

Installing QIIME2 in macOS

Installing miniconda

1. Check detailed instructions [here](#).
2. For a quick installation, run the codes below:

```
Unset
mkdir -p ~/miniconda3
curl https://repo.anaconda.com/miniconda/Miniconda3-latest-MacOSX-arm64.sh -o ~/miniconda3/miniconda.sh
bash ~/miniconda3/miniconda.sh -b -u -p ~/miniconda3
rm -rf ~/miniconda3/miniconda.sh
```

3. Initialize your Miniconda for bash and zsh:

```
Unset
~/miniconda3/bin/conda init bash
~/miniconda3/bin/conda init zsh
```

Installing QIIME2

1. Once Miniconda is installed, install [QIIME2](#).
Note: we are going to use the QIIME2 2023.7 (there is a newer one, but we tailored this workshop for this version so when a prompt appears, just click “Show me the content on this page”)
2. For a quick installation, follow the instructions here.
3. First, update `conda` and install `wget`.

```
Unset
conda update conda
conda install wget
```

4. Afterwards, download and install the QIIME2 conda environment file.

Unset

```
wget https://data.qiime2.org/distro/core/qiime2-2023.7-py38-osx-conda.yml  
conda env create -n qiime2-2023.7 --file qiime2-2023.7-py38-osx-conda.yml
```

```
# Optional cleanup (delete the .yml file as the environment has already been installed)
```

```
rm qiime2-2023.7-py38-osx-conda.yml
```

5. Now that the QIIME2 2023.7 environment has been installed, activate it using the environment's name:

Unset

```
conda activate qiime2-2023.7
```

6. Test if QIIME2 has been properly installed by running:

Unset

```
qiime --help
```

Installing JupyterLab (IDE of choice)

1. Install JupyterLab through conda using:
Note: install JupyterLab while the QIIME2 environment is activated.

Unset

```
conda install -c conda-forge jupyterlab
```

2. Once installed, activate it using the code below

Unset

```
jupyter lab --no-browser
```

3. Document and run your codes in JupyterLab. Access it by getting the link produced by your terminal (see image below).

To access the server, open this file in a browser:

`file:///Users/jakeivanp.baquiran/Library/Jupyter/runtime/jpserver-2147-open.html`

Or copy and paste one of these URLs:

`http://localhost:8888/lab?token=c2e526668551e6b4711acd4e088622411e900ccc508ef485`

`http://127.0.0.1:8888/lab?token=c2e526668551e6b4711acd4e088622411e900ccc508ef485`