

NCSA LSST FY18 Acquisition Strategy (excerpt)

Strategy Overview

The acquisition strategy for federal fiscal year 2018 focuses on hardening of the development and integration environment to provide adequate capabilities to promote project development during the construction phase.

List of Planned Capabilities:

Kubernetes Installation:

The goal of the Kubernetes installation is to build the core Kubernetes capability and infrastructure to support evolution of the Kubernetes services. Capabilities of the Kubernetes installation budgeted here include container storage (backups, GPFS client), network overlays, Kubernetes head node functions, and worker nodes.

The use cases include:

- Integrate the Kubernetes control infrastructure with the existing Qserv hardware in the PDAC.
- Support a JupyterLab presence in the PDAC.
- Provide a production LSST Science Platform for staff.
- Support development of the LSST Science Platform.
- Support development of the Alert Distribution system.
- Support HTCondor daemons for production.
- Support evolution of the Kubernetes infrastructure by providing a separate test and integration capability.