Installation Guide: How to install Jupyter Lab on your computer

In the Python workshop, we will use Anaconda, which is one of the most popular distributions for Python and R and used by many data scientists.

1. Install Anaconda on Windows

The Anaconda for Windows Installation Guide is intuitive and will guide you through the installation process.
To install Anaconda on your business computer, you might need admin rights. In this case, please contact the Onsay Helpdesk.

After the installation has completed, you will see the "Thanks for installing Anaconda" dialog box. There may be a browser window opening and asking for registration. This step can be skipped.

Now, we will start Jupyter Lab.

Info: Jupyter Lab can be started in two different ways:

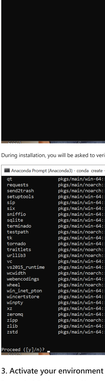
1. Anaconda Navigator which is a Graphical User Interface (GUI)
2. Anaconda Prompt which is a Command Line Interface (CLI).

Click here for more info. We will start Jupyter Lab from the Anaconda Prompt in this installation guide.

2. On your Windows computer, click Start and Search for Anaconda Prompt.

If Anaconda was installed properly, the Anaconda Prompt Desktop App should appear now.

After opening Anaconda Prompt, you should the start screen.



2. Create a virtual environment for your project

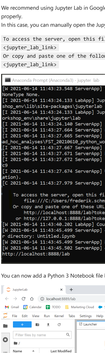
We strongly recommend that you use virtual environments to install libraries. A virtual environment is a tool that helps to keep dependencies required by different project separate by creating isolated Python virtual environments for them. It is one of the most important tools that most of the Python developers use.

Execute the following command in your Anaconda Prompt:
`conda create -n python_workshop_env python=3.8 jupyterlab pandas numpy matplotlib`

This command creates a new virtual environment called `python_workshop_env` (you can use any other name). It will install:

- Python version 3.8
- Jupyter Lab (one of the most popular user interfaces for Python programming)
- Pandas (Python package for analyzing data)
- NumPy (Python package for working with numbers)
- Matplotlib (Python package)

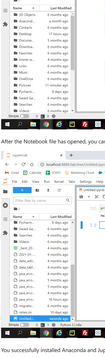
During installation, you will be asked to verify the installation. Execute `y` to create the virtual environment.



3. Activate your environment

Execute the following command in your Anaconda Prompt:
`conda activate python_workshop_env` (or what ever name you gave your virtual environment)

Now, you are in your environment and you can see the packages you installed while creating the virtual environment. It is important to always activate your environment before you start working on your project.



Info: If you want to install other packages execute the following command in your Anaconda Prompt:
`conda install <package_name>`

4. Launch your Jupyter Lab

Execute the following command in your Anaconda Prompt:
`jupyter lab`

Now, a Jupyter Lab window should open in your browser.

We recommend using Jupyter Lab in Google Chrome. If you use a different default browser, the Jupyter Lab window may not open properly.
In this case, you can manually open the Jupyter Lab link from your Anaconda Prompt:

You can now add a Python 3 Notebook file by clicking on the upper Python 3 icon.

After the Notebook file has opened, you can get started working on your project.

You successfully installed Anaconda and Jupyter Lab. Now you can start working on your project!