



PROGRESS WITH ATLAS RELEASES INSTALLATION ON SUMMIT

ADC WFM

FEBRUARY 20, 2019

Alexander Undrus (BNL)

Summit is opened for business

- Project space is created for ATLAS on January 30
 - Initially for 3 months
- ATLAS Comprehensive Software Compilation (ACSC) project is resumed
- Summit is different from Summitdev
 - Power9, binary compatible with Summidev Power8
 - 16-core CPUs on login nodes (10-core on SummitDev)
 - Different versions of software (e.g. gcc 6.4 instead of 6.3)
 - New gpfs file system (small NFS home area also available)
- Adjustments are requested:
 - Increase NFS home area quota from 50GB to 200GB
 - Remove 90 days purge policy for ATLAS project gpfs area



First results of ACSC on Summit

- Release AthSimulation 21.0.34 was recompiled on Summit
 - With gcc 6.4
 - Simple tests are successful, Sim_tf tests will follow
 - Number of parallel compilation streams is optimized
 - The best is `-j12 –l12': AthSimulation cmake config,

compilation, install time **46 minutes**

- compare with **4.5 hours** without parallelization on Summit, **6 hours** on Summitdev
- Same speed as on ATLAS build farm
- Installation of full Athena release 21.0.31 has been started
 - Dedicated for fast simulation tasks in the nearest future
 - Currently consulting trigger team on tdaq release installation
- Also in plans: install one of the latest AthDerivation 21.2.X.Y releases, run some Derivation production tasks

Alex Undrus, Feb 21, 2019