Miniconda

> The default installation of Miniconda may have restrictive licensing on some packages (see https://stackoverflow.com/a/78766306 for some explanation). The drop-in replacement "miniforge" will set up a similar minimal conda environment that defaults to the "conda-forge" channel of open packages.

As the packages in Python distributions can change rapidly, it is difficult to have a single, system-wide installation that is useful to everyone. We will continue to install some basic ones in /sopt, but they are not likely to change after initial build.

To let users customize a minimal Python environment that won't disturb others, we suggest installing the "Miniconda" version of the Anaconda Python distro. (See

https://conda.io/miniconda.html for additional info.)

Example Install 1) Python3-based conda installed in the default $HOME/miniconda3/ directory:

```
cd
wget https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
chmod u+x Miniconda3-latest-Linux-x86_64.sh
./Miniconda3-latest-Linux-x86_64.sh -b
```

Example Install A) Same as option1, but installed to /DFS-L/DATA/$group/$user/miniconda3/ directory, with link in home directory (allows installing very large numbers of packages that would make your home directory go over quota):

```
cd
wget https://repo.anaconda.com/miniconda/Miniconda3-latest-Linux-x86_64.sh
chmod u+x Miniconda3-latest-Linux-x86_64.sh
mkdir /DFS-L/DATA/$(id -gn)/$USER/miniconda3
ln -s /DFS-L/DATA/$(id -gn)/$USER/miniconda3 miniconda3
./Miniconda3-latest-Linux-x86_64.sh -bu
```

As of 23-November-2020, this installs Miniconda3 4.9.2, which uses Python 3.8.5. It also installs the minimal set of packages:

```
_libgcc_mutex-0.1-main
brotlipy-0.7.0-py38h27cfd23_1003
```

```
ca-certificates-2020.10.14-0

certifi-2020.6.20-pyhd3eb1b0_3

cffi-1.14.3-py38h261ae71_2

chardet-3.0.4-py38h06a4308_1003

conda-4.9.2-py38h06a4308_0

conda-package-handling-1.7.2-py38h03888b9_0

cryptography-3.2.1-py38h3c74f83_1

idna-2.10-py_0

ld_impl_linux-64-2.33.1-h53a641e_7

libedit-3.1.20191231-h14c3975_1

libffi-3.3-he6710b0_2

libgcc-ng-9.1.0-hdf63c60_0

libstdcxx-ng-9.1.0-hdf63c60_0

ncurses-6.2-he6710b0_1

openssl-1.1.1h-h7b6447c_0

pip-20.2.4-py38h06a4308_0

pycosat-0.6.3-py38h7b6447c_1

pycparser-2.20-py_2

pyopenssl-19.1.0-pyhd3eb1b0_1

pysocks-1.7.1-py38h06a4308_0

python-3.8.5-h7579374_1

readline-8.0-h7b6447c_0

requests-2.24.0-py_0

ruamel_yaml-0.15.87-py38h7b6447c_1

setuptools-50.3.1-py38h06a4308_1

six-1.15.0-py38h06a4308_0

sqlite-3.33.0-h62c20be_0

tk-8.6.10-hbc83047_0

tqdm-4.51.0-pyhd3eb1b0_0

urllib3-1.25.11-py_0

wheel-0.35.1-pyhd3eb1b0_0

xz-5.2.5-h7b6447c_0

yaml-0.2.5-h7b6447c_0

zlib-1.2.11-h7b6447c_3
```

This uses about 323MB of disk space.

Once installed, you can set up the environment paths to your private version (with either install option) using:

```
ml miniconda/3/own
```

Installing new packages (e.g. numpy) within your miniconda3 directory is as simple as:

```
conda install numpy
```

Miniconda2 can be installed in a similar way with:

```
cd
wget https://repo.continuum.io/miniconda/Miniconda2-latest-Linux-x86_64.sh
chmod u+x Miniconda2-latest-Linux-x86_64.sh
./Miniconda2-latest-Linux-x86_64.sh -b
```

There is also the corresponding miniconda/2/own module. Only one python module (miniconda/anaconda/python/Intel-python, all with versions 2 or 3) can be loaded at a time.

Revision #2
Created 10 May 2023 20:21:56 by Chris
Updated 23 January 2025 21:13:53 by Nathan