Setup your environment:

From Andy Hass:

Set ATLCURRENT file to contain "none".

You should then see, when you login:
ahaas@parrot $ bash
Doing hepix login
Hello from /afs/slac.stanford.edu/g/atlas/etc/hepix/group_sys.conf.sh
Not setting up any particular release yet, since ATLCURRENT='none'

Afterwards, simply setup the release you want, just like at CERN.

How to access Xrootd space at WT2

➢ On all nodes, Xrootd space can be accessed via ROOT URL

root://atl-xrdr.slac.stanford.edu//atlas/xrootd/atlasdatadisk/…
root://atl-xrdr.slac.stanford.edu//atlas/xrootd/atlasmcdisk/…
root://atl-xrdr.slac.stanford.edu//atlas/xrootd/usr/…

✧ To copy a file in and out of Xrootd, use ‘xrdcp’:

xrdcp /tmp/README root://atl-xrdr//atlas/xrootd/usr/y/yangw/README
xrdcp root://atl-xrdr//atlas/xrootd/usr/y/yangw/README /tmp/junk

Note: ***directories will be created automatically***

✧ Accessing root file in Xrootd space from ROOT :

$ root –b –l
root [0] TXNetFile f("root://atl-xrdr//atlas/xrootd/usr/y/yangw/root.root”)

How to access Xrootd space at WT2, cont'd

➢ Interactive machines can access Xrootd space via XROOTDFS

atlint01.slac.stanford.edu : 8 core Intel Xeon 3Ghz, 8GB, RHEL4 32bit

✧ mount xrootd space in local directory tree, just like NFS:

/xrootd/atlas/atlasdatadisk/…
/xrootd/atlas/atlasmcdisk/…
/xrootd/atlas/usr/…

✧ Mapping between ROOT URL and XROOTDFS mount point:

root://atl-xrdr.slac.stanford.edu//atlas/xrootd ⇔ /xrootd/atlas

✧ Most Unix tools work on XROOTDFS.

Try 'cd', 'ls', 'file', 'cp', 'cat', 'rm', 'bbcp'. *Will NOT create directories automatically*

✧ dq2-client tools also run on XROOTDFS

DQ2 clients tools

- **Login to atlint01.slac.stanford.edu,** do “voms-proxy-init –voms atlas”
- **cd /xrootd/atlas/usr/y/yangw (use yours !!!). If not exist, mkdir**

- **which sites has dataset A ?**

```
dq2-ls "data08_cosmag.00090272.physics_TGCwBeam.recon.AOD.o4_*"
dq2-ls  -r data08_cosmag.00090272.physics_TGCwBeam.recon.AOD.o4_r559_tid027239
```

- **what datasets is available at a site**

```
dq2-ls -s SLACXRD_USERDISK
```

- **what files are in a dataset**

```
dq2-ls -f data08_cosmag.00090272.physics_TGCwBeam.recon.AOD.o4_r559_tid027239
```

- **where are physical locations of files in a dataset**

```
dq2-ls -L SLACXRD_MCDISK -f -p \
    data08_cosmag.00090272.physics_TGCwBeam.recon.AOD.o4_r559_tid027239
dq2-ls -L SLACXRD_MCDISK -f -p \
    mc08.205334.HerwigVBFH120tautaulh.recon.AOD.e387_s495_r617_tid042118
```

- **how to get a dataset to SLAC**

```
dq2-get mc08.205334.HerwigVBFH120tautaulh.recon.AOD.e387_s495_r617_tid042118
```

- **how to register my own dataset**

Transfer files between CERN and SLAC

(not using DDM, not using dq2-client tools)

- Use bbcp. bbcp is not available at CERN, copy it from SLAC (/usr/local/bin/bbcp)

- bbcp uses ssh: Add the content of your CERN ssh public key (~/.ssh/id_dsa.pub) to SLAC's authorized key file (~/.ssh/authorized_keys)

- To transfer a single file from CERN to SLAC:

```
lxplus$ bbcp -s 64 –f –F -P 2 file
yangw@atlint01.slac.stanford.edu:/xrootd/atlas/usr/y/yangw
```

- To transfer a whole directory:

```
lxplus$ bbcp -s 64 –f –F -P 2 -r dir
yangw@atlint01.slac.stanford.edu:/xrootd/atlas/usr/y/yangw
```

- To transfer from SLAC to CERN:

```
lxplus$ bbcp -z -T /usr/local/bin/bbcp -s 64 –f -P 2
yangw@atlint01.slac.stanford.edu:/xrootd/atlas/usr/y/yangw/file /tmp
```