PanDA WMS beyond ATLAS and HEP

- The main breakthrough of the BigPanDA project was the implementation of the set of demonstrations serving diverse scientific workflows
 - Implementation of MySQL(MariaDB) wrapper made PanDA accessible to a bigger scope of the scientific groups
- Biology / Genomics: Center for Bioenergy Innovation at ORNL
- Molecular Dynamics: Prof. K. Nam (U. Texas-Arlington)
- IceCube Experiment
- Blue Brain Project (BBP), EPFL
- LSST (Large Synoptic Survey Telescope) project/DESC collaboration
- LQCD, US LQCD Project
- nEDM, (neutron Electric Dipole Moment Experiment, ORNL

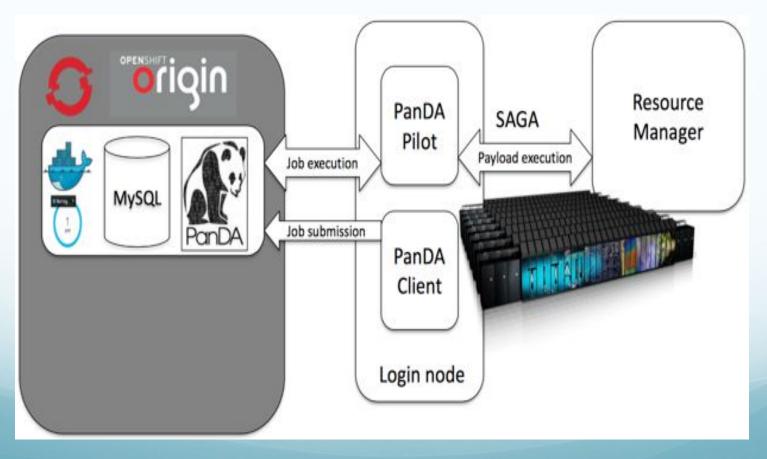




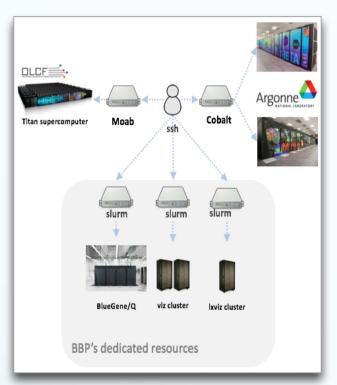


BigPanDA Server at OLCF

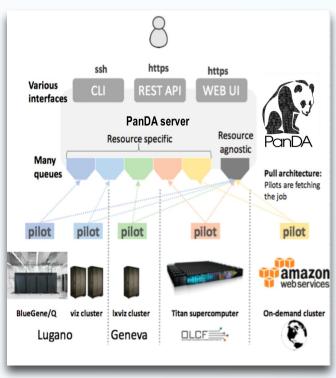
ORNL PanDA instance deployed as a service under OpenShift
Origin (container cluster management and orchestration
system) was one of the first successful experiences to run PanDA
as container to serve various experiments at OLCF



Blue Brain Project computing model evolution







- BigPanDA portal hosted by BlueBrainProject was another successful R&D demonstrated ability of the system to run non-HEP SW on a variety of computing systems including BlueGene/Q (Lugano, Switzerland) and Titan(ORNL)
- "Proof of the concept" phase was successfully finished
 - The test jobs were successfully submitted to the targeted resources via PanDA portal.
 - The project demonstrated that the software tools and methods for processing large volumes of experimental data, which have been developed initially for experiments at the LHC, can be successfully applied to BBP.