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STNS01-44 BEE – FY22-1: Enhanced BEE client

ECP WBS	2.3.6.01 – LANL ATDM - BEE
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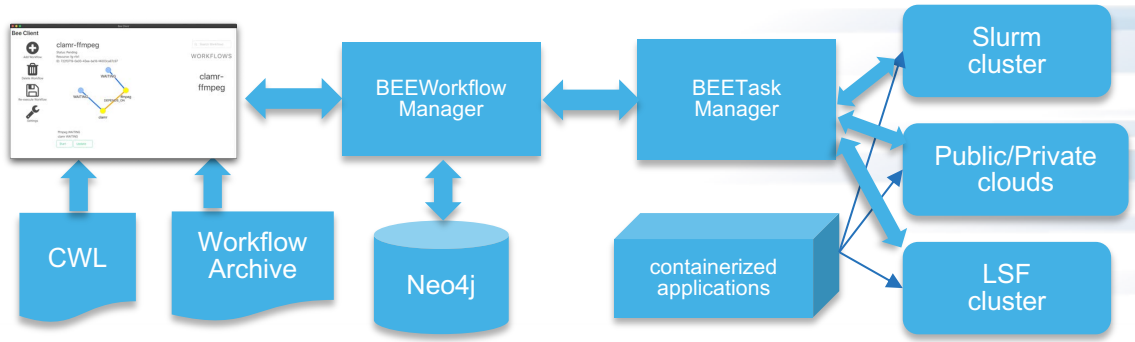
Members	LANL, Kent State University

Scope and objectives

- BEE provides a portable, modular, HPC-focused workflow engine capable of managing containerized applications at scale.
- In FY22 BEE is completing enhancements and refinements that will complete the major development work of the workflow system. The first major milestone is the development of a graphical client. The second milestone will be the ability for BEE to automatically restart checkpointed tasks. The final milestone for FY22 will be the ability to launch and manage multiple simultaneous workflows.

BEE: cross-platform portability of workflows



Impact

BEE will give ECP a tool that great simplifies the deployment of containerized workflows on the next generation of pre-exascale and exascale systems, as well as public and private clouds. BEE allows scientists to describe their workflow using the Common Workflow Language and then deploy that workflow across the entire spectrum of systems without having to learn the specifics of each container runtime, HPC resource manager, or cloud API. BEE also streamlines the curation and sharing of common workflows among the scientific community.

Project accomplishment

- The BEE graphical client gives users a cross-platform desktop application for the management and visualization of their workflows.

Deliverables	Report: https://github.com/lanl/BEE/blob/master/doc/ECPFY22STNS01-44-Completion.pdf HPC resources used: LANL Fog HPC cluster and LANL Darwin testbed