

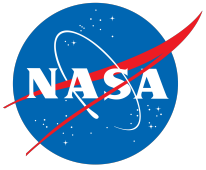


PDS4 Operational Readiness Review Summary

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Engineering Node



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ToR Summary

Purpose/Intent

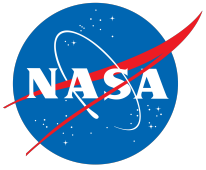
The purpose of this Operational Readiness Review (ORR) is to conduct an assessment of the readiness of a limited PDS4 release for data providers from the LADEE and MAVEN projects.

Scope

The following define the scope of this ORR:

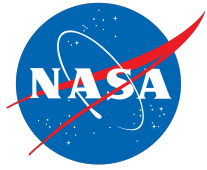
- a. PDS4 data standards for this Limited Release
- b. PDS4 tools for this Limited Release
- c. Test plan and results for this Limited Release
- d. Deployment plan for this Limited Release





ORR ToR/PDS4 Mapping

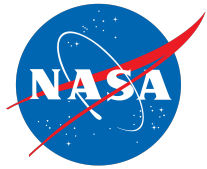
- Entrance Information
 - PDS4 Standards Documents (Standards Reference, Data Providers Handbook, Concepts Document)
 - <http://pds.nasa.gov/pds4/doc/index.shtml>
 - PDS4 Examples: <http://pds.nasa.gov/pds4/doc/examples/>
 - PDS4 Tools: Design, Validate, Harvest, Registration (to support ingestion)
 - Schemas: <http://pds.nasa.gov/pds4/schema/index.shtml>
 - Test Plans and Reports: <http://pds.nasa.gov/pds4/orr0913/index.cfm>
 - Schedule of deliveries and deployment: will be presented; project schedule maintained online at http://pds-engineering.jpl.nasa.gov/pds2010/pds4_project_schedule.pdf



Readiness for LADEE and MAVEN



- PDS4 has had significant review and exposure
- The adoption of XML, while a risk, is working well
- PDS Discipline Nodes have worked very closely with PDS4 and LADEE/MAVEN to minimize the impact
- Build 3b with CDF extensions supports the ToR and ingestion for LADEE/MAVEN data providers
- Design, Harvest, Registry and Validate Tools tested at the Nodes
- Engineering has already transitioned over which significantly reduces the risk of rolling out for LADEE and MAVEN. Minimal risks exist for moving forward.
- Build 4a will add support for data distribution at the nodes (outside of ToR)



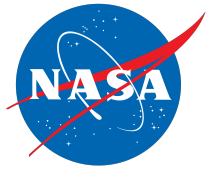
ORR Risks for this Deployment



- PDS4 Formatted CDF Files for MAVEN –
 - Description: PDS is planning to accept a *PDS4 compliant* CDF file for archive. This was negotiated after build 3b and V1.0 and confirmed by the MAVEN mission for their ORR in August.
 - Risk: PDS has not accepted CDF types files into the archive since it is not an international standard.
 - Mitigation
 - PPI has developed a mapping from CDF to PDS4.
 - The PDS4 CCB has approved very minor changes to V1.0 to accommodate the approach. To be released in V1.1.
 - Should CDF present a problem, the data can be converted and archived as a PDS4 table structure.

- Changes to PDS4 Data Standards –
 - Description: Changes and Improvements to PDS4 Standards can impact missions if they are required to make changes.
 - Risk: Changes to PDS4 Standards that impact LADEE and/or MAVEN
 - Mitigation:
 - When selecting the first PDS4 missions, Atmos and PPI agreed to upgrading data products, if required.
 - The CCB is intended to ensure that stability is in place and to limit changes which affect LADEE and MAVEN.
 - With V1.0, the number and scope of changes has dropped drastically, but improvements will be made. PDS is testing an upgrade of summary/search metadata that is scheduled to be release for V1.1 which PPI and Atmos would like to adopt.



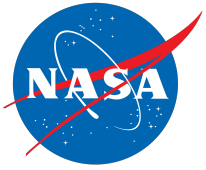


ORR ToR/PDS4 Mapping



- Success Criteria
 - All major issues and/or liens/actions identified during the review have been resolved and/or plans established to resolve them.
 - We will work with the chair to ensure RFAs are addressed.
 - PDS4 documents are complete and usable.
 - . The documents have continued to be aligned with each build and have gone through significant review inside and outside PDS. They have been developed in parallel as early support was provided to the missions.
 - PDS4 examples are *validated* and *registered*.
 - PDS4 Examples have been tested by Engineering, PPI and Atmospheres including migrated data sets from PDS3 missions. They have been designed, validated, harvested and registered in multiple registries using build 3b software.
 - PDS4 deliveries tested by lead nodes for LADEE and MAVEN.
 - Atmospheres and PPI have tested both simulated data products and software using build 3b. Atmospheres has used migrated data from Phoenix. PPI has used data from MGS and ARTEMIS.
 - Core tools, both off the shelf and custom developed, are in place to support *design* and *validation*.
 - Teams have used Oxygen for designing labels. Templates have been delivered to LADEE and MAVEN. The Validate Tool provides validation support for V1.0 using build 3b software.





THANK YOU!

