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## Next Generation PanDA Pilot for ATLAS and Other Experiments

*Monday, 14 October 2013 15:00 (45 minutes)*

The Production and Distributed Analysis system (PanDA) has been in use in the ATLAS Experiment since 2005. It uses a sophisticated pilot system to execute submitted jobs on the worker nodes. While originally designed for ATLAS, the PanDA Pilot has recently been refactored to facilitate use outside of ATLAS. Experiments are now handled as plug-ins, and a new PanDA Pilot user only has to implement a set of prototyped methods in the plug-in classes, and provide a script that configures and runs the experiment specific payload.

We will give an overview of the Next Generation PanDA Pilot system and will present major features and recent improvements including live user payload debugging, data access via the federated xrootd system, stage-out to alternative storage elements, support for the new ATLAS DDM system (Rucio), and an improved integration with glExec, as well as a description of the experiment specific plug-in classes. The performance of the pilot system in processing LHC data on the OSG, LCG and NorduGrid infrastructures used by ATLAS will also be presented. We will describe plans for future development on the time scale of the next few years.

### Summary

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