

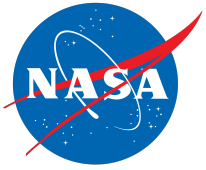


PDS4 Operational Readiness Review
PDS3 to PDS4 System Transition Support for LADEE/MAVEN

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Engineering Node

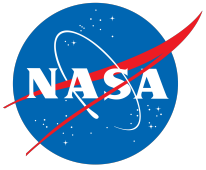


September 18, 2013



Overview

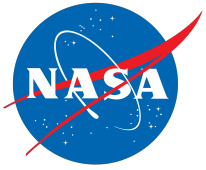
- Transition Constraints
- Transition Approach
- Concept
- Status
- Risks



System Transition Constraints



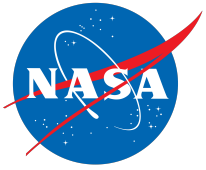
- PDS is required to continue to support PDS3 data deliveries for missions that are accumulating archival data
 - This is expected to continue for several years
- PDS nodes need the autonomy to transition to PDS4 based on their mission and user community needs
- Ensure that both PDS3 and PDS4 data can co-exist and be accessible



System Transition Approach for LADEE and MAVEN



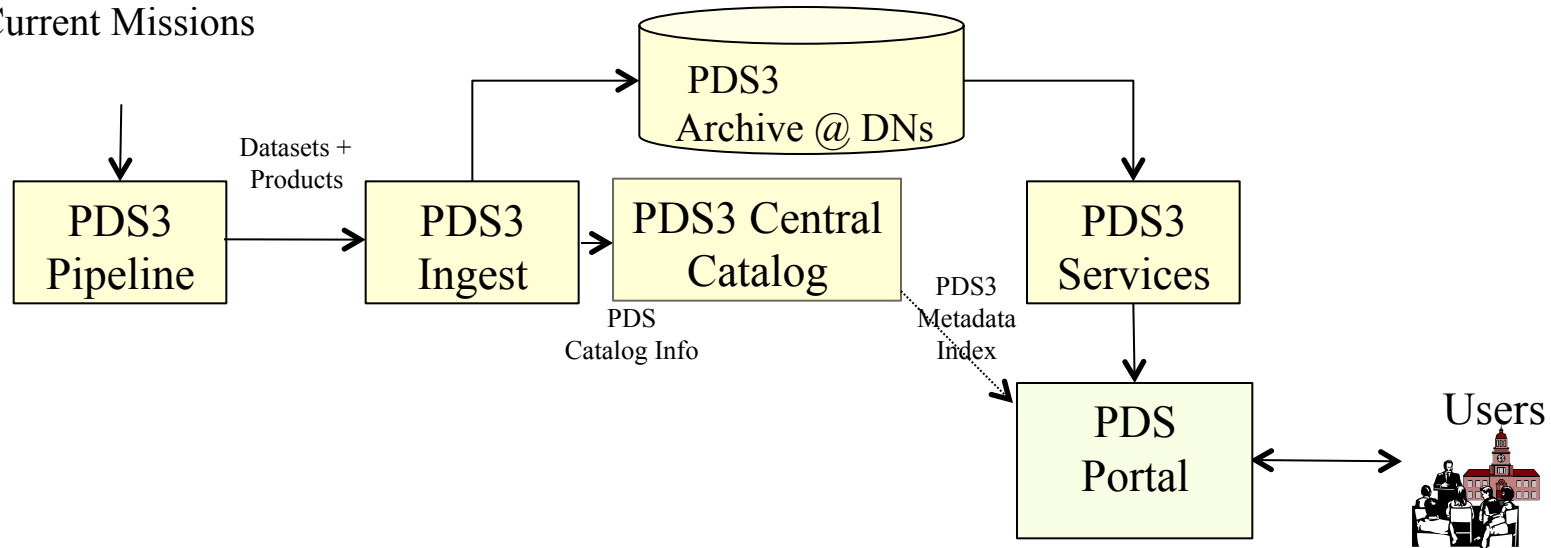
- Ensure that PDS3 and PDS4 data and services can co-exist
 - This requires that Engineering be able to accept and register data from existing PDS3 missions and upcoming PDS4 missions
- Bring together PDS3 and PDS4 catalog type data into the PDS4 system
 - This requires that PDS3 catalog data be registered in the PDS4 registry at Engineering
 - An integrated registry will enable high level search across PDS holdings and archives whether PDS3 or PDS4
- Allow data and services to be registered overtime to phase the transition of nodes, new missions, data and services as they are brought online

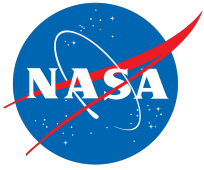


PDS3 Implementation



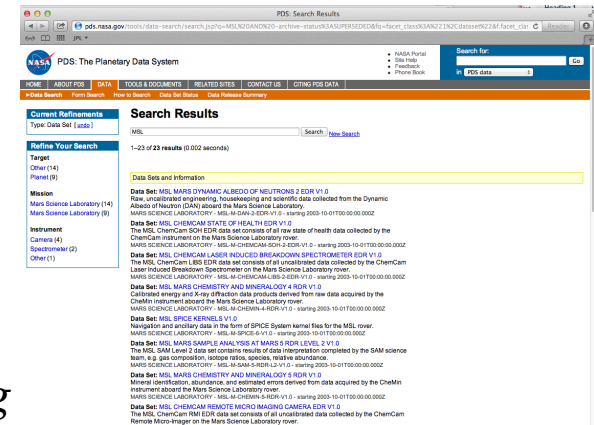
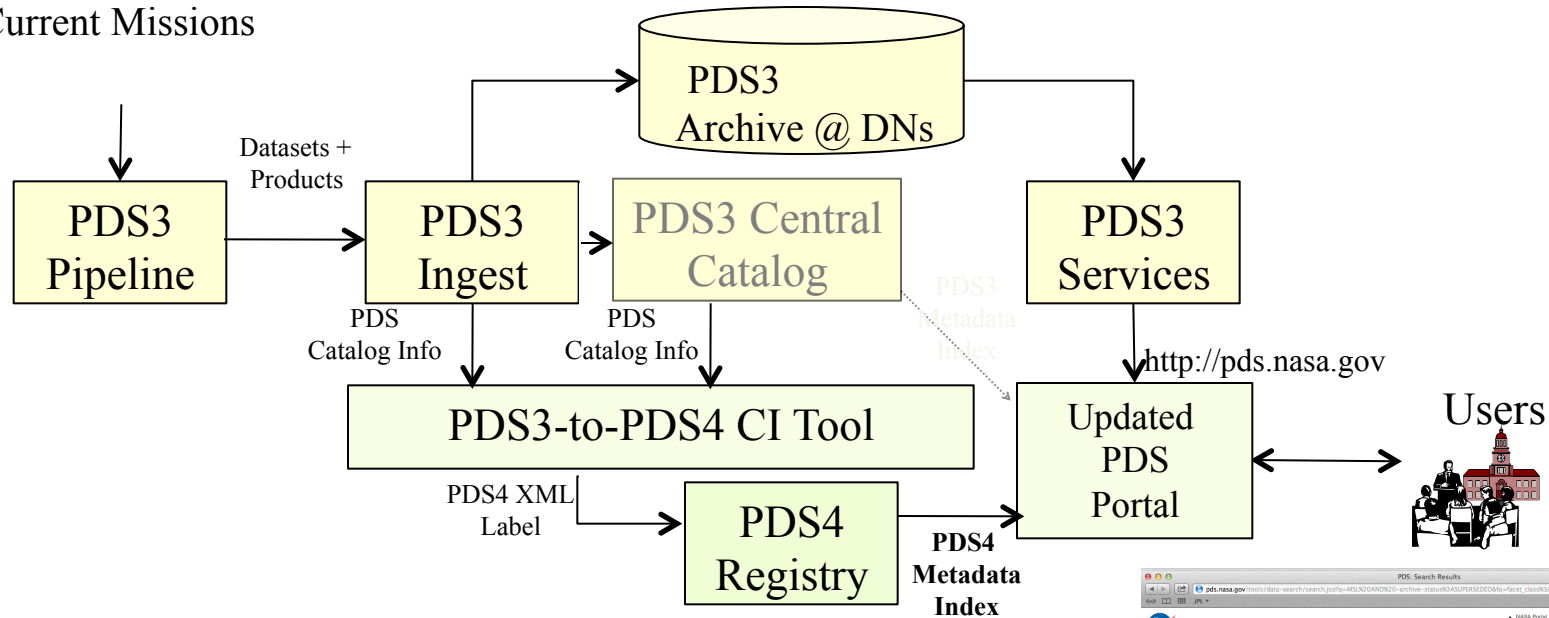
Current Missions





Today

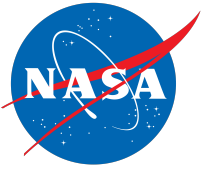
Current Missions



(1) PDS4 infrastructure deployed at EN; Central catalog migrated. (done)

PDS4 ORR LADEE AND MAVEN

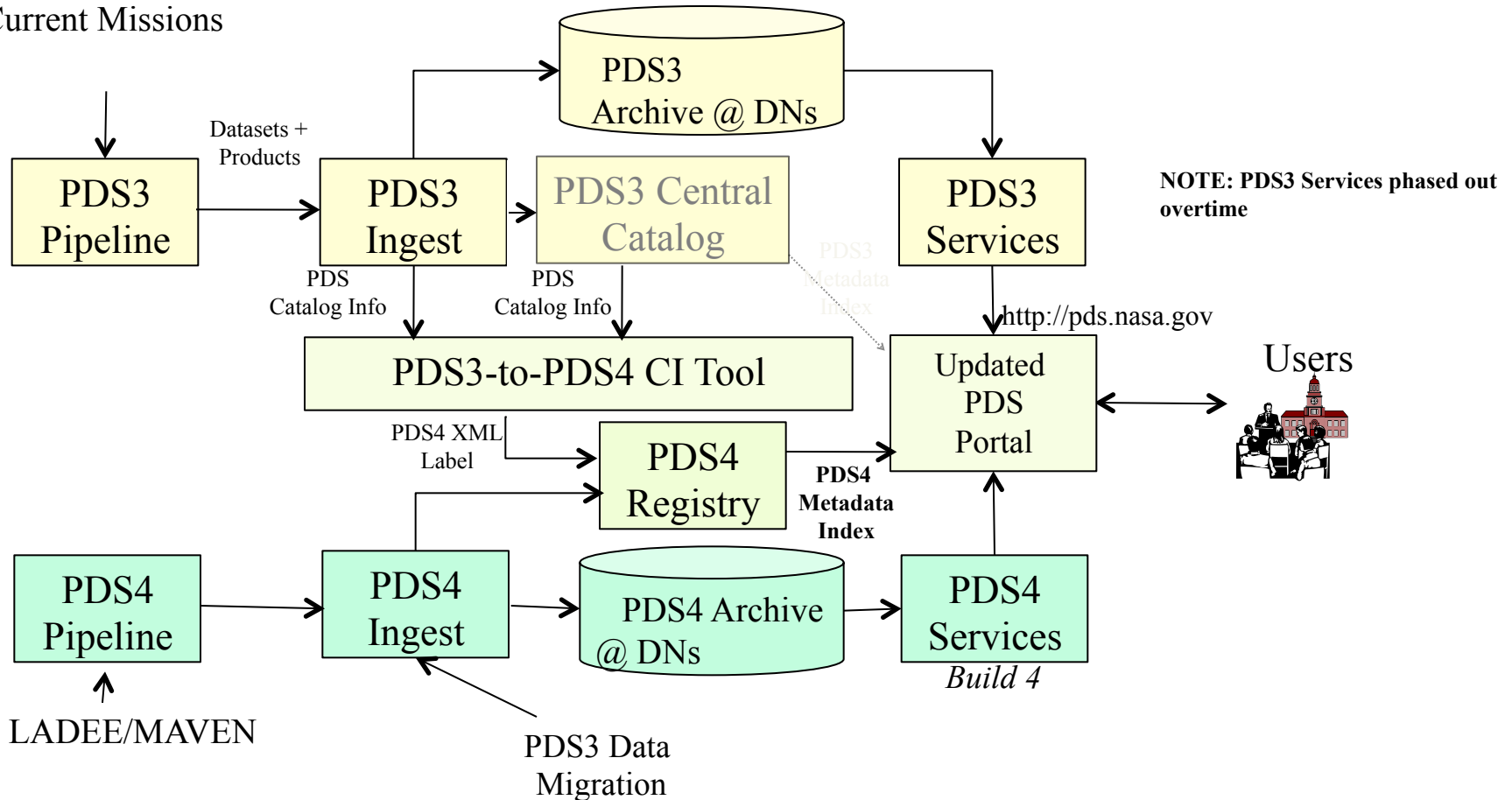
MSL data registered in PDS4 system @ EN



Planned Support for LADEE/MAVEN



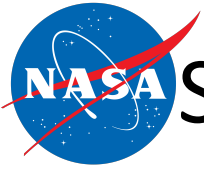
Current Missions



- (1) PDS4 infrastructure deployed at EN; Central catalog migrated. (done)
- (2) Working towards acceptance of LADEE/MAVEN PDS4 mission data

PDS4 ORR LADEE AND MAVEN



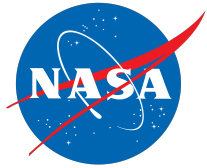


System Transition Status to Support



LADEE/MAVEN

- Transition Engineering Node to PDS4 (completed)
 - Operational deployment of new hardware, PDS4 software services (registry, harvest, search, portal, etc)
 - Migrate PDS3 catalog to PDS4
 - Enable PDS3 catalog deliveries to be registered at Engineering registry for continued operations
- Produce a version 1.0 PDS4 standard (completed)
- Place PDS4 Standards under a Change Control Board (completed)
- Generate LADEE and MAVEN archival pages (Prototype Completed)
- Install Validate, Harvest, Registry build 3b software at Nodes to support ingestion (deployed at PPI and Atmos)
- Build, Test and Release Build 4a to support Data Distribution (to be completed)
- Deploy Build 4a at the Nodes (will be discussed under deployment plan)



Risks

- Minimal risk to the current system
 - Major portions of Engineering have already been transitioned
 - LADEE and MAVEN data and distribution services can be added into the system incrementally since they are registered as new data and services