Namespace Dictionaries
Part 2

Ingest_LDD → LDDTool

LDD.xsd

LDD.sch

LDD.xml

…

And a bunch of supplemental files (JSON. Log, etc.)

Major Themes

- Versioning & Provenance

- Build & Release

- Development & Configuration Control

Versioning & Provenance - Wants

1. Track the development history of a dictionary, independent of IM development

2. Track the IM development history

3. Ensure all dictionaries referenced in a single label are part of the same IM version

4. Locate dictionaries belonging to a specific IM version

Versioning & Provenance - Wants

1. Track the development history of a dictionary, independent of IM development

2. Track the IM development history

Ingest_LDD

	Entity	Card	Value/Class	Ind
Hierarchy	Tagged_NonDigital_Object			
	. TNDO_Supplemental			
	. . Ingest_LDD			
Subclass	none			
Attribute	comment	0..1		
	external_property_maps_id	0..*		
	full_name	1		
	last_modification_date_time	1		
	ldd_version_id	1		
	name	1		
	namespace_id	1		
	steward_id	1		
Inherited Attribute	none			
Association	data_object	1	Conceptual_Object	
	has_Property_Maps	0..*	Property_Maps	
	local_attribute	0..*	DD_Attribute	
	local_class	0..*	DD_Class	
	local_rule	0..*	DD_Rule	
Inherited Association	none			

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Schema Page

- **PDS (pds)**
  This directory contains the XML Schema and Schematron files under the Planetary Data System (PDS) namespace.
  - **Version v1 (1.9.0.0) - September 29, 2017**
    - PDS4_PDS_1900.xsd
    - PDS4_PDS_1900.sch
    - PDS4_PDS_1900.xml
    - PDS4_PDS_JSON_1900.JSON
    - PDS4_PDS_JSON_1900_DOM.JSON
    - PDS4_PDS_OWL_1900.rdf

All Releases

The following directories represent namespaces within PDS4 and contain the released XML Schema and Schematron files:

- **Alternate (alt)**
  This directory contains the XML Schema and Schematron files under the Alternate namespace.
  - **Version v1 (1.4.0.0) - May 14, 2015**
    - PDS4_ALT_1000.xsd
    - PDS4_ALT_1000.sch
    - PDS4_ALT_1000.xml
    - PDS4_ALT_1000.zip

- **Atmospheres (atm)**
  This directory contains the XML Schema and Schematron files under the Atmospheres namespace.

- **Cartography (cart)**
  This directory contains the XML Schema and Schematron files under the Cartography namespace.
  - **Version v1 (1.7.0.0) - January 1, 2017**
    - PDS4_CART_1700.xsd
    - PDS4_CART_1700.sch
    - PDS4_CART_1700.xml
  - **Version v1 (1.6.0.0) - October 19, 2016**
    - PDS4_CART_1600.xsd
    - PDS4_CART_1600.sch
    - PDS4_CART_1600.xml

Versioning & Provenance - Wants

3. Ensure all dictionaries referenced in a single label are part of the same IM version

4. Locate dictionaries belonging to a specific IM version

- Require all LDDs be built using LDDTool with no additional hand editing.

- Generate new version of each discipline dictionary with each update of the core dictionary.

- Reorganize schema page, by IM number, not dictionaries

Build & Release - Wants

1. Discipline dictionaries released simultaneously with the core IM.

2. Discipline dictionary references to the IM version namespace managed at build time.

3. Stewards have to meet build deadlines only when they have a new dictionary being included, or substantive changes to make to an existing dictionary.

4. Stewards submit the Ingest_LDD file only - the build and release happens automatically.

Solutions?

Development & Configuration Control - Wants

1. All users (internal and external) need a problem reporting mechanism for the core IM and all discipline dictionaries (and related software).

2. Discipline dictionaries should be included in impact assessments for all proposed changes or additions to the core IM.

3. Changes and enhancements to discipline dictionaries should be trackable.

4. Discipline dictionaries should be as rigorous in validation as the core IM.

Solutions?