How to organise and send a copy of your data

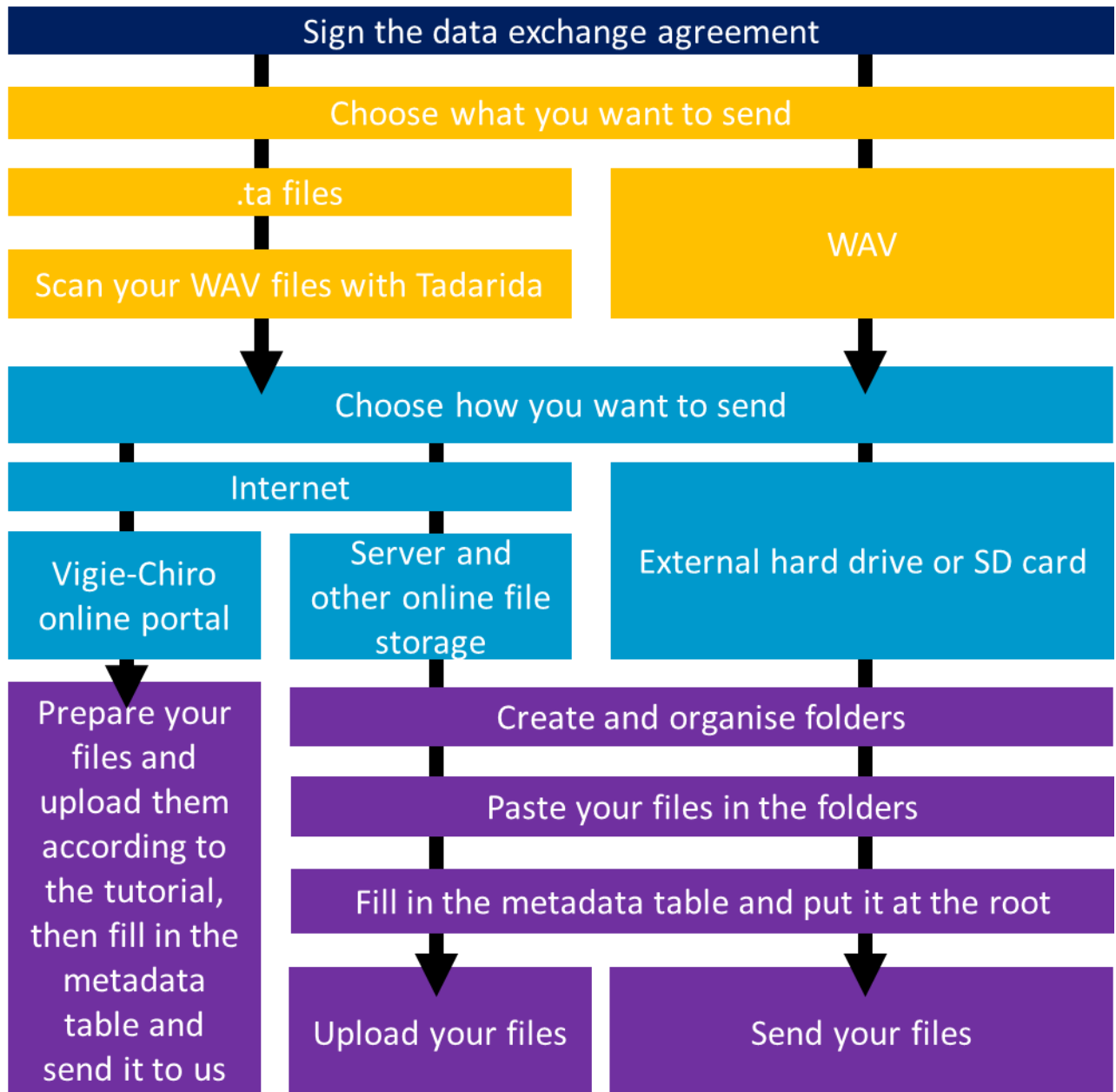*A tutorial by Charlotte Roemer and Yves Bas, December 2021*

Summary

Summary of the different steps of this tutorial

Sign the data exchange agreement

Choose what you want to send

.ta files

WAV

Scan your WAV files with Tadarida

Choose how you want to send

Internet

Vigie-Chiro online portal

Server and other online file storage

External hard drive or SD card

Prepare your files and upload them according to the tutorial, then fill in the metadata table and send it to us

Create and organise folders

Paste your files in the folders

Fill in the metadata table and put it at the root

Upload your files

Send your files

1. Sign the data exchange agreement

Each contract has its own reference number, so please send an email to Charlotte Roemer at this email address to obtain a contract form: charlotte.roemer1@mnhn.fr

Please fill in the contract and sign it before you send it back. If you need to clarify certain points in the contract please send an email to Charlotte Roemer.

Once you have received the agreement signed from the French Museum of Natural History, you may send us the data!

2. Select the data that you will send

If you have more than 2 To of WAV files that could be sent to the project, you are encouraged to ask us which sites are the most important. This will help us to be quicker and more efficient to achieve data transfer for all partners.

3. Choose what you want to send

Some recorders offer a native format (e.g. .raw) or a compression format (e.g. .wac). In this case, please convert your files to .wav.

3.1. File duration

- If you can cut your file sequences during the conversion process, **please cut them in maximum durations of 5 seconds**. This is the length that we will use to count bat passes.
- In case you already cut your files to a maximum duration and don't have the original files anymore, please mention the duration in the metadata table (see section 7). In this case, do not re-cut your files.
- If you didn't cut your file sequences and don't have time to do it, this is fine, please mention it in the metadata table (see section 7).

3.2. Time expansion

- If you can apply a time expansion factor during the conversion process, **please apply a x10 factor**. This is how we will process the data.
- In case you applied another time expansion factor or if don't have time to do it, this is fine, please mention it in the metadata table (see section 7).

3.3. File format

You have two options for file format.

- The first one (the one we prefer) is to send the WAV files.
- The second is to scan these files with the Tadarida software, which will produce .ta files, which contain the acoustic parameters of each detected sound event in your sound sequences. .ta

files are similar to .txt files and are much lighter than WAV files. To produce .ta files, please follow the [tutorial here](#).

- You can choose to send a combination of both, for example the most important study sites in WAV and the rest in .ta.

4. Choose how to send your files

You have different options to send your files. They are listed below. Please keep in mind that only one person can handle data transfer on our side, so it might take some time before we are available to receive your data.

If you have a very good internet connexion and not too much data to send (too much is up to you), you can choose to send them online. Else, you can copy/paste them on a SD card or an external hard drive.

4.1. Our server (internet)

We can create a visitor account for you on the CC-IN2P3 data centre. Please ask for an account at charlotte.roemer1@mnhn.fr

We will give you additional instructions on how to transfer your data via the program [Cyberduck](#).

4.1. Your facility (internet)

If you have a server or a cloud account (Google Drive, Dropbox…) on which you want to upload your files, and then grant us access, we can download your files from this server or cloud.

4.2. Another online file storage (internet)

Please do not choose a non-permanent file storage such as Wetransfer because we cannot guarantee that we will be reactive enough to download the files before they are automatically deleted. Instead consider the option 4.1 above.

### 4.1. The Vigie-Chiro online portal (internet)

Warning: this option is recommended for French-speaking partners only because the portal is in French. There are multiple steps to follow (including required settings for the recorders) and the process is more time demanding than the other options.

This online portal was designed for the participants of the Vigie-Chiro citizen science program. If you want to use it you will have to follow [the Vigie-Chiro tutorial](#). If you don't find your country in the grid on the portal (i.e. you cannot add a new study location on the map), please send us an email and we will add a grid for your country.

The data uploaded on this portal are also stored at the CC-IN2P3 data centre. The advantage of using this online portal is that you are autonomous (you don't need us).

If you use this online portal, you can skip the next steps. **However, it will still be necessary to fill the complete metadata table** (section 7).

4.2. External hard drives
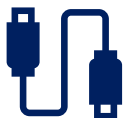
We have a set of external hard drives that we will be able to send to you so you can put a copy of your files on it and send them back to us. Since the amount of external hard drives is limited, it might take some time before we can send one to you. You can also choose to send your external hard drive to us, but please be aware that we decline any responsibility in case something happens to your external hard drive on the way.

Please ask for an external hard drive by writing to charlotte.roemer1@mnhn.fr and inform us about the space you need.

4.3. SD cards or USB keys
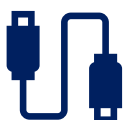
If you don't have a lot of data but have a poor internet connexion, and if they can be stored on your SD cards or USB keys, this is a safe way to send them to us. Please be aware that we decline any responsibility in case something happens to your SD cards on the way.

5. Organise folders

Please prepare folders in this order: Site, Participation. This is an example:

- **Site_1**
    - o **Participation_1**
    - o **Participation_2**
- **Site_2**
    - o **Participation_1**
- **Site_3**
    - o **Participation_1**

A **site** is a unique location that will be described in the metadata table by only two attributes: latitude and longitude. The height of the microphone does not matter here. You can name the folder as you like, for example "National_Park_Cevennes_Florac_Hilltop" or "Site_1". Please avoid special characters and spaces.

A **participation** is one recording session on your site. Each recording session will be described in the metadata table by a lot of different attributes, including starting and ending date and time of the recordings, recorder type, recorder settings, microphone height, etc. You can name the participation folders as you like, for example "Participation_1", "Participation_2" or "October_2020", "Spring_2021". Please avoid special characters and spaces.

6. Put the WAV files in the participation folders

Put the WAV files in the participation folders.

You can use as many different participation folders as you like but each folder must contain at least one complete night.

If you recorded several nights in a row but did not record during one night in the middle, please split the recordings into two different participation folders so that there is no discontinuation in one folder. It is not a problem if two participation folders have the same metadata (excluding the starting and ending dates obviously).

If you used a stereo recorder, please contact us to agree on how to organise this data.

7. Fill in the metadata table and put it at the root

Please download the complete metadata table and the tutorial about how to fill each column. This complete table contains all metadata that will be important for the analysis of the data. Once you have filled this table, put it at the root of your space.

This is an example:

- Site_1
  - o Participation_1
  - o Participation_2
- Site_2
  - o Participation_1
- Site_3
  - o Participation_1
- **Metadata_table.csv**

Please keep in mind that data without metadata will be useless!

8. Send your data (choose one option)

8.1. Our server
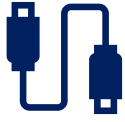
Please follow instructions to transfer data directly to the CC-IN2P3.

8.2. Other internet transfer

Please send the link to download data to Charlotte Roemer at this address: charlotte.roemer1@mnhn.fr

8.3. External hard drives, SD cards or USB keys

If you use one of our external hard drives, please do not keep it more than a few days: other partners might be waiting to receive one :)

When you are finished copying the files on it, put the disk back in the plastic box it came with. Please wrap up external hard drives, SD cards and USB keys carefully so that they won't move in their transport box. Please send them to this address:

Charlotte Roemer
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Centre d'Ecologie Fonctionnelle et Evolutive (CEFE)
Campus du CNRS
1919 route de Mende
34293 Montpellier 5
FRANCE

9. You're done

A big thank you! You will be able to see a summary of your contribution on the map of participations when we update it. The cells of this map are 50 km wide to preserve the confidentiality of your study locations.