

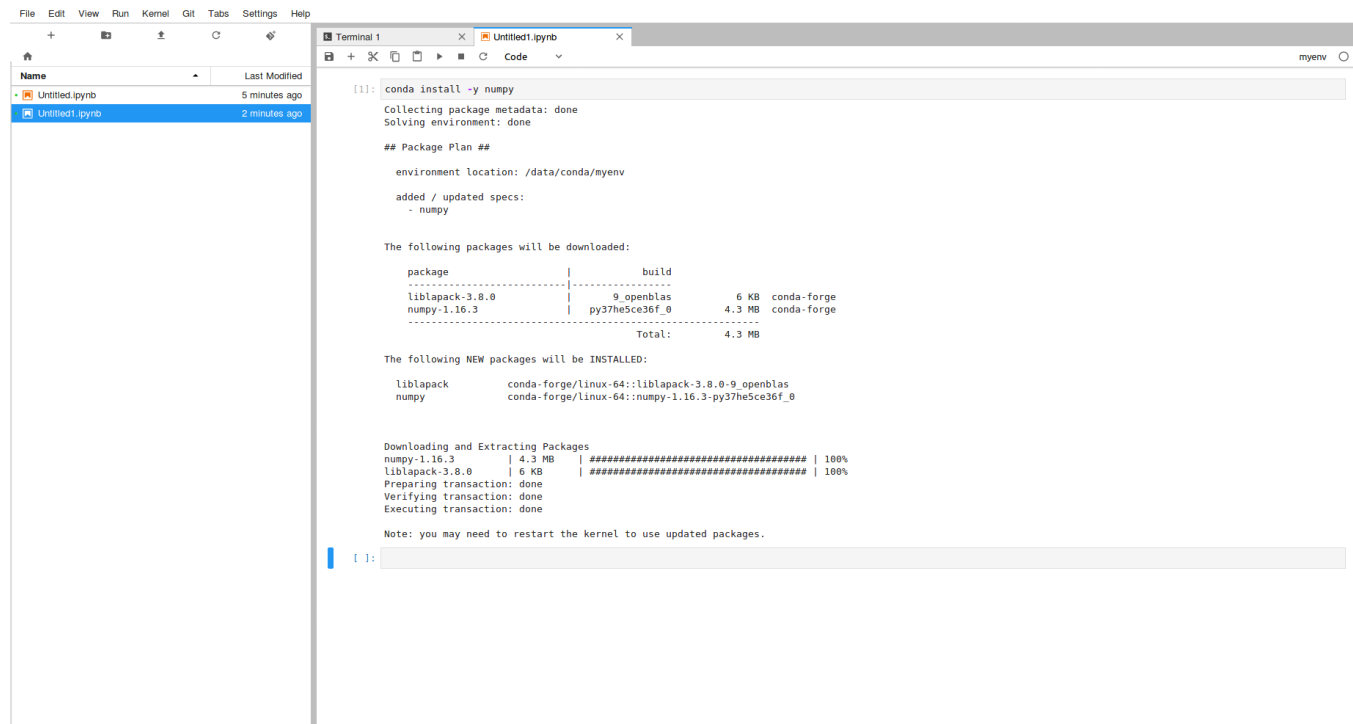
# JupyterLab - Adding/Removing Packages

## Adding Packages/Libraries to the New Environment

Packages can be added to the Conda environment via two mechanisms either of which work fine.

### Python

Python has native Conda Environment support, hence from within a notebook using the Kernel simply calling Conda will install any package correctly to the current environment. This has the added advantage (if this is a python-based project), of capturing your package installs within a Notebook for ease of re-reproducibility for others not working in the same environment.



The screenshot shows the JupyterLab interface. On the left is a file browser with a list of files: 'Untitled.ipynb' (5 minutes ago) and 'Untitled1.ipynb' (2 minutes ago). The main area displays a terminal window with the following output:

```
[1]: conda install -y numpy
Collecting package metadata: done
Solving environment: done

## Package Plan ##

environment location: /data/conda/myenv

added / updated specs:
- numpy

The following packages will be downloaded:

package | build | size | source
-----|-----|-----|-----
liblapack-3.8.0 | 9_openblas | 6 KB | conda-forge
numpy-1.16.3 | py37he5ce36f_0 | 4.3 MB | conda-forge
Total: 4.3 MB

The following NEW packages will be INSTALLED:

liblapack conda-forge/linux-64::liblapack-3.8.0-9_openblas
numpy conda-forge/linux-64::numpy-1.16.3-py37he5ce36f_0

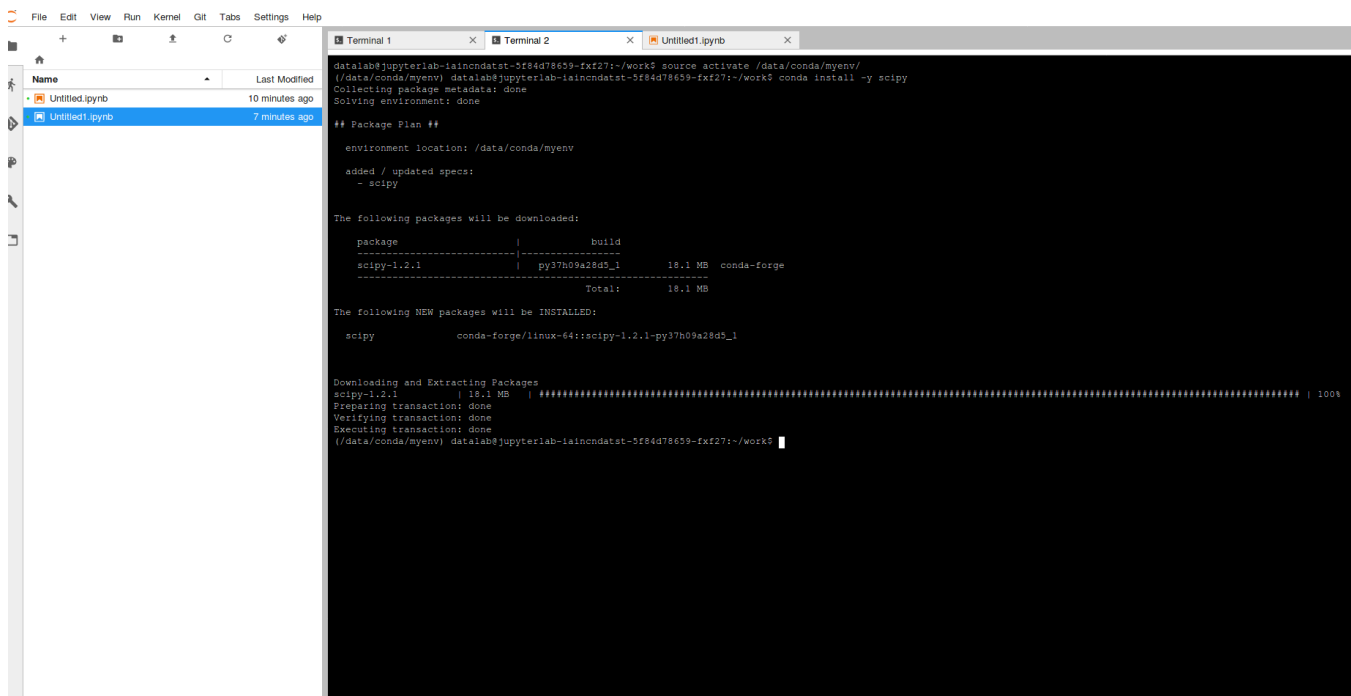
Downloading and Extracting Packages
numpy-1.16.3 | 4.3 MB | ##### | 100%
liblapack-3.8.0 | 6 KB | ##### | 100%
Preparing transaction: done
Verifying transaction: done
Executing transaction: done

Note: you may need to restart the kernel to use updated packages.
```

### Anything Else

If instead of using python you want to install by other means, the terminal can also be used to install any Conda packages using the following example commands;

```
source activate /data/conda/<environment_name>
conda install -y <package>
# e.g
# source activate /data/conda/myenv
# conda install -y numpy
```



The screenshot shows a JupyterLab application window. On the left is a sidebar with a file browser and a list of files: 'Untitled.ipynb' (10 minutes ago) and 'Untitled.py' (7 minutes ago). The main area contains a terminal window with the following output:

```
data1ab@jupyterlab-laincndatst-5f84d78659-fxf27:~/work$ source activate /data/conda/myenv/
(/data/conda/myenv) data1ab@jupyterlab-laincndatst-5f84d78659-fxf27:~/work$ conda install -y scipy
Collecting package metadata: done
Solving environment: done

## Package Plan ##

environment location: /data/conda/myenv
added / updated specs:
- scipy

The following packages will be downloaded:

package | build
-----|-----
scipy-1.2.1 | py37h09a28d5_1 18.1 MB conda-forge
-----|-----
Total: 18.1 MB

The following NEW packages will be INSTALLED:

scipy conda-forge/linux-64::scipy-1.2.1-py37h09a28d5_1

Downloading and Extracting Packages
scipy-1.2.1 | 18.1 MB | ##### | 100%
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
(/data/conda/myenv) data1ab@jupyterlab-laincndatst-5f84d78659-fxf27:~/work$
```

Once packages are installed in your environment, they'll be persisted as normal.