

# DM and Automated Summit Services

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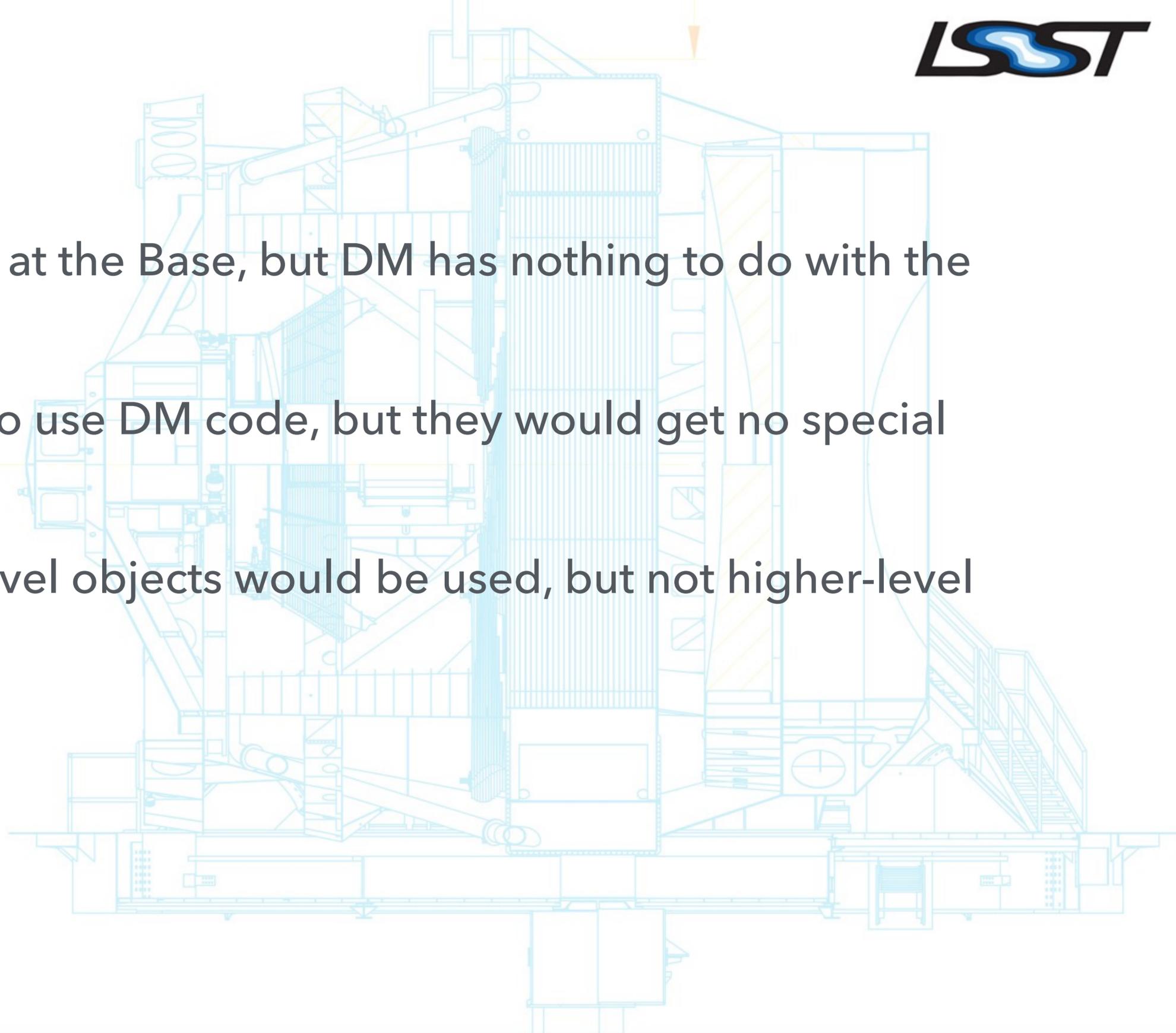
The logo for the Large Synoptic Survey Telescope (LSST). The letters 'LSST' are rendered in a bold, black, sans-serif font. The letter 'S' is filled with a blue-to-white gradient, giving it a three-dimensional, glowing appearance. The letters are outlined in white.

*Large Synoptic Survey Telescope*

# Originally

## Isolation between subsystems

- Not only does DM only operate at the Base, but DM has nothing to do with the Summit.
- Summit systems could choose to use DM code, but they would get no special support or custom code.
- The expectation was that low-level objects would be used, but not higher-level middleware or control systems.



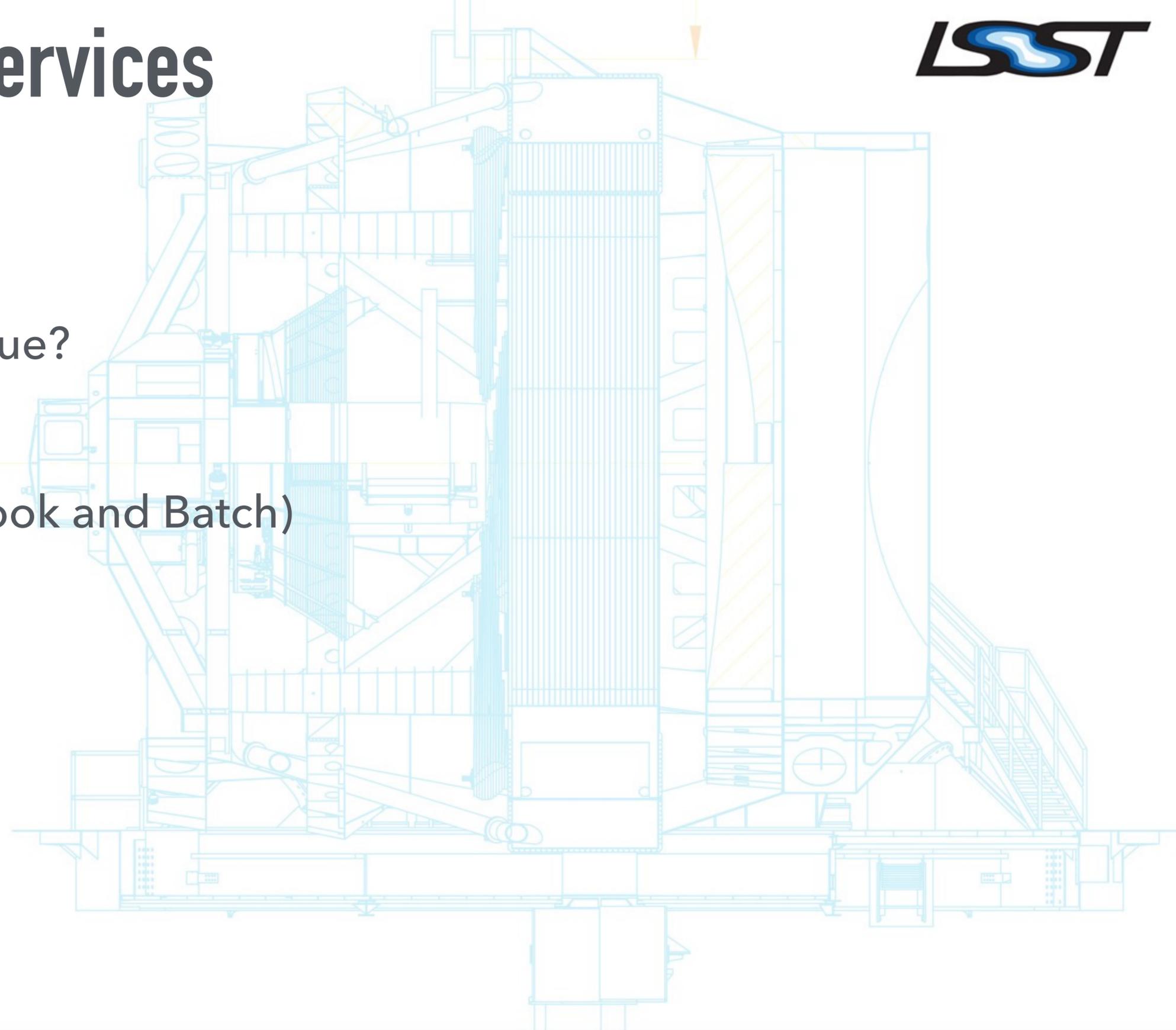
# Today

## DM in control loops

- Wavefront sensor processing for active optics
  - Includes ISR
- Guider image centroiding
- LATISS positioning and focus
- Camera Diagnostic Cluster analysis and visualization
- Commissioning and calibration scripts executed by Script Queue
  - Combine CSC control with analysis of images (or telemetry)
- (T&S CSCs running in full Science Pipelines environment)

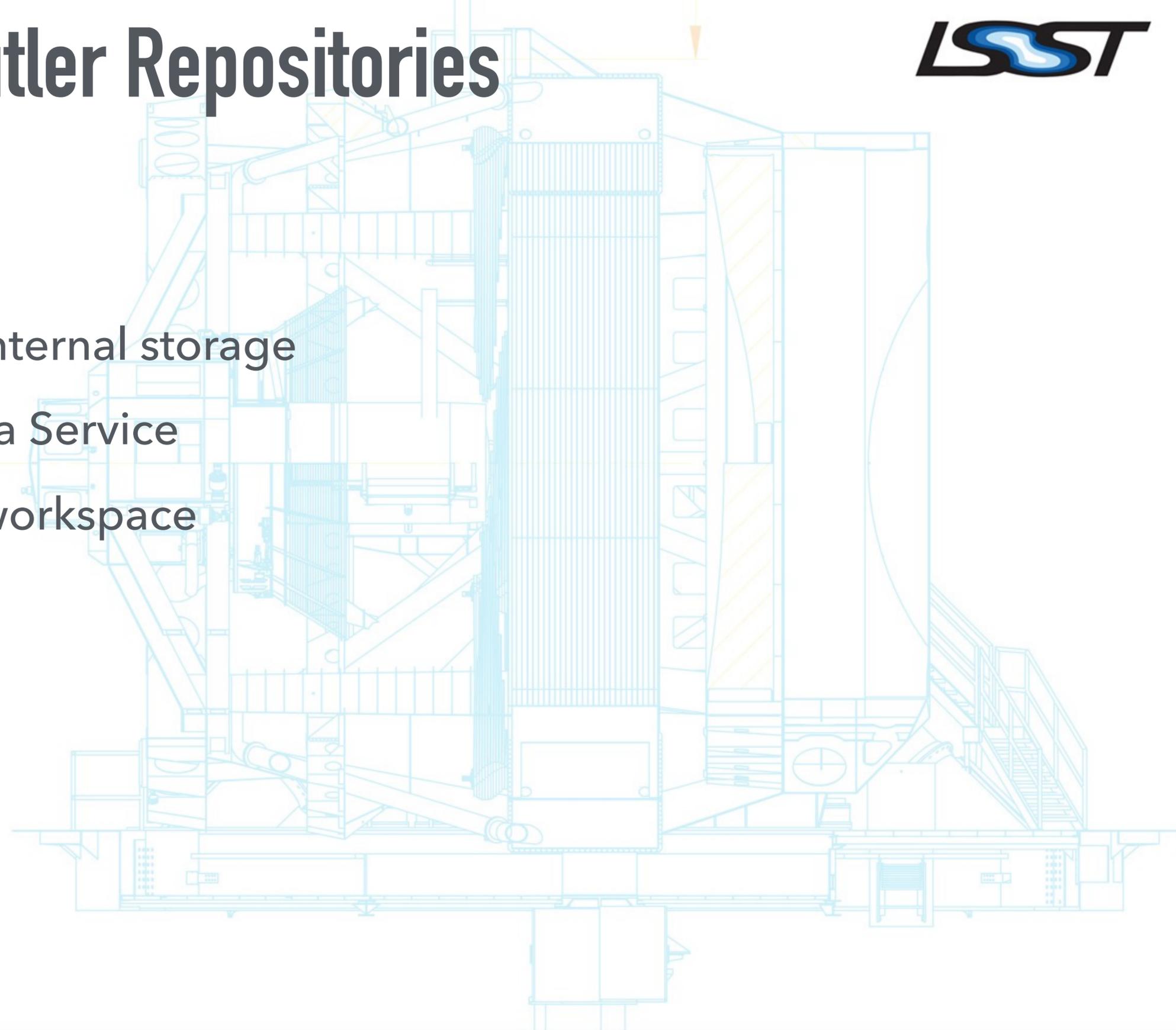
# Compute Systems and Services

- Per-CSC servers/clusters
  - T&S: AOS, Guider, Script Queue?
  - Camera: Diagnostic Cluster
- Commissioning Cluster (Notebook and Batch)
- NCSA Cluster
- OCS-Controlled Batch
- Prompt Processing
- Direct Script Queue execution?



# Storage Services and Butler Repositories

- ? Summit Shared Filesystem
- ? Camera Diagnostic Cluster internal storage
- Observatory Operations Data Service
- ? Commissioning Cluster file workspace
- Data Backbone



# Proposal



No LSP on the Summit unless Camera puts one in Diagnostic Cluster

- Nearly all LSP uses from the Summit should go to the Commissioning Cluster
- Notebook != LSP; can have notebooks on laptops or other servers

All Butlers on Summit use local SQLite registries

- Not integrated with DBB or each other
- No Oracle at the Summit

OCS-Controlled Batch is sufficient for Script Queue usage