## **LSST Service Management, Monitoring & Status**

- LSST Service Status page
  For monitoring please look to Monitoring, Alerting & Instrumenting page.
- Please look to the developers guide for information on creating tickets, services, and other needs.
- Prototype Service Catalog
  A web-accessible view of the service catalog is available here. Use the guest login. Be aware though, that the web version is constrained to 2 layouts that contain basic service information.

## What are the current services offered at LDF 5/1/2018:

Service/machine	Description
lsst-dev01	login node or submit node
Isstweb	Web services machine for retrieval of data and data management services
vm servers	Numerous development VM environments from monitoring to DBB test beds, container type test beds, demo type machines. LSST-demo, DBB test machines, K8 test monitor 01 nagios, ATS gateway
Isst-demo	VM from the VM servers above for testing. Supports docker containers.
IsstDB	mysql environment for DB support project wide (wild west)
L1 test stand and DAQ	Machines for simulating and testing camera
ATS archiver	Auxiliary Telescope System archiver. at NCSA until 5/2018. Travels to Tuscon with Spectragraph and on to summit and then settles at Base when it's available. Machine used for getting data from spectragraph and storing for viewing.
Nebula	Open Stack resource (non-production test platforms)
Chile systems	Authorization and Athenication systems (VM environment) and Bro network taps
Slurm batch cluster	48 compute nodes with Isst-dev01 is head node
K8	Kubernetes infrastructure for support of docker images. (20 nodes)
Oracle RAC	Consolidated DB (6 nodes)
PDAC	Prototype Data Access Center – Qserv DB and SUI systems for data retrieval (35 nodes)
DR systems	Disaster recovery (DR) which is different than backup.
xcat and puppet	infrastructure systems to build nodes exactly the same every time and base software installs
VM head node	VM infrastructure head node for management of all VM systems
Storage	1.9TB of storage from Lenovo and 2 GSS servers with 2 other NFS servers. Added 3PB of DDN storage with 8 GPFS VM servers
Monitor DB and other monitoring systems	influxDB, log host grafana
NCSA center provided	Jira, Idap, kerberos, IDM, qualys scans, system security vetting, nearline tape, firewalls
Identity.lsst.org	Identity host
cilogon/API and IDM	identity management environment across all LSST systems
network emulator	inject network latency into network traffic for testing long distance software.

• Essentials of the IT Change Process