ATLAS Environment at SLAC

Basics (updated 11-May-2018)

Please refer to the items under User Information in the U.S. ATLAS Center at SLAC page.

How to get up and running quick (This looks very old. Review and delete as appropriate.)

```
#Do this just once:
cd
cp ~ahaas/.bashrc .
cp ~ahaas/.profile .
mkdir .hepix; cp ~ahaas/.hepix/* .hepix/
echo "none" > ATLCURRENT
mkdir reldirs
cp -r ~ahaas/cmthome .
bash
cd cmthome
source /afs/slac.stanford.edu/g/atlas/c/CMT/v1r20p20090520/mgr/setup.sh
cmt config
```

The "cmthome" directory contains the all-important "requirements" file, which defines the CMT environment you're in, see it below in "Bonus material".

You may want to have an area with >500MB of storage space (the /afs home limit).
If you're in group "atlas" (check with "groups", otherwise mail young@slac and he'll do "ypgroup adduser -group atlas -user username"):

```
mkdir /afs/slac.stanford.edu/g/atlas/work/<firstLetterOfUsername>/<username>
ln -s /afs/slac.stanford.edu/g/atlas/work/<firstLetterOfUsername>/<username> nfs
```

Otherwise you have to use /scratch areas on the machines...

```
mkdir /scratch/<username>
ln -s /scratch/<username> scratch
```

More info on ATLAS disk space at SLAC is here.

Everytime you log in and want to use an ATLAS release:

```
touch ~/.usecvmfs
bash #this is the supported shell for ATLAS work at SLAC
setupATLAS
asetup 17.2.7.4.1,64,AtlasPhysics,here,slc5 #to setup a particular release.
```

Now you can run athena, for example:

```
get_files -jo HelloWorldOptions.py
athena.py HelloWorldOptions.py > ~/scratch/hello.log

#Check out code for skeleton AOD analysis:
atladdpkg PhysicsAnalysis/AnalysisCommon/UserAnalysis

#To get a particular version of the package, other than what's in the current release:
#cmt co -r UserAnalysis-00-13-17 PhysicsAnalysis/AnalysisCommon/UserAnalysis

#If no ATLAS access yet:
#cp -r ~ahaas/reldirs/15.3.1/PhysicsAnalysis .

#build package
cd PhysicsAnalysis/AnalysisCommon/UserAnalysis/cmt; make; cd ../run
```

More (and possibly updated) details on setup with cvmfs can be found at the beginning of the Software Basics section of the ATLAS Software tutorial.

You should be able to run anything from the CERN computing workbook, software workbook, and physics workbook.

You also are also ready to use the GRID easily, see instructions here.

Here are lots of handy tricks for getting things done (at SLAC) with ATLAS computing / analysis work.

Make use of the US ATLAS Analysis Support Centers, including their analysis tutorials.

Our old static page has some possibly still relevant but perhaps out of date info.

And there were many good talks at the 2009 WT2 users' forum workshop.

Bonus material

The default "requirements" file:

```
set CMTSITE STANDALONE
set SITEROOT /afs/slac/g/atlas/b/
#set DBRELEASE_OVERRIDE 7.1.1

macro ATLAS_DIST_AREA ${SITEROOT}
macro ATLAS_TEST_AREA ${HOME}/reldirs
apply_tag setup
apply_tag simpleTest
use AtlasLogin AtlasLogin-* $(ATLAS_DIST_AREA)
```