PDS Data Services Workshop - Kickoff

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Goals of the workshop

- Develop an overall vision and plan for the PDS moving forward with planning and implementation of an integrated data services architecture and improved user services.
- Provide technical background on the architecture, technologies, and terminology surrounding data services
- Discuss data service capabilities and plans including
  - Evolution and leveraging of the PDS4 Information Model for improving search, access, and user services
  - Development on common software standards including APIs
  - Core services
  - Community engagement
- Discuss existing pilot and node activities in data services to identify requirements including
  - REST and APIs supported by different discipline nodes
  - Linking for search
  - Support for data-driven analytical techniques including machine learning and other methods
  - Leveraging of the PDS4 information model

Agenda – November 5, 2019

- Workshop overview and framing
- Technical overview
- Case Study
- Node pilots and data services activities
- Technical plans
- Project planning and wrap up

https://docs.google.com/spreadsheets/d/1PeJ5EqU6D69yv_g3Ubj-DRbxexS0y3h8bPJWvsTYEYs/edit#gid=0

PDS Data Services Vision

Vision: Provide an integrated world-wide data services platform that enables the efficient discovery, dissemination, use and analysis of internationally sponsored planetary science archives

We accomplish this by:

- Providing a worldwide planetary science data portal as a gateway to archival data and services across PDS, IPDA and the broad planetary science community
- Providing consistent APIs for sharing archival data and services across PDS, among planetary archives, and within the planetary science community
- Supporting a federated cross-node, cross-agency search that enables users to get as close to the archived data and services as possible
- Enabling the integration of modern tools and access methods to enable data discovery and analysis from visualization to mining of archival data

Questions for Pilots and Demos

1. What is the process you go through now to get data from PDS into your environment?   How do you access, download, transform, load?

2.   What transformations are you doing to get PDS data into ready for use? This is about how to deal with data that needs further processing.

3.   Are you enhancing metadata? If so, how?

4. What types of APIs do you want PDS to have for what services?

5. Are there other services that we need to support for transformation of data, processing, etc, that should be shared PDS-wide?

6.   What are you doing in terms of running analytics (e.g., ML, and other routines)

7.   Are there services that you can offer the community?