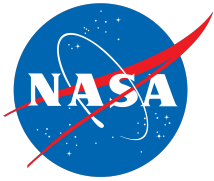




PDS Tool Coordination Strategy

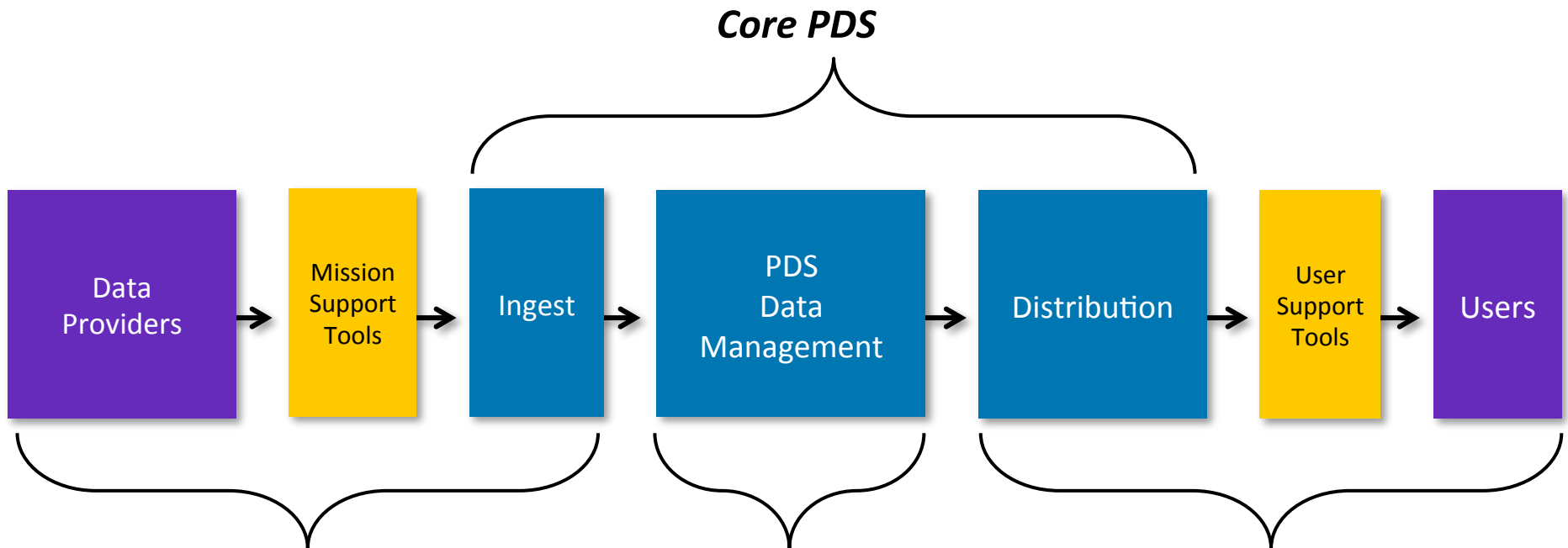
January 2015



PDS Tools Overview

- PDS tools encompass archive preparation, archive management, and user support.
- PDS develops both core and node-specific software.
- Tools are shared with international partners.
 - Core software for PDS4 is being coordinated with the IPDA
- Beyond PDS, tools are developed by the broader planetary science community which can be registered with the PDS.
- Many tools are moving towards open source to ensure they can be distributed for use and adoption both for data providers/users for NASA missions and international partners.

PDS Tool Classification



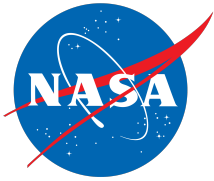
Core PDS Tools (Rqmt 1.5.x, 3.3.x)

- Design
- Generate
- Validate
- Transform
- *Visualize*
- PDS4 Tools Library Information Model

Data Provider Tools

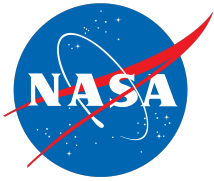


User Support Tools
(incl Portals and
Data Analysis Support)



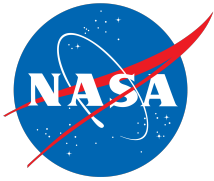
PDS Tool Landscape

- **Core tools and software:** Tools and software that are at the foundation of the PDS and the international archives
 - PDS3 and/or PDS4
 - Derived from PDS Level 1,2,3 requirements
 - Used for preparation, submission, management, and distribution of archival data
 - Used by both NASA and IPDA
 - Active development, maintenance and release
- **PDS Portals and Search Tools:** PDS Web-based Tools used to Support Access to Data
 - Provide access to PDS data holdings
 - Discipline-specific search functions
- **Node and mission specific tools:** Tools which are unique to a specific mission or node
 - Augment core tools; support specific data sets and/or node functions
 - Provide specific analysis tools
- **International Partners:** Tools developed by international partners (registered at planetarydata.org)
 - Tools registered in the IPDA registry
 - Support archive preparation, management, distribution
 - Agency specific search tools (e.g., ESA, ISRO, etc)



Tool Coordination

- Tools can be made available through a two pronged approach
 - Tool registry (build 5b): leverage IPDA tool registry infrastructure to capture tools across planetary science community.
 - PDS search (available today): continue to curate available tools for supporting use of PDS data so they show in search results at <http://pds.nasa.gov/tools/data-search/>
- Core tool development is coordinated with the Management Council and IPDA
- Node and mission-specific tools can be registered to enable the community to discover what exists before new development
- A virtual tool summit is being planned for Feb 2015
 - Discuss current tools both core and DN
 - Discuss planned tool development and releases
 - Discuss tool gaps and strategic needs
- Recognize that advertised tools require support



Tool Spreadsheet

- Tool spreadsheet encompasses the four areas identified on slide 4
- Includes both PDS3 and PDS4 tools
- Includes node specific tools and search interfaces
- Includes inputs from the nodes on mission-specific tools
- Includes tools from IPDA member agencies (e.g., ESA and ISRO)
- This is a candidate list to be used to populate the PDS tool registry