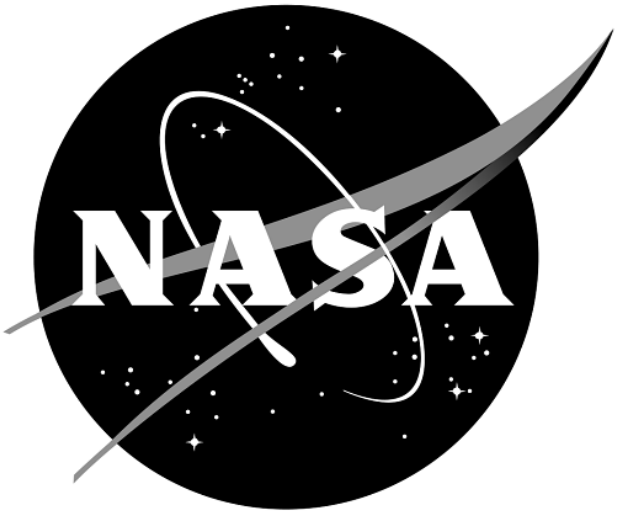
Plan Document

NASA Planetary Data System
PDS4 System
Build 3b Test Plan



Change Log

Revision	Date	Description	Author
1	Mar 29, 2013	Initial Release	Richard Chen, Emily Law
2	Sept 14, 2013	Update document references, removed not applicable test cases, updated requirement traceability matrix accordingly	Emily Law

Contents

1 Introduction

For over fifteen years, the Planetary Data System (PDS) has been NASA's official data system for archiving and distribution of data from planetary exploration missions. It has been a leader in defining data standards, working with missions and instrument teams, and developing data system technologies. The PDS has been instrumental in changing the scientific culture by working with the planetary science community to publicly release and peer review the data it captures. It has also been used as a model by other science data systems interested in establishing distributed scientific networks organized by independent discipline nodes at facilities that are doing leading-edge scientific research.

While PDS has been a leader in developing and exploiting new technologies and ideas, an increasing workload and substantial increases in the volume of delivered data are now threatening the system's ability to accomplish its primary missions of both archiving planetary science data and distributing it to working scientists. PDS identified these challenges in its Roadmap published in 2006. In addition to these challenges, the ten year Roadmap outlined several goals including improving the PDS data standards, increasing user services by leveraging newer technologies and technical standards, and re-architecting PDS to ensure efficient operations of the system while supporting the increasing demands on PDS by both the data providers and end users.

In response to these challenges and goals, PDS has developed a plan for the next generation. The vision, as defined by the PDS Management Council at its April 2008 meeting, includes:

- Simplified, but rigorous, archiving standards that are consistent, easy to learn, and easy to use
- Adaptable tools for designing archives, preparing data, and delivering the results efficiently to PDS
- On-line services allowing users to access and transform data quickly from anywhere in the system
- A highly reliable, scalable computing infrastructure that protects the integrity of data, links the nodes into an integrated data system, and provides the best service to both data providers and users

1.1 Purpose

This Integration and Test Plan in conjunction with its correspondent Test Procedures and Report document will be utilized by next generation PDS. The System Integration Team will coordinate the testing while defining the scope and depth of testing as confirmed by the Project Manager. Testing will perform following specific steps described in the Test Procedures and Report

document. The purpose of this Test Plan is to define the plan to be used to ensure that the new system and the new Standards called "PDS4" are compliant with requirements, meet customers' needs and are free of major defects. This document describes the integration and test activities and contains test cases that demonstrate compliance to requirements. It documents the test scenarios for verification and validation of the system components and data products in an integrated manner. These scenarios are traced to the new PDS4 system design requirements that in turn are traced to high level of PDS requirements.

1.2 Scope

This test plan describes the plan for verification and validation of Build 3b of the PDS4 system. The scope of this build is to support data providers and Discipline Nodes in developing PDS4 data products both for new missions and data migration. Previous releases of PDS4 have been scoped to support the LADEE and MAVEN missions as early adopters as well as internal testing by PDS and the IPDA. Future, incremental releases will target data users as PDS4 data is available within the PDS. This test plan describes the plan for verification and validation of Build 3b of the PDS4. This test plan document identifies the planned test cases for ensuring that Build 3b is implemented and working correctly at the system level. The specific test procedures will be documented in the Build 3b Test Procedure and Report document designed to report specific test steps and results of the tests that demonstrate compliance with PDS4 requirements. Test resources will include EN staff to perform integration testing. The Build 3b Test Report (http://pds.nasa.gov/pds4/orr0913/build3bProceduresReportEN.pdf) will be generated upon completion.

For PDS4 Build 3b, this testing includes:

- Ingest: Harvest, Catalog
- Preparation: Core, Design, Generate, Transform, Validate
- Registry
- Report
- Search: Core, Service, User Interface
- Security

1.3 Document Revision

Revisions of this document will be held in the PDS Engineering Node website through the use of its document history functionality.

1.4 Applicable Documents

1.4.1 Controlling Documents

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

[2] Planetary Data System Level 1, 2 and 3 Requirements, March 2010.

1.4.2 Referenced Documents

[3] PDS4 Project Plan, July 2013.

[4] PDS4 Operations Concept, September 2013.

[4] System Architecture Specification, September 2013.

[5] General System Requirements, September 2013.

[6] Software Requirements and Design, 2013

[7] PDS4 Standards Documents, 2013

2 Test Approach

The PDS4 build structure is organized such that the system can be tested and verified early on and to ensure that transition will be seamless. The builds will ensure there is a coordinated testing and deployment of functionality coupled with upgrades of the data standards.

Build 3b Integration testing is the execution and management of tests by the Engineering Node to ensure that the release of Build 3b meets the intended functionality. The process of verification testing includes the selection of verification items, and integration testing. Any functionality that is added to the system is treated as a new verification item.

3 Test Cases

For Build 3b, test data will be used to support system function test cases (section 3.1 below).

These tests should be run as regression to re-test the system after software changes.

3.1 Testing of Bundle Processing

The Build 3b system includes tools and services to support PDS4 data validation, registration, and search. The following system function test cases are designed for testing this set of tools and services as well as the expected product types.

Test Case ID	AAFUNCTION.1
Description	Create a PDS4 Product Label using a design tool based on PDS's schema.
Requirements	L5.PRP.DE.*
Success Criteria	Design tool produces a syntactically valid PDS Product Label else indicates where the label is invalid.

Test Case ID	AAFUNCTION.2
Description	Validate PDS4 label
Requirements	L5.PRP.VA.1, L5.PRP.VA.2, L5.PRP.VA.5, L5.PRP.VA.6, L5.PRP.VA.7, L5.PRP.VA.9
Success Criteria	Validation tool validates a file or all eligible products in a directory tree, indicates the schemas utilized during the validation, and ensures that a product label is well formed XML and conforms to its schemas. Also validate for content as well as syntax.

Test Case ID	AAFUNCTION.3
Description	Harvest PDS4 labels
Requirements	L5.HVT.1, L5.HVT.2, L5.HVT.4, L5.HVT.5, L5.HVT.6, L5.HVT.7, L5.HVT.8, L5.REG.1, L5.REG.8
Success Criteria	Harvest tool, based on criteria given in a user-edited configuration file, discovers all matching artifacts and for each submits metadata to the Registry service. Tools to view the registry show the metadata of the matching artifacts.

Test Case ID	AAFUNCTION.4
Description	Search for PDS4 catalog level data
Requirements	L5.SCH.1, L5.SCH.5, L5.SCH.6, L5.SCH.8, L5.SCH.10, L5.SCH.11, L5.SCH.12
Success Criteria	After configuration (e.g. regenerating search indices), Search returns the data harvested in the previous step.

3.2 Tests for Complete Coverage of PDS4 Level 5 Requirements

The following test cases test all Build 3b functions, including those not covered above. These tests ensure complete verification and validation of Build 3b level 5 requirements.

Test Case ID	AATESTME.1
Description	Query for a registered artifact
Requirements	L5.REG.14
Success Criteria	If artifact was previously registered, return a positive message. If not, negative.

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.
Requirements	L5.PRP.DE.1, L5.PRP.DE.2, L5.PRP.DE.3, L5.PRP.DE.4, L5.PRP.DE.5, L5.PRP.DE.6, L5.PRP.DE.7
Success Criteria	Design tool produces a syntactically valid PDS Product Label.

Test Case ID	AATESTME.3
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. Registry relates artifacts via (LID-based) association.
Requirements	L5.HVT.1, L5.HVT.2, L5.HVT.5, L5.HVT.6, L5.HVT.7, L5.REG.1, L5.REG.2, L5.REG.4, L5.REG.6, L5.REG.8, L5.SEC.1
Success Criteria	Harvest tool, executed from the command line, discovers all matching artifacts and for each submits metadata, based on both identifying and artifact-specific metadata, to the Registry service. A matching artifact matches the criteria given in the user-edited configuration file. Tools to view the registry should show the matching artifacts, with appropriate metadata, including the guid, which is assigned by the Registry. Tools to view the registry show the association.

Test Case ID	AATESTME.4
Description	Authorize only authenticated users access to a controlled capacity
Requirements	L5.GEN.10, L5.SEC.1, L5.SEC.3
Success Criteria	Registration fails when given invalid credentials.

Test Case ID	AATESTME.5

Description	Harvest skips candidate products not matching configuration file. Harvest also checks for previous registrations and skips those.
Requirements	L5.HVT.1, L5.HVT.5, L5.HVT.8
Success Criteria	Tools to view the registry should show only matching products and not the others.

Test Case ID	AATESTME.6
Description	Update and delete registered artifacts.
Requirements	L5.REG.9, L5.REG.13
Success Criteria	Tools to view the registry should show the status of the artifacts operated upon.

Test Case ID	AATESTME.8
Description	Query and delete associations (not just products). When Harvest registers a product, it also registers associations to the XML label file and to the referenced data file. These associations (non-LID-based) can be deleted.
Requirements	L5.REG.13, L5.REG.14
Success Criteria	The associations are removed from the registry.

Test Case ID	CTLG.1
Description	Compare a catalog submission, both file to file and directory to directory.
Requirements	L5.CAT.CMP
Success Criteria	Tool generates report with differences.

Test Case ID	CTLG.2
Description	Validate a catalog submission.
Requirements	L5.CAT.VAL
Success Criteria	Tool flags invalid language constructs.

Test Case ID	CTLG.3
Description	Ingest valid PDS3 files into the PDS4 registry service
Requirements	L5.CAT.ING
Success Criteria	Catalog successfully ingests the PDS3 files into the registry else indicates where the input is invalid. Tools to view the registry show the metadata of the PDS3 files

Test Case ID	GEN.1
Description	Run components distributed over multiple machines on any PDS-supported platforms.
Requirements	L5.GEN.1, L5.GEN.2
Success Criteria	Services produce identical results independent of machine and platform.

Test Case ID	GEN.5
Description	Applications meet Section 508 compliance guidelines.
Requirements	L5.GEN.9
Success Criteria	Successfully go through JPL webpage release process.

Test Case ID	GEN.7
Description	Document components' capabilities, dependencies, interfaces, installation, operation
Requirements	L5.GEN.11
Success Criteria	Examine such documentation.

Test Case ID	HVT.1
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.
Requirements	L5.HVT.1, L5.HVT.2, L5.HVT.4, L5.HVT.5, L5.HVT.6, L5.HVT.7, L5.HVT.8
Success Criteria	Harvest tool, executed from the command line, discovers all matching artifacts and for each submits metadata, based on both identifying and artifact-specific metadata, to the Registry service. A matching artifact resides in the directory tree of the target directory or is listed in a manifest file in the target directory, and it matches the criteria given in the user-edited configuration file and if previously registered, has been since modified. Tools to view the registry should show the matching artifacts, with appropriate metadata, and not show the non-matching artifacts.

Test Case ID	HVT.2
Description	Execute from a scheduler, accept a configuration file, recursively traverse directories, determine candidates for registration, capture metadata, submit metadata to the Registry Service.
Requirements	L5.HVT.1, L5.HVT.3, L5.HVT.4, L5.HVT.5, L5.HVT.6, L5.HVT.7, L5.HVT.8
Success Criteria	Harvest tool, executed from a scheduler, discovers all matching artifacts and for each submits metadata, based on both identifying and artifact-specific metadata, to the

	Registry service. A matching artifact resides in the directory tree of the target directory or is listed in a manifest file in the target directory, and it matches the criteria given in the user-edited configuration file and if previously registered, has been since modified. Tools to view the registry should show the matching artifacts, with appropriate metadata, and not show the non-matching artifacts.

Test Case ID	PRG.1
Description	Generate a PDS4 label from a PDS3 label or a PDS-specific DOM object.
Requirements	L5.PRP.GEN
Success Criteria	Generate produces a syntactically valid PDS Product Label else indicates where the input is invalid.

Test Case ID	PRV.1
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. Validate is built upon an API for validation.
Requirements	L5.PRP.VA.1, L5.PRP.VA.2, L5.PRP.VA.5, L5.PRP.VA.6, L5.PRP.VA.9, L5.GEN.4
Success Criteria	Validation tool validates a file or all eligible products in a directory tree. When validating a product, a label, or a schema, indicates which schemas it utilized during the validation. Ensures that a product label is well-formed XML and conforms to its schemas.

Test Case ID	PRV.2
Description	Verify that a referenced file exists.
Requirements	L5.PRP.VA.10
Success Criteria	Validation tool verifies whether a schema is well-formed and conformant to its own schema.

Test Case ID	PRV.6
Description	Accept schema file specified by file or directory
Requirements	L5.PRP.VA.7
Success Criteria	Label file validates against the schema specified.

Test Case ID	REG.1
Description	Validate and accept metadata to register an artifact or modify an artifact's registration, query for a registered artifact, delete a registered artifact. Use the REST-based API.
Requirements	L5.REG.1, L5.REG.4, L5.REG.5, L5.REG.13, L5.REG.14, L5.GEN.3
Success Criteria	Registry service validates and accepts metadata for an artifact in a defined format, consistent with the appropriate schema for the artifact. Registering an Inventory artifact should allow locating and auditing the artifact. Registering a Dictionary artifact should be reflected in the Information Model. Registering a Document artifact, e.g. a

	schema, should store the file and make the document available. Registering a Service artifact should document and promote the service.

Test Case ID	REG.2
Description	Relate artifact registrations.
Requirements	L5.REG.2
Success Criteria	Registry service relates together multiple artifacts during their registrations, whether as a batch or as individual registrations.

Test Case ID	REG.3
Description	Maintain policies for classes of artifacts, i.e. all classes of artifacts capture a base set of metadata, in the form of XML attributes: objectType, guid as well as metadata specific to each artifact class.
Requirements	L5.REG.3
Success Criteria	Registry service defines separate policies for each class of artifact. Changes to the policies of a class can reflect in the validation of a registered artifact in that class.

Test Case ID	REG.4
Description	Assign a global unique identifier to a registered artifact with no global unique identifier, query for the registered artifact, delete the registered artifact.
Requirements	L5.REG.6, L5.REG.13, L5.REG.14
Success Criteria	Registry service assigns each registered artifact, including multiple versions of an artifact, a global unique identifier.

Test Case ID	REG.5
Description	Assign a version to a registered artifact based on its unique identifier.
Requirements	L5.REG.7
Success Criteria	Registry service assigns each registered artifact, especially multiple versions of an artifact, a version identifier, derivable from its logical identifier.

Test Case ID	REG.6
Description	Allow replacement, approval, deprecation, undeprecation, and verification of registered artifacts.
Requirements	L5.REG.9, L5.REG.10, L5.REG.11, L5.REG.12
Success Criteria	Registry service provides these standard functions with expected results. Initial registration results in an artifact being in an unapproved state.

Test Case ID	REG.9
Description	Test scalability of registry.

Requirements	L5.REG.1
Success Criteria	Contents and checksums of the registry artifacts are examined.

Test Case ID	RPT.1
Description	Periodically receive metrics in defined log files via a secure transfer protocol. Aggregate and store in a repository.
Requirements	L5.RPT.1, L5.RPT.2, L5.RPT.3, L5.RPT.4, L5.RPT.6, L5.GEN.5, L5.GEN.6
Success Criteria	Following operator configuration, Report Service gets its metrics periodically in log files generated by web and FTP servers, PDS4 services, and node-specific services. Use tools to view the repository to compare against log. External applications and services provide the metrics.

Test Case ID	RPT.2
Description	Discover product-related metrics. Aggregate and store in a repository.
Requirements	L5.RPT.5, L5.RPT.6
Success Criteria	Report Service queries Registry Service for metrics regarding products instead of transfers or views. Use tools to view the repository to compare against tools to view the registry.

Test Case ID	RPT.3
Description	Control access to the repository and to the user interface.
Requirements	L5.RPT.7
Success Criteria	Authenticate for proper access, and report unsuccessful attempts.

Test Case ID	RPT.4
Description	Tailor reports and report templates. Save report templates for reuse. Periodically generate reports on PDS archiving and distribution from saved templates.
Requirements	L5.RPT.8, L5.RPT.9, L5.RPT.10
Success Criteria	Allow configuration of content, representation, filter, and scope of reports and report templates. Generated reports, even when generated from saved templates, should match configuration.

Test Case ID	RPT.5
Description	Export report.
Requirements	L5.RPT.11
Success Criteria	Specify export format and see that report is generated in the specified format.

Test Case ID	SCH.2
Description	Comply with Section 508 and adhere to WCAG level A
Requirements	L5.SCH.3
Success Criteria	Successful go through JPL website release process

Test Case ID	SCH.3
Description	Provide HTTP-based API to enter queries and return results. The browser utilizes the REST-based API.
Requirements	L5.SCH.4
Success Criteria	See search results after using HTTP-based API.

Test Case ID	SCH.5
Description	Search based on a sequence of open text keywords. Do so in a browser.
Requirements	L5.SCH.6, L5.SCH.1
Success Criteria	See reasonable results based on text such as “Cassini”.

Test Case ID	SCH.6
Description	Search based on constraints on specific indexes, and narrow results based on more constraints. Support ordering of results based on specified criteria.
Requirements	L5.SCH.7, L5.SCH.8. L5.SCH.9
Success Criteria	Return results match constraint criteria

Test Case ID	SCH.7
Description	Provide results in the form of URIs with metadata describing each URI
Requirements	L5.SCH.10, L5.SCH.11
Success Criteria	Returned web page has clickable links with text describing the link.

Test Case ID	SEC.1
Description	Create, update, or delete a user identity and a group identity.
Requirements	L5.SEC.4, L5.SEC.6
Success Criteria	Security service provides these standard functions. Tools to view identities verify each activity.

Test Case ID	SEC.2

Description	Add or remove a user from a group.
Requirements	L5.SEC.7
Success Criteria	Security service allows an operator of the system to add or remove a user from a group. The user should subsequently be able or unable to access capabilities specific to the group.

Test Case ID	SEC.3
Description	Capture identifying information associated with a user identity.
Requirements	L5.SEC.5
Success Criteria	Security service captures identifying information through Test Case SEC.1. Tools to view identities should show the information.

Test Case ID	SEC.4
Description	Encrypt transmission of identifying credentials.
Requirements	L5.SEC.2
Success Criteria	Capture network packets generated during SEC.4 to show encryption. OR trust that the protocol used encrypts.

Test Case ID	SEC.5
Description	Authenticate and authorize user.
Requirements	L5.SEC.1, L5.SEC.3
Success Criteria	Service authorizes valid users, denies invalid users

4 Requirements Traceability

This following lists the requirement number, the ID of the planned test case that tests the requirement, and the system component that the requirement applies to. The first column of the table is just a count of the requirements.

For Test case specific procedures, please refer to the test procedure and report document.

Count	System Component	Requirement #	Test case ID
1	General System	L5.GEN.1	GEN.1
2	General System	L5.GEN.2	GEN.1
3	General System	L5.GEN.3	REG.1, SCH.3
4	General System	L5.GEN.4	PRV.1
5	General System	L5.GEN.5	RPT.1
6	General System	L5.GEN.6	RPT.1
7	General System	L5.GEN.9	GEN.5
8	General System	L5.GEN.10	AATESTME.4
9	General System	L5.GEN.11	GEN.7
10	Harvest Tool	L5.HVT.1	AAFUNCTION.3, HVT.1, HVT.2
11	Harvest Tool	L5.HVT.2	AAFUNCTION.3, HVT.1
12	Harvest Tool	L5.HVT.3	HVT.2
13	Harvest Tool	L5.HVT.4	AAFUNCTION.3, HVT.1, HVT.2
14	Harvest Tool	L5.HVT.5	AAFUNCTION.3, HVT.1, HVT.2
15	Harvest Tool	L5.HVT.6	AAFUNCTION.3, HVT.1, HVT.2
16	Harvest Tool	L5.HVT.7	AAFUNCTION.3, HVT.1, HVT.2
17	Harvest Tool	L5.HVT.8	AAFUNCTION.3, HVT.1, HVT.2
18	Prep: Design Tool	L5.PRP.DE.1	AAFUNCTION.1
19	Prep: Design Tool	L5.PRP.DE.2	AAFUNCTION.1
20	Prep: Design Tool	L5.PRP.DE.3	AAFUNCTION.1
21	Prep: Design Tool	L5.PRP.DE.4	AAFUNCTION.1
22	Prep: Design Tool	L5.PRP.DE.5	AAFUNCTION.1
23	Prep: Design Tool	L5.PRP.DE.6	AAFUNCTION.1
24	Prep: Design Tool	L5.PRP.DE.7	AAFUNCTION.1
25	Prep: Validation Tool	L5.PRP.VA.1	AAFUNCTION.2, PRV.1
26	Prep: Validation Tool	L5.PRP.VA.2	AAFUNCTION.2, PRV.1
27	Prep: Validation Tool	L5.PRP.VA.3	AAFUNCTION.2
28	Prep: Validation Tool	L5.PRP.VA.5	AAFUNCTION.2, PRV.1
29	Prep: Validation Tool	L5.PRP.VA.6	AAFUNCTION.2, PRV.1

30	Prep: Validation Tool	L5.PRP.VA.7	AAFUNCTION.2, PRV.6
31	Prep: Validation Tool	L5.PRP.VA.9	AAFUNCTION.2, PRV.1
32	Prep: Validation Tool	L5.PRP.VA.10	PRV.2
33	Registry Service	L5.REG.1	AAFUNCTION.3, REG.1, REG.9
34	Registry Service	L5.REG.2	AATESTME.7, REG.2
35	Registry Service	L5.REG.3	REG.3
36	Registry Service	L5.REG.4	AATESTME.1, REG.1
37	Registry Service	L5.REG.5	REG.1
38	Registry Service	L5.REG.6	AAFUNCTION.3, AATESTME.3, REG.4
39	Registry Service	L5.REG.7	REG.5
40	Registry Service	L5.REG.8	AAFUNCTION.3
41	Registry Service	L5.REG.9	AATESTME.6, REG.6
42	Registry Service	L5.REG.10	REG.6
43	Registry Service	L5.REG.11	REG.6
44	Registry Service	L5.REG.12	REG.6
45	Registry Service	L5.REG.13	AATESTME.6, AATESTME.8, REG.1, REG.4
46	Registry Service	L5.REG.14	AATESTME.1, AATESTME.8, REG.1, REG.4
47	Report Service	L5.RPT.1	RPT.1
48	Report Service	L5.RPT.2	RPT.1
49	Report Service	L5.RPT.3	RPT.1
50	Report Service	L5.RPT.4	RPT.1
51	Report Service	L5.RPT.5	RPT.2
52	Report Service	L5.RPT.6	RPT.1, RPT.2
53	Report Service	L5.RPT.7	RPT.3
54	Report Service	L5.RPT.8	RPT.4
55	Report Service	L5.RPT.9	RPT.4
56	Report Service	L5.RPT.10	RPT.4
57	Report Service	L5.RPT.11	RPT.5
58	Search Service	L5.SCH.1	AAFUNCTION.4, SCH.5
59	Search Service	L5.SCH.3	SCH.2
60	Search Service	L5.SCH.4	SCH.3
61	Search Service	L5.SCH.5	AAFUNCTION.4, SCH.4
62	Search Service	L5.SCH.6	AAFUNCTION.4, SCH.5
63	Search Service	L5.SCH.7	SCH.6
64	Search Service	L5.SCH.8	AAFUNCTION.4, SCH.6
65	Search Service	L5.SCH.9	AAFUNCTION.4, SCH.6
66	Search Service	L5.SCH.10	AAFUNCTION.4, SCH.7
67	Search Service	L5.SCH.11	AAFUNCTION.4, SCH.7

68	Search Service	L5.SCH.12	AAFUNCTION.4
69	Security Service	L5.SEC.1	AATESTME.4
70	Security Service	L5.SEC.2	SEC.4
71	Security Service	L5.SEC.3	AATESTME.4
72	Security Service	L5.SEC.4	SEC.1
73	Security Service	L5.SEC.5	SEC.3
74	Security Service	L5.SEC.6	SEC.1
75	Security Service	L5.SEC.7	SEC.2
76	Catalog Tool	L5.CAT.CMP	CTLG.1
77	Catalog Tool	L5.CAT.VAL	CTLG.2
78	Catalog Tool	L5.CAT.ING	CTLG.3
79	Prep: Generate Tool	L5.PRP.GEN	PRG.1

5 Configuration Management and Issue Tracking

Build 3b release will be uniquely identified and under configuration management. PDS Configuration Management (CM) process will be utilized. It will be followed and maintained by the Operations Team who will act as the configuration management process engineer.

The established PDS JIRA system will be used to capture discrepancies found during testing. The system is located at:

http://oodt.jpl.nasa.gov/jira/

6 Test Environment

Build 3b integration and test environment encompasses the following:

Hostname	OS	Memory	Application
localhost (mac)	Mac OS X 10.6.8	4GB RAM	Design, Generate, Validate, Harvest
potato	Linux	24GB	Registry, Security, Storage, Transport
pdsbeta	Linux	16GB	Search
pdsops	Linux	12GB	Report

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 MC – PDS Management Council
SDD – Software Design Document
SRD – Software Requirements Document