New ATLAS Releases install on Titan

P. Svirin
S. Panitkin

New ATLAS release

- Recently ATLAS introduced a new release build procedure with Cmake and new release distribution scheme based on rpms
- For the new release (v21+) old scheme based on packman, that we used on Titan, does not work. The releases are not placed in pacman repository.
- We needed to find a new way to install ATLAS releases on Titan
- In ATLAS a new tool for stand alone installation of rpm based releases was introduced – called ayum. It is a modified yum package installation tool that allows to work in user space, without root privileges
- Standard ayum binary from ATLAS git repos does not work on Titan since it was built for SL6 and fails due to libraries incompatibility
- Direct ayum rebuild on Titan failed for the same reason

Porting AYUM on Titan

- Ayum with cmakeReleaseInstall.sh was tested on SL6 VM on Openstack@CERN, operating correctly with ATLAS repositories

  - Tested with 21.0.11 release install. Release tree was copied to Titan for tests

- Ayum install from the VM was copied to Titan's interactive node:

    - Along with necessary binary libraries (libdb, librpm, librpmio..)

    - missing python modules were installed via local installation of pip

  - This overcame incompatibility with Titan environment

- Ayum is running on Titan worker nodes

  - Release 21.0.15, that is planned for use in ATLAS MC16 campaign, was installed

  - 52 minutes for fetching release 2.0.15 (release size: 14.9 Gb, cache used: 6.2 Gb)

Rel 21.0.15 tests on Titan

- Rel 21.0.15 was tested on Titan interactive nodes
- Current DB release is not suitable for running- leads to errors
- Sergey talked to Vakho and on today a new patched DB release became available
- Job do run on interactive nodes
- Tests continues as we speak