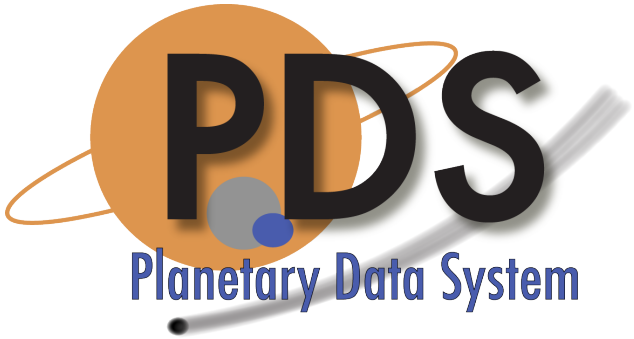
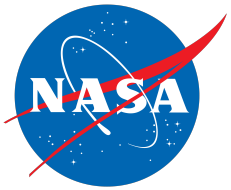


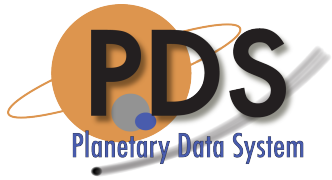
Inspect Tool Plans

PDS Technical Session
Pasadena, California
September 21-23, 2016

Sean Hardman



Topics



- Overview
- Requirements
- Design
- Development
- Next Steps

Overview

- A replacement for NASAView has been long overdue.
- This new tool will provide support for PDS3 and PDS4 products.
- Where possible, it will take advantage of existing software.
- Requirements gathering, design and development of the Inspect Tool starts in fiscal year 2017 (next week).

PDS Requirements Mapping

- The Inspect Tool maps to the following PDS Level 3 requirements:

  3.3.2 PDS will provide a capability for opening and inspecting the contents (*e.g.* label, objects, groups) of any PDS compliant archival product

  3.3.5 PDS will provide tools for visualizing selected archival products

Requirements Gathering

- Glean PDS3 requirements from NASAView, TBTool and the Object Access Library (OAL).
- Glean PDS4 requirements from the PDS4 Viewer developed by SBN.
- Solicit additional requirements from the Discipline Nodes.
- Identify a couple of key users for their input.

Design

- Initial thoughts on design lean towards a browse-based interface.
  - Point the tool at a bundle, collection or data set (locally or remotely) and browse the products.
  - Display thumbnails where appropriate, allow for data browsing (tables and arrays) or transform the product to a supported format and save locally.
- This functionality is well suited for a desktop application as well as a browser-based application.

Development

- It is likely that this software will be developed in Python.
  - Flexible platform for both web and desktop-based applications.
- Much of the software we currently have for reading and transforming data is in languages other than Python.
- Need to evaluate the effort to replicate this functionality.
  - There are advantages to offering these low-level functions in both Java and Python.

Next Steps

- Gathering requirements from the PDS3 tools is underway.
- We will start to gather requirements from the previously mentioned sources and start to formalize a requirements document.
- Planning on completion by Thanksgiving and should be able to provide a progress report at the November MC F2F.

Questions/Comments