

Installing sims (lsst stack) on edison at NERSC

This was pretty straight forward. The only issues were:

1. edison does not have CA certificates in a standard location on the login nodes
2. cc is not removed from the path and does not function when the PrgEnv-gcc module is used
3. I found that the PYTHONPATH is set by default leading to unexpected behavior unless I cleared the PYTHONPATH before installing

Heres what I did:

1. Create directories and setup environment:
\$> mkdir -p /project/projectdirs/m1727/lsst_edison/lsstStack/
\$> module swap PrgEnv-intel PrgEnv-gnu
\$> module load git
\$> setenv CC 'gcc'
\$> unsetenv PYTHONPATH
2. Get anaconda and setup paths:
\$> cd /project/projectdirs/m1727/lsst_edison/
\$> curl -s -L -o installer.sh http://repo.continuum.io/archive/Anaconda-1.9.1-Linux-x86_64.sh
\$> bash installer.sh -b -p anaconda
\$> setenv PATH \${PWD}/anaconda/bin:\$PATH
\$> setenv PYTHON `which python`
3. Get CA certificate bundle. The following is very insecure. A better way to do this is probably to use another machine to download the certificate bundle and scp it to the cluster:
\$> wget --no-check-certificate <https://raw.githubusercontent.com/bagder/ca-bundle/master/ca-bundle.crt>
\$> setenv CURL_CA_BUNDLE \$PWD/ca-bundle.crt
4. Get the installer and start the installation:
\$> cd lsstStack
\$> curl -O <http://sw.lsstcorp.org/eupspkg/newinstall.sh>
\$> bash newinstall.sh
5. Get the rest of the stack
\$> source loadLSST.csh
\$> eups distrib install lsst_sims -t sims

Important Note: This installed the v8.0 stack, but turned up a bug in afw that causes a segfault in one of the unit tests. I will track that down, but until it's fixed this stack is not usable.