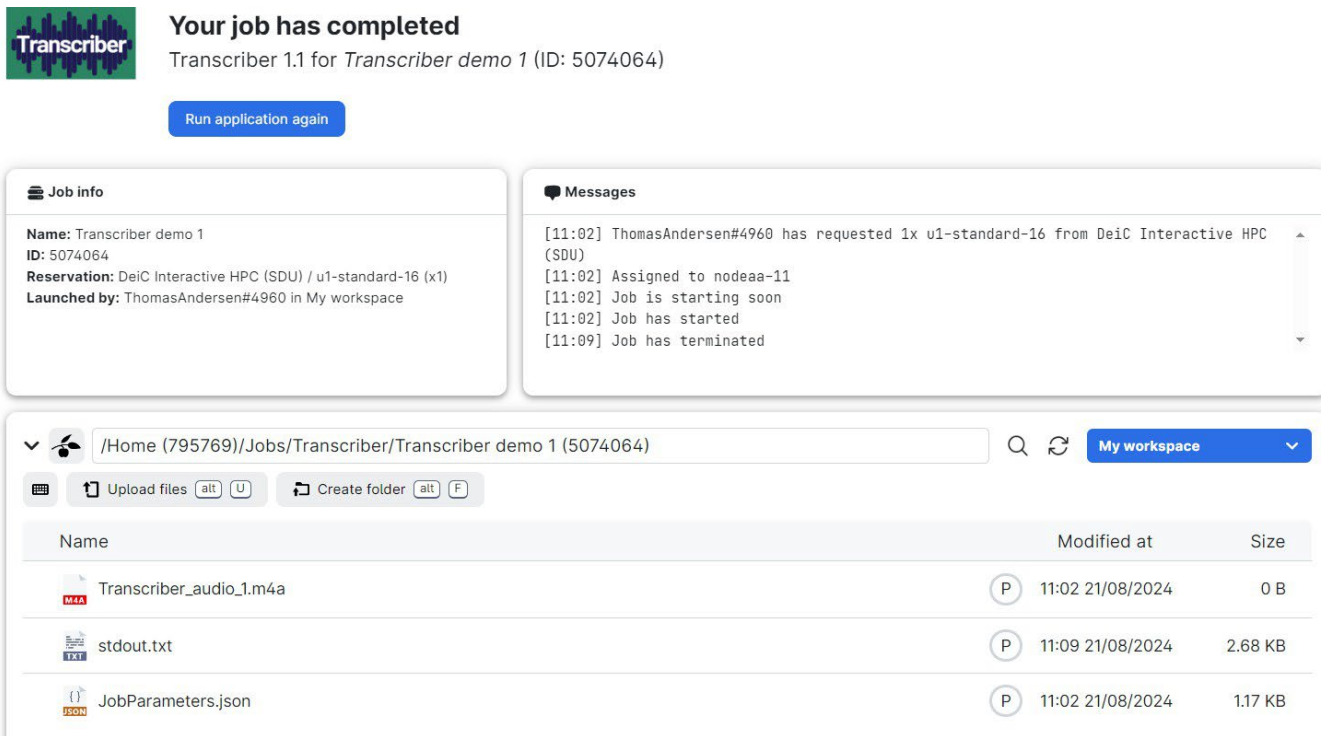
7. At this step you are free to close your computer until transcriber is done. If you wish to make sure everything is running, then wait until a "node" has been assigned and your screen will look something like this:



The screenshot shows the 'Transcriber' interface with the following elements:

- Header:** 'Transcriber' logo, 'Transcriber demo 1 is now running (ID: 5074064)', 'Open terminal' button, and 'Open interface' button.
- Stop Application:** A red button with a trash icon and the text 'Stop application'.
- Time allocation:**
 - Job start:** 11:02 21/08/2024
 - Job expiry:** 13:02 21/08/2024
 - Time remaining:** 01:59:36
 - Extend allocation (hours):** '+1', '+8', '+24' buttons.
- Messages:**
 - [11:02] ThomasAndersen#4960 has requested 1x u1-standard-16 from DeIC Interactive HPC (SDU)
 - [11:02] Assigned to nodeaa-11
 - [11:02] Job is starting soon
 - [11:02] Job has started
- Node 1:**
 - Transcription is in progress
 - /opt/conda/lib/python3.10/site-packages/pyannote/audio/core/io.py:43: UserWarning: torchaudio._backend.set_audio_backend has been deprecated. With dispatcher enabled, this function is no-op. You can remove the function call.
 - torchaudio.set_audio_backend("soundfile")
 - 2024-08-21 11:02:56,091 - Threads initialised: 16
 - █

8. Once the transcription is done, you will be met by something like this



Your job has completed
Transcriber 1.1 for *Transcriber demo 1* (ID: 5074064)

Run application again

Job info

Name: Transcriber demo 1
ID: 5074064
Reservation: DeiC Interactive HPC (SDU) / u1-standard-16 (x1)
Launched by: ThomasAndersen#4960 in My workspace

Messages

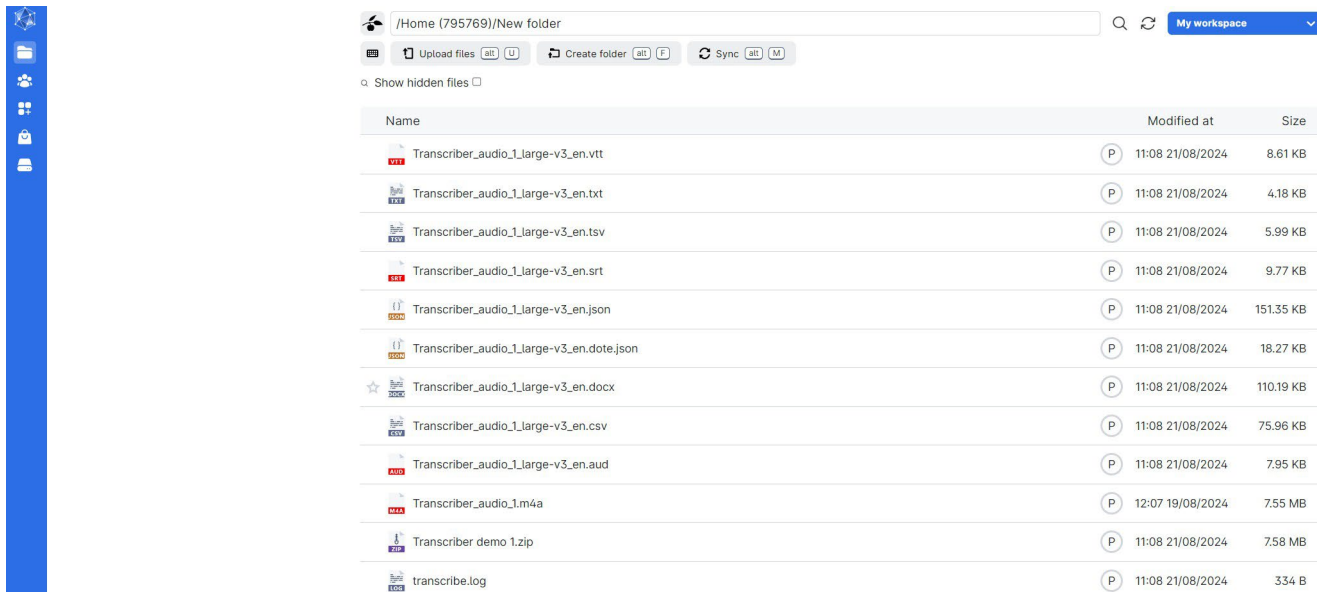
```
[11:02] ThomasAndersen#4960 has requested 1x u1-standard-16 from DeiC Interactive HPC (SDU)
[11:02] Assigned to nodeaa-11
[11:02] Job is starting soon
[11:02] Job has started
[11:09] Job has terminated
```

/Home (795769)/Jobs/Transcriber/Transcriber demo 1 (5074064)

Upload files (alt) (U) Create folder (alt) (F)

Name	Modified at	Size
Transcriber_audio_1.m4a	11:02 21/08/2024	0 B
stdout.txt	11:09 21/08/2024	2.68 KB
JobParameters.json	11:02 21/08/2024	1.17 KB

Note: This is not the actual output of your transcription. That can be found in the folder you selected for output. It may look something like this:



/Home (795769)/New folder

Upload files (alt) (U) Create folder (alt) (F) Sync (alt) (M)

Show hidden files

Name	Modified at	Size
Transcriber_audio_1_large-v3_en.vtt	11:08 21/08/2024	8.61 KB
Transcriber_audio_1_large-v3_en.txt	11:08 21/08/2024	4.18 KB
Transcriber_audio_1_large-v3_en.tsv	11:08 21/08/2024	5.99 KB
Transcriber_audio_1_large-v3_en.srt	11:08 21/08/2024	9.77 KB
Transcriber_audio_1_large-v3_en.json	11:08 21/08/2024	151.35 KB
Transcriber_audio_1_large-v3_en.dote.json	11:08 21/08/2024	18.27 KB
Transcriber_audio_1_large-v3_en.docx	11:08 21/08/2024	110.19 KB
Transcriber_audio_1_large-v3_en.csv	11:08 21/08/2024	75.96 KB
Transcriber_audio_1_large-v3_en.aud	11:08 21/08/2024	7.95 KB
Transcriber_audio_1.m4a	12:07 19/08/2024	7.55 MB
Transcriber demo 1.zip	11:08 21/08/2024	7.58 MB
transcribe.log	11:08 21/08/2024	334 B

There are several different files with your transcription. The most commonly used formats are the ".txt" file and the ".docx" file. You are welcome to look at the different formats and use the one that best suits your needs. If you would prefer

to only have your preferred format as an output, then please look at “output_format” under “other options” in this guide.

Remember that you can always contact CLAAUDIA at <https://serviceportal.aau.dk/> if you need any assistance.

3. Other options

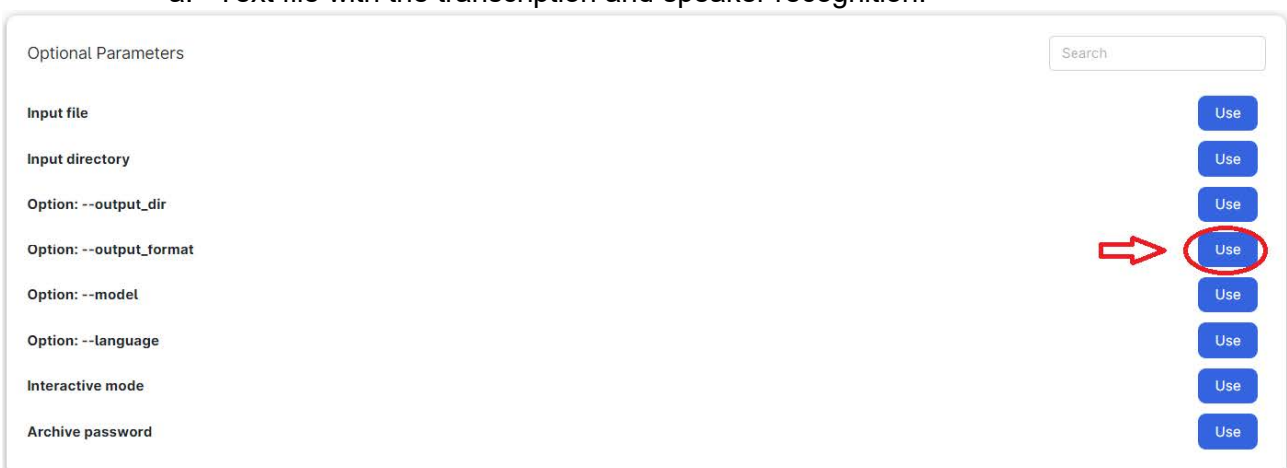
3.1 Option: --output_format

The default option is for all 8 formats to be produced automatically.

Selecting one of the following formats **will limit the output to only that format.**

The optional output formats include .csv, .srt, .txt, .vtt, .json, .tsv, .docx and DOTE.

1. CSV:
 - a. Contains every parameter outputted from the whisper model.
2. SRT:
 - a. SubRip file format, widely adopted subtitle format.
3. TXT:
 - a. Pure text file with the transcription.
4. VTT:
 - a. Web Video Text Tracks format. Contains timestamps.
5. JSON:
 - a. JavaScript Object Notation.
6. TSV:
 - a. Tab-separated value file contain start, end and text.
7. DOTE:
 - a. DOTE Transcription software developed by the BigSoftVideo team at AAU.
8. DOCX:
 - a. Text file with the transcription and speaker recognition.



3.2 Optional: --output model

This allows you to choose the model size. The options are small, medium or large. The smaller model runs faster but is less accurate. The medium model a little slower and significantly more accurate. The large model is the most accurate and runs the slowest.

The default is to use the large model, and with a machine with 16 vCPUs and 96GB memory, the speed of transcription is roughly the same as the audio recorded. i.e. 1 minute of audio takes roughly 1 minute to transcribe.

Optional Parameters

Search

Input file	Use
Input directory	Use
Option: --output_dir	Use
Option: --output_format	Use
Option: --model	Use
Option: --language	Use
Interactive mode	Use
Archive password	Use

3.3 Optional: --output language

This allows you to specify the language that the model will use to evaluate the audio for text. The officially supported languages are included in a dropdown list, from which you can choose one language.

The default is for the Whisper model to automatically detect the language of the audio that is processed.

Note: This selection also determines the output language of the text that is produced by the model.

The whisper model also automatically translates audio from multiple languages into the language that is chosen/detected language of the audio file. I.e. if there are multiple languages spoken in the audio, it will only produce text output in one language.

For example, if the chosen / detected language is English and the audio file includes English, Danish, Spanish and Greek. All the text in the output files will be in English.

Optional Parameters Search

Input file	Use
Input directory	Use
Option: --output_dir	Use
Option: --output_format	Use
Option: --model	Use
Option: --language	Use
Interactive mode	Use
Archive password	Use

