

ALCF/NERSC Facility Description

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Software Installation

- ▶ [Installation instructions on TWiki](#)
- ▶ We create by-hand a CVMFS tree somewhere we have write access: /path/to/cvmfs
- ▶ Then we install ATLASLocalRootBase in /path/to/cvmfs/atlas.cern.ch/repo/ATLASLocalRootBase and point it to our custom CVMFS path
- ▶ All further installations follow the CVMFS path conventions, such as releases are installed in /path/to/cvmfs/atlas.cern.ch/repo/sw/software
- ▶ This allows one to run

```
export ATLAS_LOCAL_ROOT_BASE=$ATLAS_SW_BASE/atlas.cern.ch/repo/ATLASLocalRootBase
source ${ATLAS_LOCAL_ROOT_BASE}/user/atlasLocalSetup.sh --quiet
```

- then asetup <release>,<package> as a normal grid site
- ▶ ATLASLocalRootBase installs support software for you:
asetup, cmake, cmt, gcc, emi, pacman, rucio, swmgr
 - ▶ We use pacman to install Releases < 20
 - ▶ We use a not so nice installation on our local Tier3, tarball the result and untar it into the proper CVMFS path on our target machine



Data Flow

▶ NERSC

- Have local RSE, so we allow Panda/Rucio to handle staging
- Use LocalSiteMover with an lsm-get/put that simply does a 'cp'

▶ ALCF

- Using MWT2 as our local RSE, which is where Panda/Rucio will stage data
- Doug designed (rse_preparator, danila renamed to pilotmover_preparator) which copies data from RSE to local rucio-style directory structure on the local filesystem
- Harvester submits job, job reads input files directly from rucio-area
- Job copies output ES files into rucio-area as they are produced

