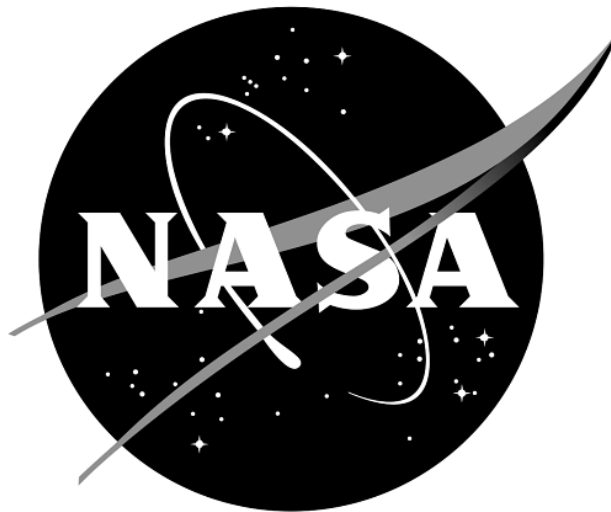

Plan Document

NASA Planetary Data System

PDS 2010 System

Build I Test Procedures & Report



No index entries found.**Change Log**

Revision	Date	Description	Author
Draft		Initial draft release.	
1c	May 16, 2011	Modified many tests to work with build 1c of Harvest and Registry. Other minor revisions.	Richard Chen

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1 Introduction

1.1 Purpose and Scope

This software system test documents specific test procedures and reports test steps and results of the system level tests that demonstrate the PDS 2010 system deployed for Build I. It verifies that PDS 2010 system Build I is compliant with Build I requirements, and ensures that the beta system functions are without critical defects. Test Traceability Matrix can be found in the PDS 2010 Build I Test Plan Section 4.

For PDS 2010 Build I, the following Prototype Software will be deployed at the EN:

- PDS Ingest subsystem (Harvest, Registry, Inventory, Document, Dictionary services), Report and Security services
- Tools suite (Label design and validation, Label and Schema generation)
- Internal administrative portal

The following Prototype Software will be deployed at one or two Discipline Nodes:

- Registry, Harvest services, and Report client

Detailed prototype release description document will be generated to facilitate and to detail the deployment activities.

Test resource will include EN developer to support unit testing, and Integration Team (which consists of EN and Node staff) to perform integration testing.

1.2 Document Revision

Revisions of this document will be held in the PDS Engineering Node website through the use of its document history functionality. Previous versions of this document can be accessed through the use of that tool.

1.3 Applicable Documents

1.3.1 Controlling Documents

[1] Planetary Data System Strategic Roadmap 2006 - 2016, February 2006.

[2] Planetary Data System Level 1, 2 and 3 Requirements, August 2006.

1.3.2 Referenced Documents

[3] PDS 2010 Project Plan, March 2010.

[4] PDS 2010 Operations Concept, March 2010.

[4] System Architecture Specification, May 2010.

[5] Service Requirements, March 2010.

[6] Service Software Requirements and Design, for the following:

- Registry Service (Inventory, Dictionary, Document, and Service), September 2010
- Harvest Tool, September 2010
- Security Service, September 2010
- Report Service, September 2010
- Preparation Tools, October 2010

[7] PDS 2010 Build I Test Plan, June 2010.

2 Executive Summary

2.1 Assessment

The tools and services tested here work with the versions specified. However, changes to them and/or the information model broke tests that worked previously, and that is very likely to happen again.

2.2 Major Findings

All tested tools and services worked as described in the Service Software Requirements and Design documents above.

2.3 Success

Tools and services performed as documented.

2.4 Metrics

This section provides a summary of the test metrics

# of tests performed	# of tests passed	# of tests failed	# of high priority anomalies
21	20	1	0

3 Test Procedures

The following table captures test procedures and test results for the test cases that have been identified as tests that will comprise the suite of “PDS 2010 Build I system tests” in the PDS 2010 Build I Test Plan Section 3. These tests will be run as necessary to re-test the system after any software changes.

The test procedures assume the following software are installed locally:

- an XML-friendly web **browser**, e.g. firefox, to view the contents of a registry
- **curl**, a command-line utility to access a URL, used here to manipulate a registry
- an **XML editor**, e.g. eclipse. Though not recommended, this can be skipped.
- **Harvest**, <http://pds-engineering.jpl.nasa.gov/pds2010/development/1.1.0/harvest>
- **Validate**, <http://pds-engineering.jpl.nasa.gov/pds2010/development/1.1.0/preparation/validate>

The tests are written for Unix, though running on Windows needs only simple substitutions, e.g. directory names. Also, the steps involving a browser or curl, which is generally available on Unix machines, can be run from any machine without any of the test input files.

The **Registry**, <http://pds-engineering.jpl.nasa.gov/pds2010/development/1.1.0/registry>, can reside remotely or locally, controlled or uncontrolled. The steps in this document use

- <https://pdsdev.jpl.nasa.gov:8443>, a remote, controlled server

Others that may be available:


- <https://pdsops2.jpl.nasa.gov>. also remote, controlled
- <http://pdsops2.jpl.nasa.gov>, remote, uncontrolled
- <https://localhost:8080>, local, controlled. Requires installing Apache Tomcat
- <http://localhost:8080>, local, uncontrolled. Requires installing Apache Tomcat

For the uncontrolled registries, username and password are not needed for the curl and the browser commands.

Before starting, extract the test input files. In Unix:

```
mkdir testDir
cd testDir
unzip build1cTestFiles.zip
```

Test Case ID	AATESTME.T1
Description	Query for a registered artifact
Test Steps	In browser, https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0
Test Results	Browser shows ugly messaged headed by "HTTP Status 500"

	 <p>If browser shows a positive message, delete the product from the registry via AATESTME.T5 and re-run this test.</p>
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T2
Description	Create a PDS Product Label using a design tool that initiates from an existing or a blank schema, accepts schema specification from a URL or a filename, facilitates editing of the label via standard editing features, validates, exports the schema, and generates the file for the product.
Test Steps	<p>Off-the-shelf XML editors, both free (e.g. eclipse) and commercial (oxygen), provide the functionality required. Verification of installation suffices. Thus,</p> <pre>cd testdir mkdir holdings cp testAAtestme/minimalImage.xml holdings/minimalImage.xml</pre> <p>If manual verification of the XML editor's sufficiency as the design tool is desired, use the editor to create, validate, and export file holdings/minimalImage.xml (instead of copying above). Tutorials for all editors are widely available. The file's contents:</p> <pre><?xml version="1.0" encoding="UTF-8"?> <Product_Array_2D_Image xmlns="http://pds.nasa.gov/schema/pds4/pds" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://pds.nasa.gov/schema/pds4/pds http://pds.jpl.nasa.gov/repository/pds4/examples/dph_examples/dph_example_products /schemas/Product_Array_2D_Image_edited_0300e.xsd"> <Identification_Area_Product> <logical_identifier>TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Ima ge.MPFL-M-IMP-2-EDR-V1.0</logical_identifier> <version_id>1.0</version_id> <product_class>Product_Array_2D_Image</product_class> <title>MARS PATHFINDER LANDER Experiment</title> <last_modification_date_time>1998-07-14T00:36:08.000Z</last_modification_date_time> <Subject_Area> <instrument_name>IMAGER FOR MARS PATHFINDER</instrument_name> </Subject_Area> </Identification_Area_Product> <Cross_Reference_Area_Product> <Observing_System></pre>



```

<local_identifier>observing_system.MPFL</local_identifier>
<title>Observing System for MPFL</title>
<Observing_System_Component>

<observing_system_component_type>SENSOR</observing_system_component_type>
  <Observing_System_Reference_Entry>
    <lid_reference>TESTING:instrument.IMP__MPFL</lid_reference>
    <reference_association_type>has_instrument</reference_association_type>
  </Observing_System_Reference_Entry>
</Observing_System_Component>
</Observing_System>
<!--Product_Reference_Entry>
  <lid_reference>TESTING:node.IMG</lid_reference>
  <reference_association_type>has_node</reference_association_type>
</Product_Reference_Entry-->
</Cross_Reference_Area_Product>
<Observation_Area>
  <comment>Observation Intent</comment>
  <start_date_time>1997-07-07T23:48:33.442Z</start_date_time>
  <stop_date_time>1997-07-07T23:48:51.766Z</stop_date_time>
  <Mission_Area></Mission_Area>
  <Node_Area></Node_Area>
</Observation_Area>
<File_Area_Observational>
  <File>
    <local_identifier>i943630r.raw</local_identifier>
    <creation_date_time>2009-05-04T13:46:30.1158Z</creation_date_time>
    <file_name>i943630r.raw</file_name>
    <file_size>126976</file_size>
    <md5_checksum>d220dac0d1fe312f3f3b9c824f6ac294</md5_checksum>
    <records>270</records>
  </File>
  <Array_2D_Image base_class="Array_Base">
    <local_identifier>MPFL-M-IMP_IMG_GRAYSCALE</local_identifier>
    <axes>2</axes>
    <axis_order>FIRST_INDEX_FASTEST</axis_order>
    <encoding_type>BINARY</encoding_type>
    <offset>0</offset>
    <Object_Statistics>
      <local_identifier>MPFL_M_IMP_STATISTICS</local_identifier>
      <maximum>4095</maximum>
      <mean>1385.3000</mean>
      <minimum>145</minimum>
      <standard_deviation>538.0290</standard_deviation>
    </Object_Statistics>
    <Array_Axis>
      <elements>248</elements>
      <name>LINE</name>
      <sequence_number>1</sequence_number>
    </Array_Axis>
    <Array_Axis>
      <elements>256</elements>
      <name>SAMPLE</name>
      <sequence_number>2</sequence_number>
    </Array_Axis>
    <Array_Element>
      <data_type>UnsignedMSB2</data_type>
    </Array_Element>
  </Array_2D_Image>
</File_Area_Observational>
</Product_Array_2D_Image>

```

Test Results	File minimallImage.xml sits in directory holdings/.
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

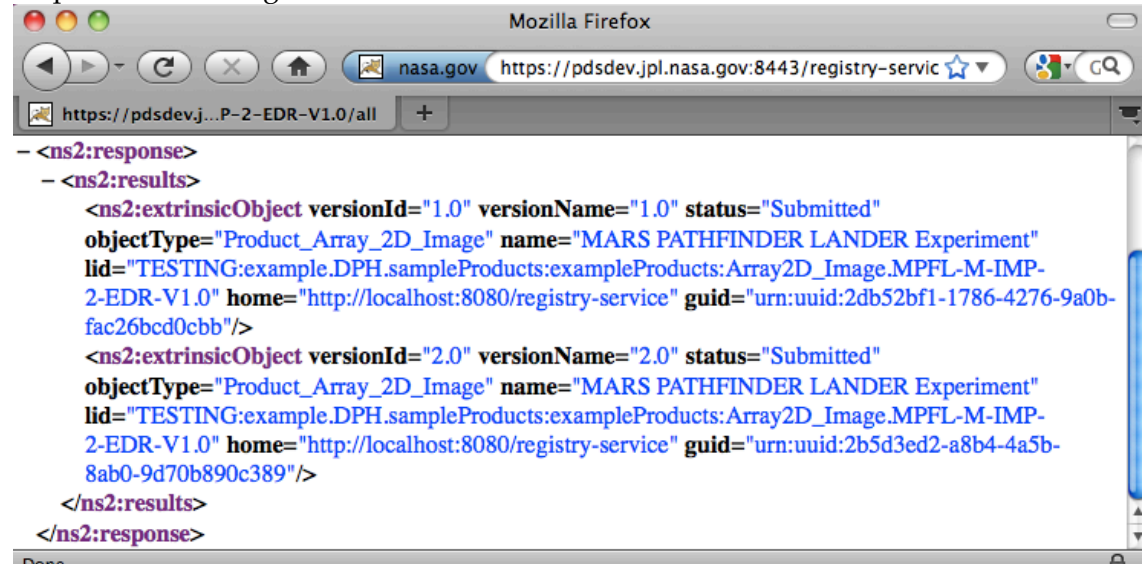
Test Case ID	AATESTME.T3
Description	For Harvest, provide a command-line interface, accept a configuration file, determine candidates for registration, capture metadata, submit metadata to the Registry Service. Registry accepts the artifact, assigns a global unique ID to the product.
Test Steps	<ol style="list-style-type: none"> 1. cp testAatestme/harvestPolicy.xml . 2. Edit ./harvestPolicy.xml to modify <path> to testDir/holdings 3. Harvest -uusername -ppassword harvestPolicy.xml 4. Repeat browser query in AATESTME.T1
Test Results	<p>Step 3 returns the following:</p> <pre> PDS Harvest Tool Log Version Version 0.3.0 Time Tue, May 03 2011 at 03:59:48 PM Registry Location https://pdsdev.jpl.nasa.gov:8443/registry-service INFO: [testDir /holdings/minimallImage.xml] Begin processing. SUCCESS: [testDir/holdings/minimallImage.xml] Successfully registered product: TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0:1.0 INFO: [testDir /holdings/minimallImage.xml] Product has the following GUID: urn:uuid:2db52bf1-1786-4276-9a0b-fac26bcd0cbb WARNING: [testDir /holdings/minimallImage.xml] Product not found in registry for the LID-based reference: TESTING:instrument.IMP__MPFL. LID will be used as the target reference for the association. SUCCESS: [testDir /holdings/minimallImage.xml] Successfully registered association to TESTING:instrument.IMP__MPFL INFO: [testDir /holdings/minimallImage.xml] Association has the following GUID: urn:uuid:7a00f910-4735-45c9-952b-d1d0b95e8b72 Summary: 1 of 1 files are candidate products, 0 skipped 1 of 1 candidate products registered. 1 of 1 associations registered, 0 skipped End of Log </pre> <p>This says Harvest registered product holdings/ minimallImage.xml (because it has a <product_class> that matches harvestPolicy.xml's objectType).</p> <p>Step 4 shows the registration of minimallImage.xml. Registry requires three items of metadata (lid, versionId, name), which appear as attributes to the product. The three correspond to the items that harvestPolicy.xml requests to be saved via XPath (logical_identifier, version_id, and title). Browser also shows the guid, which is assigned by Registry, not Harvest.</p> 
Comments	In build 1b, an ugly warning (a stack of java exceptions) could not be replicated but did not affect the correct functioning of Harvest. This was not found in build 1c.
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T4
Description	Authorize only authenticated users access to a controlled capacity
Test Steps	<ol style="list-style-type: none"> 1. Edit holdings/minimalImage.xml to change version_id to 2.0 2. Harvest -uusername -pANY_BAD_PASSWORD harvestPolicy.xml
Test Results	<p>Step 2:</p> <pre> PDS Harvest Tool Log Version Version 0.3.0 Time Tue, May 03 2011 at 04:13:25 PM Registry Location https://pdsdev.jpl.nasa.gov:8443/registry-service INFO: [testDir /holdings/minimalImage.xml] Begin processing. FAILURE: [testDir /holdings/minimalImage.xml] POST request returned HTTP code: 401 Summary: 1 of 1 files are candidate products, 2 skipped 0 of 1 candidate products registered. 0 of 0 associations registered, 0 skipped End of Log </pre>
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T5
Description	Update and delete registered artifacts.
Test Steps	<ol style="list-style-type: none"> 1. Harvest: repeat step 3 in AATESTME.T3 (with correct password) 2. Verification: repeat browser query in AATESTME.T1 3. Append “/all” to browser query 4. curl -X DELETE -v https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/1.0 -uusername:password -k 5. Repeat step 3 (browser query with /all) 6. curl -X DELETE -v https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/2.0 -uusername:password -k 7. Repeat step 2 (or step 3, which would show no results)
Test Results	<p>Step 1:</p> <pre> PDS Harvest Tool Log Version Version 0.3.0 Time Tue, May 03 2011 at 04:17:20 PM Registry Location https://pdsdev.jpl.nasa.gov:8443/registry-service INFO: [testDir /holdings/minimalImage.xml] Begin processing. SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered product: TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0::2.0 INFO: [testDir /holdings/minimalImage.xml] Product has the following GUID: urn:uuid:2b5d3ed2-a8b4-4a5b-8ab0-9d70b890c389 WARNING: [testDir /holdings/minimalImage.xml] Product not found in registry for the LID-based reference: TESTING:instrument.IMP__MPFL. LID will be used as the target reference for the association. SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered association to TESTING:instrument.IMP__MPFL INFO: [testDir /holdings/minimalImage.xml] Association has the following GUID: urn:uuid:53af5935-36f4-455a-af2f-ac0b0b83ad26 Summary: 1 of 1 files are candidate products, 0 skipped 1 of 1 candidate products registered. 1 of 1 associations registered, 0 skippedEnd of Log </pre>

Step 2: Similar to output of AATESTME.T4 step 4 but with versionId and versionName = "2.0" instead of "1.0"

Step 3 shows the registrations of both versions:



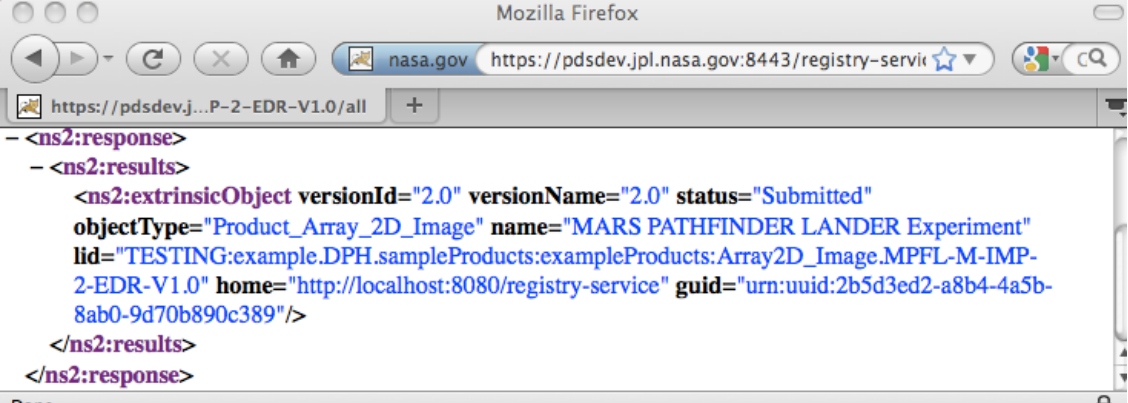
Step 4: The key output line below is "HTTP/1.1 200 OK".

```

* About to connect() to pdsdev.jpl.nasa.gov port 8443 (#0)
* Trying 128.149.132.107... connected
* Connected to pdsdev.jpl.nasa.gov (128.149.132.107) port 8443 (#0)
* SSLv3, TLS handshake, Client hello (1):
* SSLv3, TLS handshake, Server hello (2):
* SSLv3, TLS handshake, CERT (11):
* SSLv3, TLS handshake, Server key exchange (12):
* SSLv3, TLS handshake, Server finished (14):
* SSLv3, TLS handshake, Client key exchange (16):
* SSLv3, TLS change cipher, Client hello (1):
* SSLv3, TLS handshake, Finished (20):
* SSLv3, TLS change cipher, Client hello (1):
* SSLv3, TLS handshake, Finished (20):
* SSL connection using EDH-RSA-DES-CBC3-SHA
* Server certificate:
*   subject: C=US; ST=CA; L=Pasadena; O=JPL; CN=pdsdev.jpl.nasa.gov
*   start date: 2011-03-22 18:13:44 GMT
*   expire date: 2016-03-20 18:13:44 GMT
*   common name: pdsdev.jpl.nasa.gov (matched)
*   issuer: C=US; ST=CA; L=Pasadena; O=JPL; CN=pdsdev.jpl.nasa.gov
*   SSL certificate verify result: self signed certificate (18), continuing anyway.
* Server auth using Basic with user 'rchen'
> DELETE /registry-
service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.
MPFL-M-IMP-2-EDR-V1.0/1.0 HTTP/1.1
> Authorization: Basic cmNoZW46bmV3NHJjaGVu
> User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3
> Host: pdsdev.jpl.nasa.gov:8443
> Accept: */*
< HTTP/1.1 200 OK
< Server: Apache-Coyote/1.1
< Pragma: No-cache
< Cache-Control: no-cache
< Expires: Wed, 31 Dec 1969 16:00:00 PST
< Set-Cookie: JSESSIONIDSSO=1C58D873F6001A4AE5009916992C1431; Path=/; Secure; HttpOnly
< Set-Cookie: JSESSIONID=1923B81602091EFA39EEF0103648BE9D; Path=/registry-service; Secure;
HttpOnly
< Content-Length: 0
< Date: Tue, 03 May 2011 23:22:06 GMT
* Connection #0 to host pdsdev.jpl.nasa.gov left intact
* Closing connection #0
* SSLv3, TLS alert, Client hello (1):

```

Step 5 shows registration of only version 2.0

	 <p>Step 6 has similar output to step 4 Step 7 returns the error message expected in AATESTME.T1, "HTTP Status 500"</p>
Comments	Build1c corrects a minor bug in which the association created during Harvest is deleted after the product is deleted.
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T6
Description	Harvest skips candidate products not matching configuration file
Test Steps	<ol style="list-style-type: none"> 1. cp testAAtestme/unharvested* holdings/ 2. Harvest -username -password harvestPolicy.xml <p>In a browser, check the registration of the 2 unsuccessful and 1 successful products:</p> <ol style="list-style-type: none"> 3. https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:DocumentProduct.PHX-M-MECA-4-NIRDR-V1.0 4. https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:TableBin.PHX-M-TT-5-WIND-VEL-DIR-V1.0 5. Repeat browser query in AATESTME.T1
Test Results	<p>Step 2:</p> <pre> PDS Harvest Tool Log Version Version 0.3.0 Time Tue, May 03 2011 at 04:32:18 PM Registry Location https://pdsdev.jpl.nasa.gov:8443/registry-service INFO: [testDir /holdings/minimalImage.xml] Begin processing. SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered product: TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0::2.0 INFO: [testDir /holdings/minimalImage.xml] Product has the following GUID: urn:uuid:b191b895-6208-48e6-90fb-bcd2a5374883 WARNING: [testDir /holdings/minimalImage.xml] Product not found in registry for the LID-based reference: TESTING:instrument.IMP__MPFL. LID will be used as the target reference for the association. SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered association to TESTING:instrument.IMP__MPFL INFO: [testDir /holdings/minimalImage.xml] Association has the following GUID: urn:uuid:0e404a36-3e0d-4bb7-b243-6762522e3ad9 INFO: [testDir /holdings/unharvestedDoc.xml] Begin processing. SKIP: [testDir /holdings/unharvestedDoc.xml] 'Product_Document' is not an object type found in the policy file. INFO: [testDir /holdings/unharvestedTable.xml] Begin processing. SKIP: [testDir /holdings/unharvestedTable.xml] 'Product_Table_Binary' is not an object type found in the policy file. Summary: 1 of 3 files are candidate products, 2 skipped 1 of 1 candidate products registered. </pre>

	1 of 1 associations registered, 0 skipped End of Log Steps 3 and 4 have similar error messages as AATESTME.T1, "HTTP Status 500" Step 5 has similar output to AATESTME.3
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T7
Description	Registry relates artifacts via association.
Test Steps	<ol style="list-style-type: none"> 1. Clean up previous tests, if any (e.g. AATESTME.T6): <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/2.0 -uusername:password -k</code> <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/1.0 -uusername:password -k</code> <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:instrument.IMP__MPFL/1.0 -uusername:password -k</code> <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:instrument.IMP__MPFL/4.444 -uusername: username -k</code> 2. Repeat AATESTME.T1 to verify that the registry does not have the product. 3. Verify that the registry does not have the instrument product. In a browser: <code>https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:instrument.IMP__MPFL</code> 4. <code>rm holdings/minimalImage.xml</code> 5. <code>cp testAAtestme/minimalInst.xml holdings/</code> 6. <code>Harvest -uusername -ppassword harvestPolicy.xml</code> 7. <code>cp testAAtestme/minimalImage.xml holdings/</code> 8. Edit <code>holdings/minimalImage.xml</code> to uncomment <code><Product_Reference_Entry></code> 9. Register the data product and its two associations: one to a product already registered (the instrument in step 6), one to a product not yet registered. <code>Harvest -uusername -ppassword harvestPolicy.xml</code> 10. Using the GUID assigned to the first association (e.g. <code>urn:uuid:a3631a4c-4e47-4be9-9e49-f28254a6d65c</code>) in the previous step, verify the product's association to its instrument. In a browser: <code>https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/associations/guid</code> 11. Repeat using the GUID assigned to the second association (e.g. <code>urn:uuid:0d7a96d6-fbc2-4406-824e-7fb400c02f80</code>) to verify the product's association to its node.
Test Results	<p>Step 1: Previous testing may have left some/none/all of these products in the registry. For each product, if it was in the registry, this step produces output like step 4 of AATESTME.T5. Else, the key message in the error is "No entity found for query":</p> <pre> * About to connect() to pdsdev.jpl.nasa.gov port 8443 (#0) * Trying 128.149.132.107... connected * Connected to pdsdev.jpl.nasa.gov (128.149.132.107) port 8443 (#0) * SSLv3, TLS handshake, Client hello (1): * SSLv3, TLS handshake, Server hello (2): </pre>


```

* SSLv3, TLS handshake, CERT (11):
* SSLv3, TLS handshake, Server key exchange (12):
* SSLv3, TLS handshake, Server finished (14):
* SSLv3, TLS handshake, Client key exchange (16):
* SSLv3, TLS change cipher, Client hello (1):
* SSLv3, TLS handshake, Finished (20):
* SSLv3, TLS change cipher, Client hello (1):
* SSLv3, TLS handshake, Finished (20):
* SSL connection using EDH-RSA-DES-CBC3-SHA
* Server certificate:
*      subject: C=US; ST=CA; L=Pasadena; O=JPL; CN=pdsdev.jpl.nasa.gov
*      start date: 2011-03-22 18:13:44 GMT
*      expire date: 2016-03-20 18:13:44 GMT
*      common name: pdsdev.jpl.nasa.gov (matched)
*      issuer: C=US; ST=CA; L=Pasadena; O=JPL; CN=pdsdev.jpl.nasa.gov
*      SSL certificate verify result: self signed certificate (18), continuing anyway.
* Server auth using Basic with user 'rchen'
> DELETE /registry-
service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.
MPFL-M-IMP-2-EDR-V1.0/1.0 HTTP/1.1
> Authorization: Basic cmNoZW46bmV3NHJjaGVu
> User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3
> Host: pdsdev.jpl.nasa.gov:8443
> Accept: */*
< HTTP/1.1 500 Internal Server Error
< Server: Apache-Coyote/1.1
< Content-Type: text/html;charset=utf-8
< Content-Length: 4251
< Date: Thu, 05 May 2011 21:15:43 GMT
< Connection: close
<html><head><title>Apache Tomcat/7.0.4 - Error report</title><style><!--H1 {font-
family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:22px;} H2 {font-
family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:16px;} H3 {font-
family:Tahoma,Arial,sans-serif;color:white;background-color:#525D76;font-size:14px;} BODY {font-
family:Tahoma,Arial,sans-serif;color:black;background-color:white;} B {font-family:Tahoma,Arial,sans-
serif;color:white;background-color:#525D76;} P {font-family:Tahoma,Arial,sans-
serif;background:white;color:black;font-size:12px;}A {color : black;}A.name {color :
#525D76;--></style> </head><body><h1>HTTP Status 500 - </h1><HR size="1"
noshade="noshade"><p><b>type</b> Exception report</p><p><b>message</b>
<u></u></p><p><b>description</b> <u>The server encountered an internal error () that prevented it
from fulfilling this request.</u></p><p><b>exception</b> <pre>javax.persistence.NoResultException:
No entity found for query
    org.hibernate.ejb.QueryImpl.getSingleResult(QueryImpl.java:275)
    org.hibernate.ejb.criteria.CriteriaQueryCompiler$3.getSingleResult(CriteriaQueryCompiler.j
ava:264)
    gov.nasa.pds.registry.service.MetadataStoreJPA.getRegistryObject(MetadataStoreJPA.java:3
47)
    sun.reflect.GeneratedMethodAccessor86.invoke(Unknown Source)
    sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)
    java.lang.reflect.Method.invoke(Method.java:597)
    org.springframework.aop.support.AopUtils.invokeJoinpointUsingReflection(AopUtils.java:
309)
    org.springframework.aop.framework.JdkDynamicAopProxy.invoke(JdkDynamicAopProxy.
java:196)
    $Proxy84.getRegistryObject(Unknown Source)
    gov.nasa.pds.registry.service.RegistryServiceImpl.deleteObject(RegistryServiceImpl.java:65
4)
    gov.nasa.pds.registry.resource.ExtrinsicResource.delete(ExtrinsicResource.java:127)
    sun.reflect.GeneratedMethodAccessor96.invoke(Unknown Source)
    sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)
    java.lang.reflect.Method.invoke(Method.java:597)
    com.sun.jersey.server.impl.model.method.dispatch.AbstractResourceMethodDispatchProvi
der$ResponseOutInvoker._dispatch(AbstractResourceMethodDispatchProvider.java:168)
    com.sun.jersey.server.impl.model.method.dispatch.ResourceJavaMethodDispatcher.dispatch
h(ResourceJavaMethodDispatcher.java:67)
    com.sun.jersey.server.impl.uri.rules.HttpMethodRule.accept(HttpMethodRule.java:259)
    com.sun.jersey.server.impl.uri.rules.SubLocatorRule.accept(SubLocatorRule.java:118)
    com.sun.jersey.server.impl.uri.rules.RightHandPathRule.accept(RightHandPathRule.java:13
3)
    com.sun.jersey.server.impl.uri.rules.SubLocatorRule.accept(SubLocatorRule.java:118)
    com.sun.jersey.server.impl.uri.rules.RightHandPathRule.accept(RightHandPathRule.java:13
3)

```

```

com.sun.jersey.server.impl.uri.rules.ResourceClassRule.accept(ResourceClassRule.java:83)
com.sun.jersey.server.impl.uri.rules.RightHandPathRule.accept(RightHandPathRule.java:13
3)
com.sun.jersey.server.impl.uri.rules.RootResourceClassesRule.accept(RootResourceClasses
Rule.java:71)
com.sun.jersey.server.impl.application.WebApplicationImpl._handleRequest(WebApplicati
onImpl.java:990)
com.sun.jersey.server.impl.application.WebApplicationImpl.handleRequest(WebApplicatio
nImpl.java:941)
com.sun.jersey.server.impl.application.WebApplicationImpl.handleRequest(WebApplicatio
nImpl.java:932)
com.sun.jersey.spi.container.servlet.WebComponent.service(WebComponent.java:384)
com.sun.jersey.spi.container.servlet.ServletContainer.service(ServletContainer.java:451)
com.sun.jersey.spi.container.servlet.ServletContainer.doFilter(ServletContainer.java:797)
com.sun.jersey.spi.container.servlet.ServletContainer.doFilter(ServletContainer.java:770)
com.sun.jersey.spi.container.servlet.ServletContainer.doFilter(ServletContainer.java:731)
org.springframework.orm.jpa.support.OpenEntityManagerInViewFilter.doFilterInternal(Op
enEntityManagerInViewFilter.java:113)
org.springframework.web.filter.OncePerRequestFilter.doFilter(OncePerRequestFilter.java:7
6)
* Closing connection #0
* SSLv3, TLS alert, Client hello (1):
</pre></p><p><b>note</b> <u>The full stack trace of the root cause is available in the Apache
Tomcat/7.0.4 logs.</u></p><hr size="1" noshade="noshade"><h3>Apache
Tomcat/7.0.4</h3></body></html>

```

Steps 2 & 3: Like AATESTME.T1, ugly output headed by “HTTP Status 500 –”

Step 5:

```

PDS Harvest Tool Log
Version      Version 0.3.0
Time         Wed, May 04 2011 at 09:49:19 AM
Registry Location  https://pdsdev.jpl.nasa.gov:8443/registry-service
INFO:  [testDir /holdings/minimalImage.xml] Begin processing.
SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered product:
TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-
V1.0::2.0
INFO:  [testDir /holdings/minimalImage.xml] Product has the following GUID: urn:uuid:b2d1831c-3593-
4408-ba1e-2346a1441f12
INFO:  [testDir /holdings/minimalImage.xml] Found registered product for LID-based reference:
TESTING:instrument.IMP__MPFL
SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered association to
TESTING:instrument.IMP__MPFL
INFO:  [testDir /holdings/minimalImage.xml] Association has the following GUID: urn:uuid:2667eafd-
fc98-427e-bce8-f481ba78e30b
INFO:  [testDir /holdings/minimalImage.xml] Found registered product for LID-based reference:
urn:nasa:pds:node.IMG
SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered association to
urn:nasa:pds:node.IMG
INFO:  [testDir /holdings/minimalImage.xml] Association has the following GUID: urn:uuid:ed731517-
54ab-490b-91c5-55c02c376d0b
INFO:  [testDir /holdings/minimalInst.xml] Begin processing.
INFO:  [testDir /holdings/minimalInst.xml] No associations found.
WARNING: [testDir /holdings/minimalInst.xml] Product already exists in the registry:
TESTING:instrument.IMP__MPFL::v1.0
INFO:  [testDir /holdings/unharvestedDoc.xml] Begin processing.
SKIP:  [testDir /holdings/unharvestedDoc.xml] 'Product_Document' is not an object type found in the
policy file.
INFO:  [testDir /holdings/unharvestedTable.xml] Begin processing.
SKIP:  [testDir /holdings/unharvestedTable.xml] 'Product_Table_Binary' is not an object type found in
the policy file.
Summary:
2 of 4 files are candidate products, 2 skipped
1 of 2 candidate products registered.
2 of 2 associations registered, 0 skipped
End of Log

```

Step 6: Instrument product successfully registered

```

PDS Harvest Tool Log
Version      Version 0.3.0
Time         Thu, May 05 2011 at 04:07:11 PM
Registry Location  https://pdsdev.jpl.nasa.gov:8443/registry-service
INFO:  [testDir /holdings/minimalInst.xml] Begin processing.

```

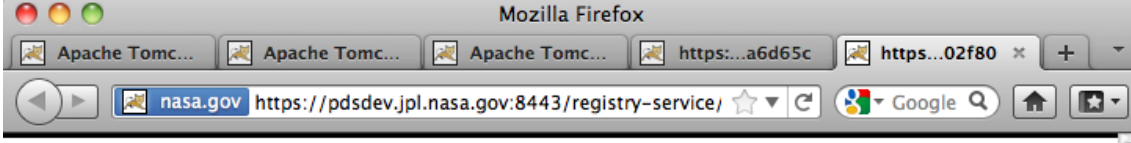

INFO: [testDir /holdings/minimalInst.xml] No associations found.
 SUCCESS: [testDir /holdings/minimalInst.xml] Successfully registered product:
 TESTING:instrument.IMP__MPFL::1.0
 INFO: [testDir /holdings/minimalInst.xml] Product has the following GUID: urn:uuid:2fb9bb81-31ed-4efb-889f-dad1655424c5
 INFO: [testDir /holdings/unharvestedDoc.xml] Begin processing.
 SKIP: [testDir /holdings/unharvestedDoc.xml] 'Product_Document' is not an object type found in the policy file.
 INFO: [testDir /holdings/unharvestedTable.xml] Begin processing.
 SKIP: [testDir /holdings/unharvestedTable.xml] 'Product_Table_Binary' is not an object type found in the policy file. Summary:
 1 of 3 files are candidate products, 2 skipped
 1 of 1 candidate products registered.
 0 of 0 associations registered, 0 skipped
 End of Log

Step 9:

PDS Harvest Tool Log
 Version Version 0.3.0
 Time Thu, May 05 2011 at 03:09:04 PM
 Registry Location https://pdsdev.jpl.nasa.gov:8443/registry-service
 INFO: [testDir /holdings/minimalImage.xml] Begin processing.
 SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered product:
 TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0::1.0
 INFO: [testDir /holdings/minimalImage.xml] Product has the following GUID: urn:uuid:da366eb3-9f53-4d79-b7b6-e370b3e82e3b
 INFO: [testDir /holdings/minimalImage.xml] Found registered product for LID-based reference:
 TESTING:instrument.IMP__MPFL
 SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered association to
 TESTING:instrument.IMP__MPFL
 INFO: [testDir /holdings/minimalImage.xml] Association has the following GUID: urn:uuid:a3631a4c-4e47-4be9-9e49-f28254a6d65c
 WARNING: [testDir /holdings/minimalImage.xml] Product not found in registry for the LID-based reference: TESTING:node.IMG. LID will be used as the target reference for the association.
 SUCCESS: [testDir /holdings/minimalImage.xml] Successfully registered association to
 TESTING:node.IMG
 INFO: [testDir /holdings/minimalImage.xml] Association has the following GUID: urn:uuid:0d7a96d6-fbc2-4406-824e-7fb400c02f80
 INFO: [testDir /holdings/minimalInst.xml] Begin processing.
 INFO: [testDir /holdings/minimalInst.xml] No associations found.
 WARNING: [testDir /holdings/minimalInst.xml] Product already exists in the registry:
 TESTING:instrument.IMP__MPFL::1.0
 INFO: [testDir /holdings/unharvestedDoc.xml] Begin processing.
 SKIP: [testDir /holdings/unharvestedDoc.xml] 'Product_Document' is not an object type found in the policy file.
 INFO: [testDir /holdings/unharvestedTable.xml] Begin processing.
 SKIP: [testDir /holdings/unharvestedTable.xml] 'Product_Table_Binary' is not an object type found in the policy file.
 Summary:
 2 of 4 files are candidate products, 2 skipped
 1 of 2 candidate products registered.
 2 of 2 associations registered, 0 skipped
 End of Log

Step 10:



	<p>Step 11: Note that because product TESTING:node.IMG was not previously in the registry, targetObject refers to the LID, not the GUID</p>  <pre> - <ns2:association associationType="has_node" targetObject="TESTING:node.IMG" sourceObject="urn:uuid:da366eb3-9f53-4d79-b7b6-e370b3e82e3b" versionId="1.0" versionName="1.0" status="Submitted" objectType="Association" lid="urn:uuid:1ab61714-b1d1-4818-897c-cc44377d8514" home="http://localhost:8080/registry-service" guid="urn:uuid:0d7a96d6-fbc2-4406-824e-7fb400c02f80"> - <ns2:slot name="verified" id="123477"> <ns2:value>false</ns2:value> </ns2:slot> </ns2:association> </pre>
Comments	In build 1b, this test revealed an anomaly since fixed: https://oodt.jpl.nasa.gov/jira/browse/PDS-1
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T8
Description	Harvest checks for previous registration.
Test Steps	Harvest -uusername -ppassword harvestPolicy.xml
Test Results	<pre> PDS Harvest Tool Log Version Version 0.3.0 Time Thu, May 05 2011 at 04:19:29 PM Registry Location https://pdsdev.jpl.nasa.gov:8443/registry-service INFO: [testDir /holdings/minimalImage.xml] Begin processing. WARNING: [testDir /holdings/minimalImage.xml] Product already exists in the registry: TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR- V1.0:1.0 INFO: [testDir /holdings/minimalInst.xml] Begin processing. INFO: [testDir /holdings/minimalInst.xml] No associations found. WARNING: [testDir /holdings/minimalInst.xml] Product already exists in the registry: TESTING:instrument.IMP__MPFL:1.0 INFO: [testDir /holdings/unharvestedDoc.xml] Begin processing. SKIP: [testDir /holdings/unharvestedDoc.xml] 'Product_Document' is not an object type found in the policy file. INFO: [testDir /holdings/unharvestedTable.xml] Begin processing. SKIP: [testDir /holdings/unharvestedTable.xml] 'Product_Table_Binary' is not an object type found in the policy file. Summary: 2 of 4 files are candidate products, 2 skipped 0 of 2 candidate products registered. 0 of 0 associations registered, 0 skipped End of Log </pre>
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T9
Description	Query and delete associations (not just products)
Test Steps	1. Repeat step 10 from AATESTME.T7

	<p>2. <code>curl -X DELETE -v https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/associations/guidFromPreviousStep -uusername:password -k</code></p> <p>3. Repeat step 1</p> <p>Another way to delete an association is to delete its source object.</p> <p>4. Repeat step 11 from AATESTME.T7</p> <p>5. Note: the LID not the GUID, is specified to deleting a product: <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/1.0 -uusername:password -k</code></p> <p>6. Repeat step 4</p>
Test Results	<p>Step 1: same output as step 10 from AATESTME.T7</p> <p>Step 2: benign output, with "HTTP/1.1 200 OK" somewhere in the middle:</p> <pre> * About to connect() to pdsdev.jpl.nasa.gov port 8443 (#0) * Trying 128.149.132.107... connected * Connected to pdsdev.jpl.nasa.gov (128.149.132.107) port 8443 (#0) * SSLv3, TLS handshake, Client hello (1): * SSLv3, TLS handshake, Server hello (2): * SSLv3, TLS handshake, CERT (11): * SSLv3, TLS handshake, Server key exchange (12): * SSLv3, TLS handshake, Server finished (14): * SSLv3, TLS handshake, Client key exchange (16): * SSLv3, TLS change cipher, Client hello (1): * SSLv3, TLS handshake, Finished (20): * SSLv3, TLS change cipher, Client hello (1): * SSLv3, TLS handshake, Finished (20): * SSL connection using EDH-RSA-DES-CBC3-SHA * Server certificate: * subject: C=US; ST=CA; L=Pasadena; O=JPL; CN=pdsdev.jpl.nasa.gov * start date: 2011-03-22 18:13:44 GMT * expire date: 2016-03-20 18:13:44 GMT * common name: pdsdev.jpl.nasa.gov (matched) * issuer: C=US; ST=CA; L=Pasadena; O=JPL; CN=pdsdev.jpl.nasa.gov * SSL certificate verify result: self signed certificate (18), continuing anyway. * Server auth using Basic with user 'rchen' > DELETE /registry-service/registry/associations/urn:uuid:a3631a4c-4e47-4be9-9e49-f28254a6d65c HTTP/1.1 > Authorization: Basic cmNoZW46bmV3NHJjaGVu > User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3 > Host: pdsdev.jpl.nasa.gov:8443 > Accept: */* < HTTP/1.1 200 OK < Server: Apache-Coyote/1.1 < Pragma: No-cache < Cache-Control: no-cache < Expires: Wed, 31 Dec 1969 16:00:00 PST < Set-Cookie: JSESSIONIDSSO=DB735D2F853F53B8243326F0AB6CB9E7; Path=/; Secure; HttpOnly < Set-Cookie: JSESSIONID=FF8EB603DAEB504FFBC409CBA37ABAB2; Path=/registry-service; Secure; HttpOnly < Content-Length: 0 < Date: Fri, 06 May 2011 08:28:48 GMT * Connection #0 to host pdsdev.jpl.nasa.gov left intact * Closing connection #0 * SSLv3, TLS alert, Client hello (1): </pre> <p>Step 3: Similar to output of AATESTME.T1</p> <p>Step 4: Same output as step 11 from AATESTME.T7</p> <p>Step 5: Similar to output to step 2</p> <p>Step 6: Similar output to step 3</p>
Comments	
Date of Testing	2011.01.27, 2011.01.31
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	AATESTME.T10 *delay until desired behavior is determined
Description	Register two products and the association between them, e.g. a data file and its instrument. Update instrument info, which necessitates a new version. Deprecate old version, but the association still points to it although the newer version exists. Delete old version, but the association disappears although the newer version exists.
Test Steps	<p>This test is independent, but the previous steps influence the registry, so DELETE</p> <ol style="list-style-type: none"> 1. <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/2.0 -uusername:password -k</code> 2. <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:example.DPH.sampleProducts:exampleProducts:Array2D_Image.MPFL-M-IMP-2-EDR-V1.0/1.0 -uusername:password -k</code> 3. <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:instrument.IMP__MPFL/1.0 -uusername:password -k</code> 4. <code>curl -v -X DELETE https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:instrument.IMP__MPFL/4.444 -uusername:password -k</code> 5. <code>rm holdings/minimal*</code> 6. <code>cp testAAtestme/minimalInst.xml holdings/</code> 7. <code>Harvest -uusername -ppassword harvestPolicy.xml</code> 8. <code>cp testAAtestme/minimalImage.xml holdings/</code> 9. <code>Harvest -uusername -ppassword harvestPolicy.xml</code> 10. Edit holdings/minimalInst.xml to increase version_id to 4.444 11. <code>Harvest -uusername -ppassword harvestPolicy.xml</code> 12. In browser, https://pdsdev.jpl.nasa.gov:8443/registry-ui/, then enter a LID of TESTING:instrument.IMP__MPFL, and Update 13. <code>curl -X POST -H "Content-type:application/xml" -v https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/TESTING:instrument.IMP__MPFL/1.0/deprecate -uusername:password -k</code> 14. repeat step 11 15. repeat , which still shows association to the deprecated version 16. repeat step 3 17. repeat , which shows the association is gone.
Test Results	<p>Step 1: similar to the output of either of the last two steps of AATESTME.T7</p> <p>Step 2: benign output, with "HTTP/1.1 200 OK" somewhere in the middle.</p> <p>Step 3: <code><response numFound="0">...</code></p>
Comments	Not automatically updating a product's association to a newer version of a target may be desired behavior. If this is a bug, http://oodt.jpl.nasa.gov/jira/browse/PDS-34
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	GEN.T1
Description	Run components distributed over multiple machines on any PDS-supported platforms.

Test Steps	Ensure your machine is not the same machine as the Registry's. Run all AATESTME.* steps.
Test Results	Results should be as described in the AATESTME.* Test Results.
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	GEN.T2 *not ready for build 1
Description	Services provide an application programming interface.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	GEN.T3 *not ready for build 1
Description	Run tools via an application programming interface.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	GEN.T4 *not ready for build 1
Description	Services provide an interface to enable monitoring of health.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	GEN.T5 *not ready for build 1
Description	Applications meet Section 508 compliance guidelines.
Test Steps	
Test Results	

Comments	
Date of Testing	
Test Personnel	

Test Case ID	GEN.T6
Description	Restrict access to operations that alter the content of the registry.
Test Steps	AATESTME.T4 tests this for the Registry (and Harvest) service. Other mechanisms may exist for altering the registry.
Test Results	
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	GEN.T7
Description	Document components' capabilities, dependencies, interfaces, installation, operation
Test Steps	Examine such documentation.
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	HVT.T1
Description	Provide a command-line interface, accept a configuration file, recursively traverse directories, determine candidates for registration, capture metadata, submit metadata to the Registry Service, track each artifact registration.
Test Steps	<p>Note: Step 3 may take hours to run.</p> <ol style="list-style-type: none"> 1. In testHarvest/harvestBundle.xml, change <bundles><file> to <i>testDir/testHarvest/Product_Bundle_context_20110415.xml</i> 2. Edit testHarvest/preClean to set username and password on each line 3. testHarvest/preClean 4. Harvest testHarvest/harvestBundle.xml -uusername -ppassword
Test Results	<p>harvestCheck matches logical_identifier in files with lid in the registry Step 2: could have many error messages. preClean ensures somewhat clean registry Step 3:</p> <p style="padding-left: 40px;">Summary: 3986 of 3986 files are candidate products, 0 skipped 3960 of 3986 candidate products registered. 29400 of 29403 associations registered, 2 skipped</p> <p>Step 4: No additional registrations should occur</p>
Comments	In build 1c, Step 3 took 5.8 hours to run
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12

Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho
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Test Case ID	HVT.T2 *not ready for build 1
Description	Execute from a scheduler, accept a configuration file, recursively traverse directories, determine candidates for registration, capture metadata, submit metadata to the Registry Service.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	PRV.T1
Description	Accept a file or a directory name for product(s) to be validated. If directory, be able to traverse the tree to find products. Indicate the schemas utilized during validation.
Test Steps	<ol style="list-style-type: none"> 1. <code>cd testDir; mkdir vtest; cp testAAtestme/* vtest/</code> 2. Validate vtest 3. <code>mv vtest/harvestPolicy.xml .</code> 4. Validate vtest 5. <code>mkdir vtest/bad; mv ./harvestPolicy.xml vtest/bad/</code> 6. Validate vtest 7. Validate vtest/minimalInst.xml
Test Results	<p>Every run of Validate traces the schemas used and PASSES minimalImage.xml, minimalInst.xml, unharvestedDoc.xml, unharvestedTable.xml. Also,</p> <p>Step 2:</p> <p style="padding-left: 40px;">FAIL: <code>testDir /harvestPolicy.xml</code></p> <p style="padding-left: 40px;">ERROR Could not find product class for label.</p> <p>Step 4: no errors since the bad label (harvestPolicy.xml is not a PDS4 product) is gone</p> <p>Step 6: same error as Step 2 since Validate traverses</p> <p>Step 7: no errors, as test AATESTME.T2 might have shown</p>
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	PRV.T2 *not ready for build 1
Description	Verify that a referenced file exists.
Test Steps	<ol style="list-style-type: none"> 1. Validate vtest/minimalImage.xml 2. <code>echo fakeTokenOfData > vtest/i943630r.raw</code> 3. Validate vtest/minimalImage.xml
Test Results	<p>Step 1: ERROR [<code>testDir/vtest/harvestPolicy.xml</code>]</p> <p>Step 3: no errors</p>

Comments	
Date of Testing	
Test Personnel	

Test Case ID	PRV.T3
Description	Validate aggregate products and all products referenced in the aggregation.
Test Steps	<ol style="list-style-type: none"> 1. <code>cd testDir</code> 2. <code>grep file_specification_name testValidate/minimal_Product_Bundle.xml</code> 3. <code>Validate testValidate/minimal_Product_Bundle.xml</code>
Test Results	<p>Step 2 shows that the product files to be validated are in a separate directory tree from the bundle xml file.</p> <p>Step 3 shows that Validate reaches the referenced products. Unfortunately, it produces a ton of error messages, as Validate has schema version 0300A while the products use schema version 0200B. The bottom of the output:</p> <p style="padding-left: 40px;">Summary: 11 of 11 validated, 0 skipped 1 of 11 passed End of Report</p>
Comments	
Date of Testing	2011.05.09, 2011.05.12
Test Personnel	Richard Chen, John Ho

Test Case ID	PRV.T4 *not ready for build 1
Description	Merge label fragments
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

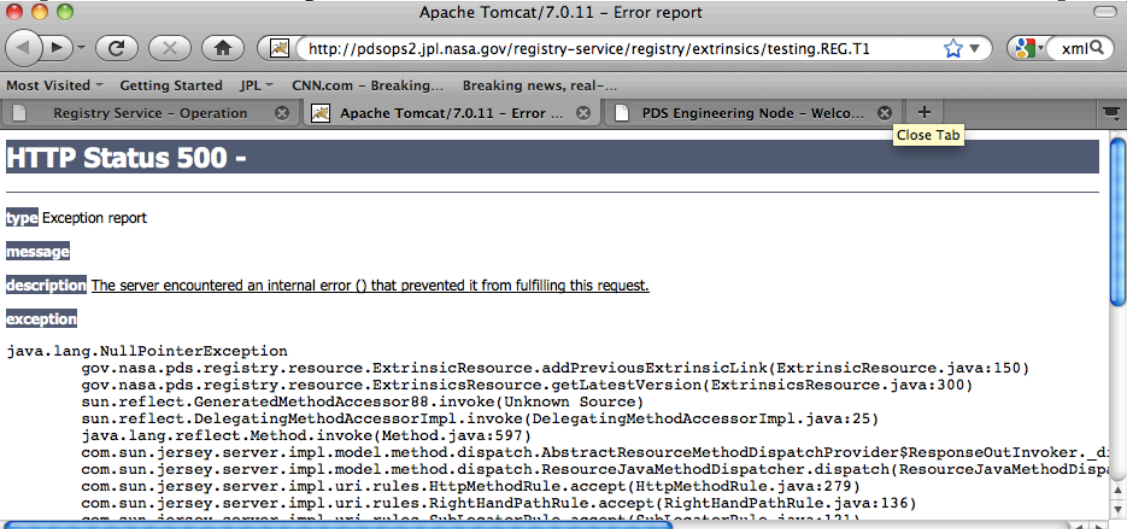
Test Case ID	PRV.T5 *not ready for build 1
Description	Validate schema
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

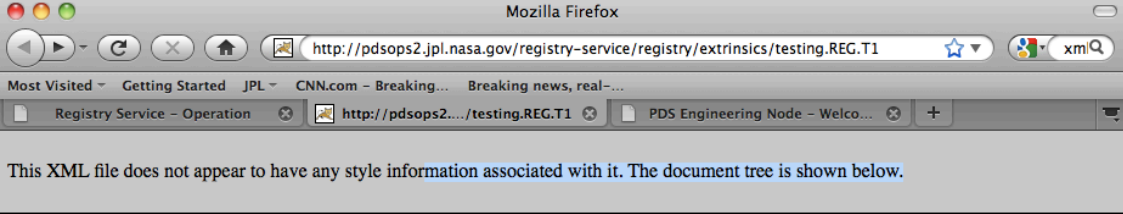
Test Case ID	PRV.T6
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Description	Accept schema file specified by file or directory
Test Steps	<ol style="list-style-type: none"> 1. Validate testValidate/im2.xml 2. Validate -x testValidate/PIG2.xsd testValidate/im2.xml
Test Results	<p>im2.xml is the same file as testAAtestme/minimalImage.xml except "Product_Array_2D_Image" has been replaced with "PA2I". testValidate/PA2I.xsd defines the schema for PA2I, which is the same as Product_Array_2D_Image's.</p> <p>Step 1: ERROR line 4, 68: cvc-elt.1.a: Cannot find the declaration of element 'PA2I'.</p> <p>Step 2: no error</p>
Comments	For build 1c, this failed, causing the addition of the next test.
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

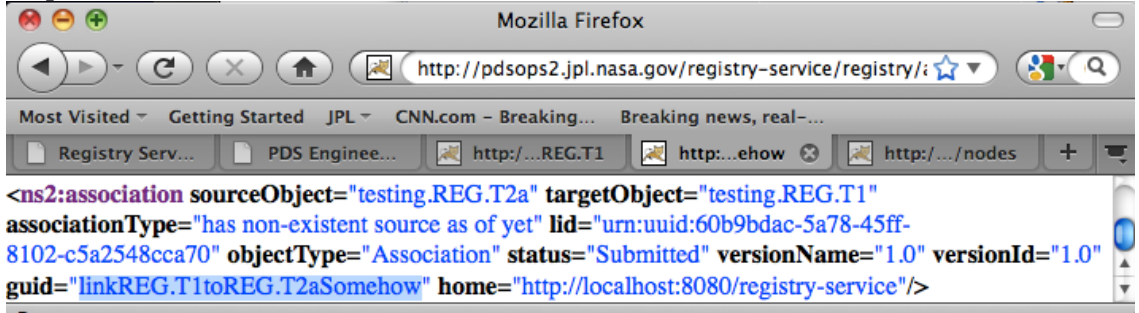
Test Case ID	PRV.T7
Description	Accept schema file specified by file or directory
Test Steps	<ol style="list-style-type: none"> 1. cp testAAtestme/minimalImage.xml vtest/ 2. Validate holdings/minimalImage.xml 3. cp testValidate/Product_Array_2D_Image_edited_0300e.xsd vtest/x.xsd 4. Validate -x vtest/x.xsd vtest/minimalImage.xml 5. To ensure the ERROR is not caused by a name collision, edit vtest/x.xsd and globally replace "Product_Array_2D_Image" with "XXX" 6. Repeat step 4
Test Results	<p>Step 2: PASS</p> <p>Step 4: FATAL ERROR line 43, 109: src-resolve: Cannot resolve the name 'pds:logical_identifier_Type' to a(n) 'type definition' component.</p> <p>Step 6: same as step 4</p>
Comments	<p>http://oodt.jpl.nasa.gov/jira/browse/PDS-35</p> <p>This scenario may be extremely likely or a result of mixed versioning.</p>
Date of Testing	2011.05.09, 2011.05.12
Test Personnel	Richard Chen, John Ho

Test Case ID	REG.T1
Description	Validate and accept metadata to register an artifact or modify an artifact's registration.
Test Steps	<ol style="list-style-type: none"> 1. cd testDir 2. https://pdsdev.jpl.nasa.gov:8443 /registry-service/registry/extrinsics/testing.REG.T1 in a browser shows no current product has lid "testing.REG.t1", which input files test.REG.T1[abc].xml have. 3. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T1a.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics attempts to register the bad input file 4. Repeat step 1 to ensure lid still does not exist. 5. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T1b.xml https://pdsdev.jpl.nasa.gov:8443/registry-

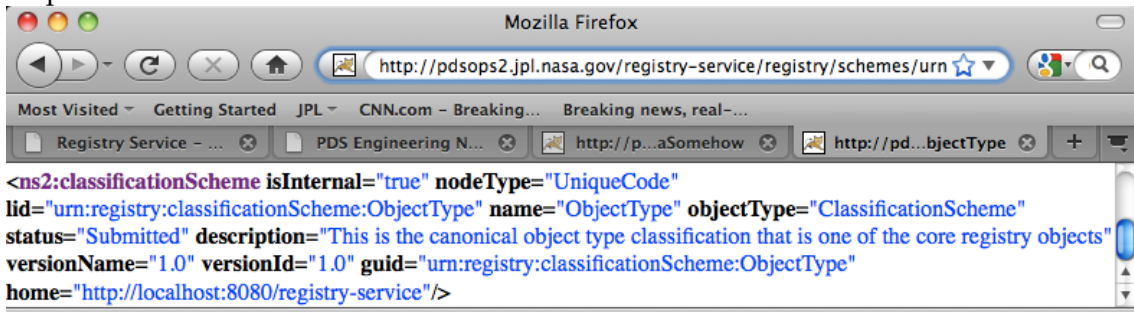
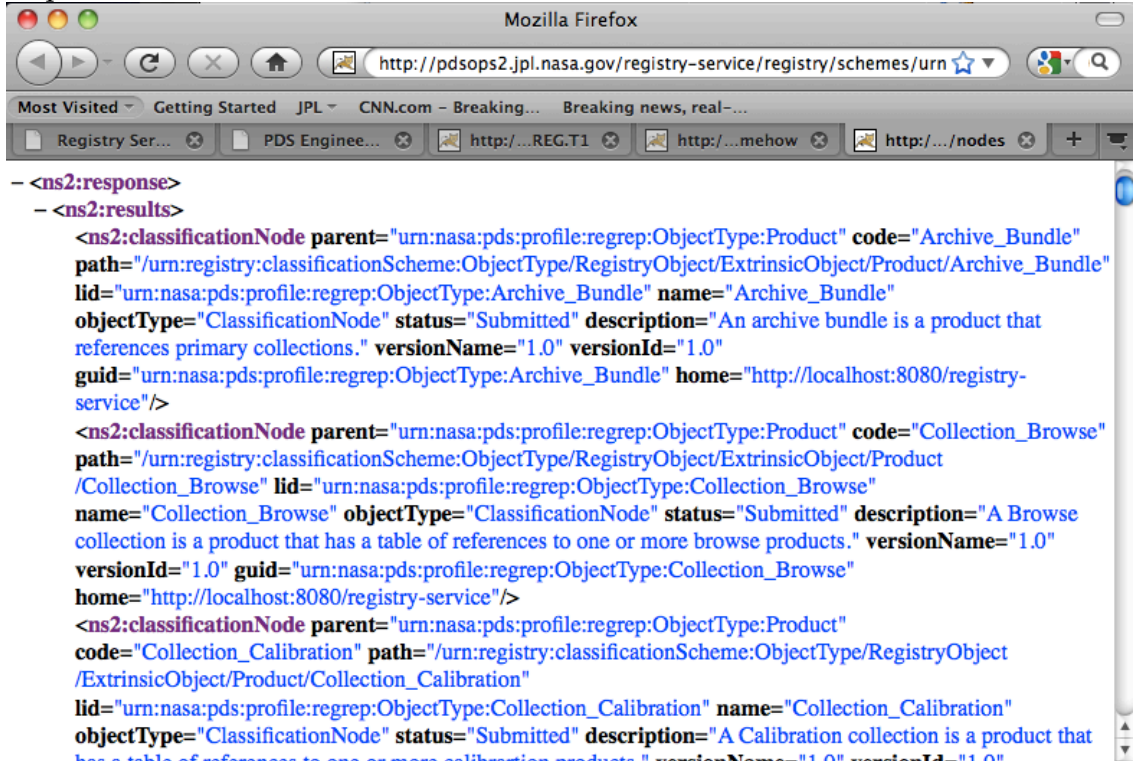
	<p>service/registry/extrinsics registers a good input file</p> <ol style="list-style-type: none"> 6. Repeat step 1 to see the lid 7. curl -X DELETE --verbose https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T1/1.0 8. Repeat step 1 to ensure lid no longer exists 9. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T1c.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics registers a good input file with different values for the phone numbers 10. Repeat step 1 to see the changed values
Test Results	<p>Step 2: The error message should be "HTTP Status 500 -". If lid does exist, run step 7</p>  <p>Step 3: The error message should be "HTTP/1.1 400 Bad Request...The request sent by the client was syntactically incorrect..."</p> <p>Step 4: Same as step 2</p> <p>Step 5: Benign output messages without "ERROR":</p> <ul style="list-style-type: none"> * About to connect() to pdsops2.jpl.nasa.gov port 80 (#0) * Trying 128.149.132.54... connected * Connected to pdsops2.jpl.nasa.gov (128.149.132.54) port 80 (#0) > POST /registry-service/registry/extrinsics HTTP/1.1 > User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3 > Host: pdsops2.jpl.nasa.gov > Accept: */* > Content-type:application/xml > Content-Length: 631 < HTTP/1.1 201 Created < Server: Apache-Coyote/1.1 < Location: https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T1/1.0 < Content-Type: application/xml < Transfer-Encoding: chunked < Date: Fri, 29 Apr 2011 16:25:56 GMT * Connection #0 to host pdsops2.jpl.nasa.gov left intact * Closing connection #0 <p>testing.REG.T1.v1.0</p> <p>Step 6: Upon success, the registry service returns good xml. In firefox:</p>

	 <pre> - <ns2:extrinsicObject lid="testing.REG.T1" name="Product 1234 v1" objectType="Product" status="Submitted" description="Stolen from http://pdsops2.jpl.nasa.gov/registry-service/operate/index.html with attribute lid above changed for uniqueness" versionName="1.0" versionId="1.0" guid="testing.REG.T1.v1.0" home="http://localhost:8080/registry-service"> - <ns2:slot id="246940" name="last-name"> <ns2:value>Doe</ns2:value> </ns2:slot> - <ns2:slot id="246942" name="first-name"> <ns2:value>John</ns2:value> </ns2:slot> - <ns2:slot id="246944" name="phone"> <ns2:value>(818)777-7777</ns2:value> <ns2:value>(818)888-8888</ns2:value> </ns2:slot> </ns2:extrinsicObject> </pre> <p>Step 7:</p> <ul style="list-style-type: none"> * About to connect() to pdsops2.jpl.nasa.gov port 80 (#0) * Trying 128.149.132.54... connected * Connected to pdsops2.jpl.nasa.gov (128.149.132.54) port 80 (#0) > DELETE /registry-service/registry/extrinsics/testing.REG.T1/1.0 HTTP/1.1 > User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3 > Host: pdsops2.jpl.nasa.gov > Accept: */* < HTTP/1.1 200 OK < Server: Apache-Coyote/1.1 < Content-Length: 0 < Date: Fri, 29 Apr 2011 20:13:03 GMT * Connection #0 to host pdsops2.jpl.nasa.gov left intact * Closing connection #0 <p>Step 8: Same as step 2</p> <p>Step 9: Similar to step 5</p> <p>Step 10: Similar to step 6 but with different values for the phone numbers, i.e. from (818)777-7777 and (818)888-8888 to (818)222-2222 and (818)333-3333</p>
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

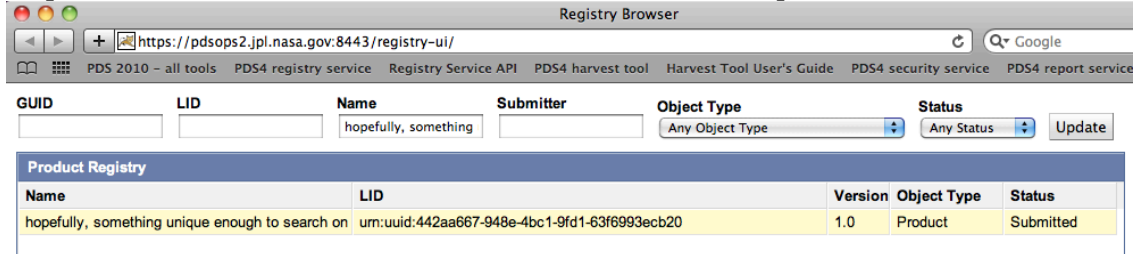
Test Case ID	REG.T2
Description	Relate artifact registrations, regardless of whether artifact has been registered yet
Test Steps	<ol style="list-style-type: none"> 1. https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/associations/linkREG.T1toREG.T2aSomehow shows no such associations 2. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T2.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/associations adds 1 association (from a nonexistent sourceLid) to desired targetLid

	3. Repeat step 1 to see the association (POSTing the sourceLids referenced in steps 2 and 3 is actually unnecessary)
Test Results	<p>Step 1: The error message should be "HTTP Status 500", then much like REG.T1's step 2's output. If not (i.e. if output looks like step 3's below</p> <pre>curl -X DELETE -v https://pdsdev.jpl.nasa.gov:8443/registry- service/registry/associations/linkREG.T1toREG.T2aSomehow</pre> <p>Step 2: Benign output messages without "ERROR"</p> <pre>* About to connect() to pdsops2.jpl.nasa.gov port 80 (#0) * Trying 128.149.132.54... connected * Connected to pdsops2.jpl.nasa.gov (128.149.132.54) port 80 (#0) > POST /registry-service/registry/associations HTTP/1.1 > User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3 > Host: pdsops2.jpl.nasa.gov > Accept: */* > Content-type:application/xml > Content-Length: 257 < HTTP/1.1 201 Created < Server: Apache-Coyote/1.1 < Location: https://pdsdev.jpl.nasa.gov:8443/registry- service/registry/associations/linkREG.T1toREG.T2aSomehow < Content-Type: text/plain < Transfer-Encoding: chunked < Date: Sat, 30 Apr 2011 07:36:44 GMT * Connection #0 to host pdsops2.jpl.nasa.gov left intact * Closing connection #0 linkREG.T1toREG.T2aSomehow</pre> <p>Step 3:</p>  <p>The screenshot shows a Mozilla Firefox browser window with the address bar displaying <code>http://pdsops2.jpl.nasa.gov/registry-service/registry/</code>. The browser's Most Visited list includes "Registry Serv...", "PDS Engine...", "http://...REG.T1", "http://...ehow", and "http://.../nodes". The main content area displays an XML snippet: <code><ns2:association sourceObject="testing.REG.T2a" targetObject="testing.REG.T1" associationType="has non-existent source as of yet" lid="urn:uuid:60b9bdac-5a78-45ff-8102-c5a2548cca70" objectType="Association" status="Submitted" versionName="1.0" versionId="1.0" guid="linkREG.T1toREG.T2aSomehow" home="http://localhost:8080/registry-service"/></code></p>
Comments	
Date of Testing	2011.01.27, 2011.01.31, 2011.05.09, 2011.05.12
Test Personnel	John Ho, Richard Chen, Richard Chen, John Ho

Test Case ID	REG.T3 *not fully ready for build 1c
Description	Maintain policies for classes of artifacts.
Test Steps	<ol style="list-style-type: none"> 1. In a browser, https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/schemes/urn:registry:classificationScheme:ObjectType Retrieves the only supported scheme at this time. 2. In a browser, https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/schemes/urn:registry:classificationScheme:ObjectType/nodes retrieves the nodes associated with the scheme of step 1

Test Results	<p>Step 1:</p>  <pre> <ns2:classificationScheme isInternal="true" nodeType="UniqueCode" lid="urn:registry:classificationScheme:ObjectType" name="ObjectType" objectType="ClassificationScheme" status="Submitted" description="This is the canonical object type classification that is one of the core registry objects" versionName="1.0" versionId="1.0" guid="urn:registry:classificationScheme:ObjectType" home="http://localhost:8080/registry-service"/> </pre> <p>Step 2:</p>  <pre> - <ns2:response> - <ns2:results> <ns2:classificationNode parent="urn:nasa:pds:profile:regrep:ObjectType:Product" code="Archive_Bundle" path="/urn:registry:classificationScheme:ObjectType/RegistryObject/ExtrinsicObject/Product/Archive_Bundle" lid="urn:nasa:pds:profile:regrep:ObjectType:Archive_Bundle" name="Archive_Bundle" objectType="ClassificationNode" status="Submitted" description="An archive bundle is a product that references primary collections." versionName="1.0" versionId="1.0" guid="urn:nasa:pds:profile:regrep:ObjectType:Archive_Bundle" home="http://localhost:8080/registry- service"/> <ns2:classificationNode parent="urn:nasa:pds:profile:regrep:ObjectType:Product" code="Collection_Browse" path="/urn:registry:classificationScheme:ObjectType/RegistryObject/ExtrinsicObject/Product /Collection_Browse" lid="urn:nasa:pds:profile:regrep:ObjectType:Collection_Browse" name="Collection_Browse" objectType="ClassificationNode" status="Submitted" description="A Browse collection is a product that has a table of references to one or more browse products." versionName="1.0" versionId="1.0" guid="urn:nasa:pds:profile:regrep:ObjectType:Collection_Browse" home="http://localhost:8080/registry-service"/> <ns2:classificationNode parent="urn:nasa:pds:profile:regrep:ObjectType:Product" code="Collection_Calibration" path="/urn:registry:classificationScheme:ObjectType/RegistryObject /ExtrinsicObject/Product/Collection_Calibration" lid="urn:nasa:pds:profile:regrep:ObjectType:Collection_Calibration" name="Collection_Calibration" objectType="ClassificationNode" status="Submitted" description="A Calibration collection is a product that has a table of references to one or more calibration products." versionName="1.0" versionId="1.0" </pre>
Comments	
Date of Testing	
Test Personnel	

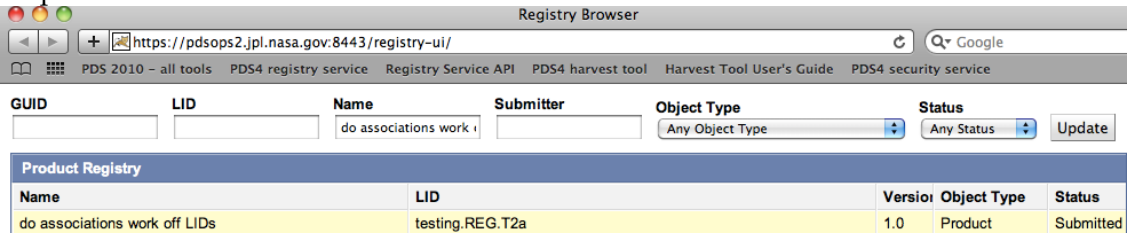
Test Case ID	REG.T4
Description	<p>Assign a global unique identifier to a registered artifact with no local or global unique identifier, query for the registered artifact, delete the registered artifact.</p> <p>The registry service is very forgiving but provides enough tools to correct bad entries.</p>
Test Steps	<ol style="list-style-type: none"> 1. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T4.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics 2. In a browser, https://pdsops2.jpl.nasa.gov/registry-ui 3. Under "Name", enter "hopefully, something unique enough to search on" from test.REG.T4.xml. Click "Update" 4. curl -X DELETE --verbose https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/lidFromPreviousStep/1.0

	5. Click the "Update" button again.
Test Results	<p>Step 1: Note the value (an assigned LID) of "Location:" in the positive message:</p> <ul style="list-style-type: none"> * About to connect() to pdsops2.jpl.nasa.gov port 80 (#0) * Trying 128.149.132.54... connected * Connected to pdsops2.jpl.nasa.gov (128.149.132.54) port 80 (#0) > POST /registry-service/registry/extrinsics HTTP/1.1 > User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3 > Host: pdsops2.jpl.nasa.gov > Accept: */* > Content-type:application/xml > Content-Length: 675 < HTTP/1.1 201 Created < Server: Apache-Coyote/1.1 < Location: https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/urn:uuid:442aa667-948e-4bc1-9fd1-63f6993ecb20/1.0 < Content-Type: application/xml < Transfer-Encoding: chunked < Date: Fri, 29 Apr 2011 21:30:08 GMT * Connection #0 to host pdsops2.jpl.nasa.gov left intact * Closing connection #0 urn:uuid:eba1c7a9-3026-470b-85c6-400b5cdc402b <p>Step 3: the LID should match the value of "Location:" in step 1</p>  <p>Step 4:</p> <ul style="list-style-type: none"> * About to connect() to pdsops2.jpl.nasa.gov port 80 (#0) * Trying 128.149.132.54... connected * Connected to pdsops2.jpl.nasa.gov (128.149.132.54) port 80 (#0) > DELETE /registry-service/registry/extrinsics/urn:uuid:442aa667-948e-4bc1-9fd1-63f6993ecb20/1.0 HTTP/1.1 > User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7 OpenSSL/0.9.8l zlib/1.2.3 > Host: pdsops2.jpl.nasa.gov > Accept: */* < HTTP/1.1 200 OK < Server: Apache-Coyote/1.1 < Content-Length: 0 < Date: Fri, 29 Apr 2011 21:36:46 GMT * Connection #0 to host pdsops2.jpl.nasa.gov left intact * Closing connection #0 <p>Step 5: The row should be gone</p>
Comments	
Date of Testing	2011.05.09, 2011.05.12

Test Personnel	Richard Chen, John Ho
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Test Case ID	REG.T5 *superseded
Description	Assign a version to a registered artifact based on its unique identifier
Test Steps	<ol style="list-style-type: none"> 1. https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T2b shows no current product targetLid=testing.REG.T2b 2. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T5a.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics 3. Repeat step 1. Note that userVersion is 1.0 4. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T5b.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics 5. Repeat step 1. Note that userVersion is 2.0 6. https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T2b/all shows both versions
Test Results	<p>Step 1: The error message should be "HTTP Status 500 -"</p> <p>Step 2: Benign output messages without "ERROR"</p> <p>Step 3: Upon success, the registry service returns good xml with userVersion = 1.0</p> <p>Step 5: Upon success, the registry service returns good xml with userVersion = 2.0</p> <p>Step 6: Upon success, the registry service returns good xml showing both posts.</p>
Comments	
Date of Testing	
Test Personnel	

Test Case ID	REG.T6
Description	Allow replacement, approval, deprecation, undeprecation, and verification of registered artifacts.
Test Steps	<ol style="list-style-type: none"> 1. In a browser, https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T2a shows no current product has lid "testing.REG.T2a". 2. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T6a.xml https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics 3. Repeat step 1 to see the lid 4. In a browser, https://pdsdev.jpl.nasa.gov:8443/registry-ui/ Under "Name", enter "do associations work off LIDs" from test.REG.T6b.xml. Click "Update" 5. curl -X POST -H "Content-type:application/xml" -v https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T2a/1.0/approve 6. Repeat step 4 to see the Status 7. curl -X POST -H "Content-type:application/xml" -v https://pdsdev.jpl.nasa.gov:8443/registry-

	<p>service/registry/extrinsics/testing.REG.T2a/1.0/deprecate</p> <p>8. Repeat step 4 to see the Status</p> <p>9. curl -X POST -H "Content-type:application/xml" -v https://pdsdev.jpl.nasa.gov:8443/registry- service/registry/extrinsics/testing.REG.T2a/1.0/undeprecate</p> <p>10. Repeat step 4 to see the Status</p> <p>11. curl -X POST -H "Content-type:application/xml" -v -d @testRegistry/test.REG.T6b.xml https://pdsdev.jpl.nasa.gov:8443/registry- service/registry/extrinsics replaces the info in the first file with different values for the phone numbers</p> <p>12. Repeat step 1 to see the lid</p>
Test Results	<p>Step 1: The error message should be "HTTP Status 500", then much like REG.T1's step 2's output. If not, curl -X DELETE -v https://pdsdev.jpl.nasa.gov:8443/registry-service/registry/extrinsics/testing.REG.T2a/1.0</p> <p>Step 2: Benign output messages without "ERROR", like REG.T1's step 5</p> <p>Step 3: Positive message like REG.T1's step 6.</p> <p>Step 4:</p>  <p>Step 5: Similar to step 2</p> <p>Step 6: Similar to step 4 but with "Approved" instead of "Submitted"</p> <p>Step 7: Similar to step 2</p> <p>Step 8: Similar to step 4 but with "Deprecated" instead of "Submitted"</p> <p>Step 9: Similar to step 2</p> <p>Step 10: Same as step 4</p> <p>Step 11: Similar to step 2</p> <p>Step 12: Similar to step 3 but with different values for phone numbers</p>
Comments	
Date of Testing	2011.05.09, 2011.05.12
Test Personnel	Richard Chen, John Ho

Test Case ID	REG.T7 *not ready for build 1c
Description	Enable replication of registry contents
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	REG.T8 *not ready for build 1c
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Description	Verify registry contents
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	RPT.T1, RPT.T2, RPT.T3, RPT.T4, RPT.T5
Description	Various requirements regarding reporting
Test Steps	Commercial applications, in particular Sawmill, provide the functionality required. Verification of installation suffices.
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	SEC.T1 *not ready for build 1
Description	Create, update, or delete a user identity and a group identity.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	SEC.T2 *not ready for build 1
Description	Add or remove a user from a group.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	SEC.T3 *not ready for build 1
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Description	Capture identifying information associated with a user identity.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

Test Case ID	SEC.T4 *not ready for build 1
Description	Encrypt transmission of identifying credentials.
Test Steps	
Test Results	
Comments	
Date of Testing	
Test Personnel	

4 Anomalies

The JIRA issue tracking system (<http://www.atlassian.com/software/jira>) is being used to capture discrepancies found during testing.

For build 1b, only 1 minor anomaly was found and reported to the development team, and it has been fixed for the next build. See the comments to AATESTME.T7

For build 1c, 1 minor anomaly (PRV.T7) and 1 potential anomaly (AATESTME.T10) were found.

4.1 Issues Entered

<https://oodt.jpl.nasa.gov/jira/browse/PDS-1>. Resolved

<http://oodt.jpl.nasa.gov/jira/browse/PDS-34>

<http://oodt.jpl.nasa.gov/jira/browse/PDS-35>

For the full JIRA list, <http://oodt.jpl.nasa.gov/jira/browse/PDS>

4.2 Major Issues

None.

4.3 Open anomalies

None.

5 Test Data

All necessary test data reside in starlite:/data/home/rchen/PDS4test.build1c.zip

Appendix A: Acronyms

CM – Configuration Management
DN – PDS Discipline or Data Node
GUI – Graphical User Interface
EN – PDS Engineering Node
I&T – Integration and Test
NASA – National Aeronautics and Space Administration
OS – Operating System
PDS – Planetary Data System
PDS3 – Version 3.8 of the PDS Data Standards
PDS4 – Version 4.0 of the PDS Data Standards
PDS 2010 – PDS 2010 Project
PDS MC – PDS Management Council
SDD – Software Design Document
SRD – Software Requirements Document