Installation of ISCE

UNAVCO workshop

Aug 1, 2016

Download ISCE

https://winsar.unavco.org/isce.html

- Two tarballs for the 201604 release

Suggested directory structure for installation

Step 0: Unpacking source tarball

- Unpack both tarballs in ROOT/src/VERSION
  - tar xjf isce-2.0.0_201604.tar.bz2
  - tar xzf isce-2.0.0_201604_dempatch.tgz

Step 1: Check for python2 and scons

LMC-053937:~>: which scons

Should return a path to scons executable
scons –h should report help without errors

If Step 1 failed

If you are on OS X:

Use macports instructions on https://github.com/piyushrpt/elCapitanSetup

If you are on Linux (old OS):

Use anaconda
https://github.com/piyushrpt/oldLinuxSetup

If you are on Linux (relatively new OS):

Use yum / apt with sudo access
http://earthdef.caltech.edu/boards/4/topics/305

Step 2: Check for python 3

LMC-053937:~>: python3

Should return a python 3 version interpreter terminal

```
>>> import numpy
>>> import scipy
>>> from matplotlib.pyplot as plt
>>> import h5py
>>> from osgeo import gdal
```

Ctrl-D to exit

If Step 2 failed

If you are on OS X:

Use macports instructions on https://github.com/piyushrpt/elCapitanSetup

If you are on Linux:

Use anaconda
https://github.com/piyushrpt/oldLinuxSetup

If you are on Linux (relatively new OS):

Use yum / apt
http://earthdef.caltech.edu/boards/4/topics/305

Step 3: Setup SConfigISCE

See README.txt file in the distribution tarball.

If you are on OS X:

Use macports instructions on https://github.com/piyushrpt/elCapitanSetup

If you are on Linux:

Use anaconda
https://github.com/piyushrpt/oldLinuxSetup

Step 4: Setup environment

- PATH - install/isce/bin:install/isce/applications
- PYTHONPATH – install:install/isce/applications
- ISCE_HOME – install/isce
- SCONS_CONFIG_DIR - path to SConfigISCE file
- PRJ_SCONS_BUILD (optional)
- PRJ_SCONS_INSTALL (optional)

Some templates for environment setup

If you are on OS X:

Use macports instructions on https://github.com/piyushrpt/elCapitanSetup

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If you are on Linux (relatively new OS):

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Step 5: Actual installation

In the unpacked folder:

LMC-053937:~>: scons install

Follow instructions on screen.
Run twice to ensure everything is installed.

Step 6: Setting up automatic access to SRTM

- cd $HOME
- create a file named .netrc with the following 3 lines (including the indentations apparently):

machine urs.earthdata.nasa.gov

login your_earthdata_login_name

password your_earthdata_password

- Change permissions for .netrc to 600

chmod 600 ~/.netrc