

## **TOOL PREREQUISITES**

The following software must be installed before OntoNet:

**FOR MAC ONLY** : **HomeBrew** (not specific version)

Tape in your terminal : `/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"`  
Follow the instructions printed into your terminal  
(More instructions <https://brew.sh/>)

**Python** (use 3.7 or > version)

**Linux** : Tape in your terminal : `sudo apt install python3.7`

**Mac** : Tape in your terminal : `brew install python`

**Git** (we use version 2.34.1, this version or latest is required)

**Linux** : type 'sudo apt install git-all' in your terminal

**Mac** : multiple options, see <https://git-scm.com/download/mac>

--> Define your git user name and your name (necessary to use ODK !!!!!) with « `git config --global user.name "YourUserNameHere"` » and « `git config --global user.email "YourUserEmailHere"` »

**Git LFS** (3.5.1)

**Linux** : Download the binary file 'Source code (tar.gz)' on <https://github.com/git-lfs/git-lfs/releases> (release 3.5.1). After make add to your \$PATH the path to binary location. Run git lfs install to perform required global configuration changes : `./install.sh`

**Mac** : Use : `brew install git-lfs`

**Docker** (version 26.0.0)

Install from <https://www.docker.com/products/docker-desktop/>, click on the arrow next to 'download for Linux' for Mac

**ODK** (latest version)

- **Step 1** : Download the file `seed-via-docker.*` on <https://ontology-development-kit.readthedocs.io/en/latest/NewRepo.html> according your OS
- **Step 2** : Create a directory ODK located wherever you prefer, and put the `seed-via-docker` file into it
- **Step 3** : Make sure Docker is running (you will see the Docker whale in your toolbar on a Mac)
- **Step 4** : In your terminal, go into ODK repertory and update with the last ODK version via Docker :

**Linux & Mac** : `cd Path/to/your/ODK/repertory/`  
`docker pull obolibrary/odkfull`

If you have the following error : *'Using default tag: latest permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Post "http://%2Fvar%2Frun%2Fdocker.sock/v1.45/images/create?fromImage=obolibrary%2Fodkfull&tag=latest": dial unix /var/run/docker.sock: connect: permission denied'*, do in your terminal :

```
sudo groupadd docker
sudo usermod -aG docker YourUserName
```

Disconnect and return in your user account, ensure Docker is running and try on your terminal 'docker run hello-world'. If the command work, retry to pull obolibrary/odkfull into your ODK repertory

- **Step 5 :** Set you as owner of the file and give to you the rigths to execute the file seed-via-docker :

**Linux & Mac :** `sudo chown [YourUserName] ./seed-via-docker.sh`

(if you need to ensure your username, use the command 'id -un' in your terminal)

`chmod u+x ./seed-via-docker.sh`

- **Step 6 :** Test if ODK tool it's founctional : download the project.yaml file at <https://github.com/INCATools/ontology-development-kit/blob/a88aaa0bbac89b267f4c1699caa94f32eb53bce4/examples/triffo/project.yaml#L4> and put it in your ODK repertory, with your seed-via-docker file. Use this following command must created in your ODK repertory a new repertory, 'triffo' in ODKrepertory/target/, without terminal error

**Linux & Mac :** `./seed-via-docker.sh -C ./project.yaml`

If that didn't work and you just have the message 'This script only works with ODK 1.3.2 and later. For ODK 1.3.1 or earlier, use <https://raw.githubusercontent.com/INCATools/ontology-development-kit/v1.3.1/seed-via-docker.sh>', ensure you have defined a git user name and mail like in git installation instructions : in your terminal do the following commands :

```
git config --get user.name : if nothing printed, use git config --global user.name
"YourUserNameHere"
```

```
git config --get user.email : if nothing printed, use git config --global user.email
"YourUserEmailHere"
```

- **Step 7 :** Remove the created repertory 'triffo' into your created repertory 'target', and the file project.yaml

**ROBOT** (latest version)

See instructions here: <http://robot.obolibrary.org/>

--> For the step 2, if the download file have '.sh' or '.bat' in file name, rename the 'robot.sh' file into 'robot'

--> For the step 3, if put the file in other location than '/usr/local/bin/', update the terminal PATH:

**Linux :**

Do in your terminal 'cd ~'

In the .bashrc file, with your favourite terminal text editor (for exemple nano ou vi),open the file [eg: nano ~/.bashrc] and write:

```
export PATH=$PATH:/path/to/directory/contain/robot.jar AND robot scripts
```

Save the file

**Mac :**

Do in your terminal 'cd ~'

In the .zshrc file (create it if didn't exist), with your favourite terminal text editor (for exemple nano ou vi),open the file [eg: nano ~/.zshrc] and write:

```
export PATH=$PATH:/path/to/directory/contain/robot.jar AND robot scripts
```

Save the file

**OR**

Do in your terminal 'cd /etc/paths.d'

Create a new file : 'touch robot'

Write in this file : '/path/to/directory/contain/robot.jar AND robot scripts'

Save the file

Please do after step 4, close your terminal and reopen it. Test the command 'robot --help' and see if it's functional it's very important

**awk** (GNU version 5.1.0) and **gawk** (Awk GNU version 5.1.0)

**Linux** : sudo apt-get install awk

sudo apt-get install gawk

**Mac** : brew install awk

brew install gawk

**sed** (GNU version 4.8)

**Linux** : sudo apt-get install sed

**Mac** : brew install sed

## **DOWNLOAD THE TOOL**

- **Step 1 :** Download OntoNet repertory given by the Transcriptional Control of Chordate Morphogenesis team and put it where you want in your files
- **Step 2 :** Update the variable 'ODKpath' : after the = symbol, write  
~/your/path/to/directory/contain/seed-via-docker.sh or bat. Do this on the following tool's files :
  - OntoNet/*main.py*
  - OntoNet/*ManageProjectCreation.py*
- **Step 3 :** If it's not on the OntoNet directory, put the *token.txt* file given by the team into OntoNet repertory. ***Don't rename it !!!***

**To use OntoNet**, going on tool's directory Path/where/is/directory/OntoNet and  
**Linux & Mac** : use "python3 main.py" on your terminal