

# Big PanDA.Pilot changes for Titan.

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# PanDA Pilot initial changes

- Native PanDA pilot was successfully started on Titan interactive nodes.
  - Correct definition of PanDA queue was needed.
- Main modification was performed for payload execution part: runJobTitan.py module was developed based on runJob.py module.
  - Method, which call payload execution was changed for run and collect results of job execution through PBS;
  - Interface with PBS job manager was implemented by using SAGA API
- Some minor modifications of cleanup procedures was done (subdirectories cleanup).

# New features

- Proper setup and execution of MPI jobs through ALPS.
- Function for collecting information about available resources for backfill was implemented
  - Full PanDA workflow Pilots on Titan was done.

# Next steps.

- Some redesign of Pilots components still needed for:
  - parallel execution of pilots on same worker node;
  - Changing of data format for parameters which describe setup and execution of payload (partly done for current PanDA – Titan execution, quite difficult for debug due to dependencies from experiment specifics and different types of jobs)