PDS B13.1 TRR

PDS Engineering Node

Exported on 07/26/2023

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3 Review Board

Review Board Chair	Scott Markham
Chief Engineer	Costin Radulescu/Kyran Owen-Mankovich (Delegate)
Assurance Engineer	Eva Bokor
Security Systems Engineer	Mike Pajevski
Task Manager	Jordan Padams
Test Engineer	Gary Chen/Miguel Pena
Other Stakeholders	Kevin Grimes - Cartography and Imaging Sciences Node (not present) Dan Scholes - Geoscience Node at Wash U (not present) Mike Drum – SBN at Planetary Science Institute (not present)

4 Software Overview

Work Product	DMS Doc and Revision ID	DMS Document Status
Test Plan	https://pds-engineering.jpl.nasa.gov/content/build_13.1_it_deliverables	Version 1.0
PDS General System Software Requirements Document (SRD) version 1.1	https://pds-engineering.jpl.nasa.gov/file/pds4-system-reqs.pdf-0 https://pds-engineering.jpl.nasa.gov/file/ds4-harvest-design.pdf-0 https://pds-engineering.jpl.nasa.gov/file/pds4-preparation-design.pdf-0 https://pds-engineering.jpl.nasa.gov/file/pds4-registry-design.pdf-0 https://pds-engineering.jpl.nasa.gov/file/pds4-report-design.pdf-0 https://pds-engineering.jpl.nasa.gov/file/pds4-search-design.pdf-0 https://pds-engineering.jpl.nasa.gov/file/pds4-security-design.pdf-0, as found on https://pds-engineering.jpl.nasa.gov/content/key-documents https://github.com/NASA-PDS-Incubator/pds-deep-archive/blob/master/docs/pds4_nssdca_delivery_design_20191219.docx and https://docs.google.com/spreadsheets/d/18oqtg3DEo2KrgvBOWLSOuqF2uZtq2XmByJwUknYSZUQ/edit#gid=1170315169	Released
Test Procedures	*To be developed after TRR*	N/A
Test Anomaly & Issues (GitHub Issues)	Issues are tracked under each individual component repository, e. g. https://github.com/NASA-PDS See Release Description for links to specific repositories.	Anomalies found during system test cycles. Task tracking.

Test Support Tools	N/A	N/A
Test Report	*To be developed after testing is completed*	N/A
System Deployment Guide	See individual tool Installation Guides.	N/A
Release Description	[1]https://[2]nasa-pds.github.io[3]/releases/13.1/rdd.html	N/A

1 https://nasa-pds.github.io/releases/13.0/rdd.html
2 http://nasa-pds.github.io
3 https://nasa-pds.github.io/releases/13.1/rdd.html

5 Commitments

See[4]B13.1 RDD. Any tasks that do not contain a "badge" in the I&T column are either sub-tasks of a larger requirement / bug fix, or a sustaining task.

4 https://nasa-pds.github.io/releases/13.1/rdd.html

6 Improvements

See[5]B13.1 RDD. Any tasks that do not contain a "badge" in the I&T column are either sub-tasks of a larger requirement / bug fix, or a sustaining task.

5 https://nasa-pds.github.io/releases/13.1/rdd.html

7 Defect Corrections

See[6]B13.1 RDD. Any tasks that do not contain a "badge" in the I&T column are either sub-tasks of a larger requirement / bug fix, or a sustaining task.

6 https://nasa-pds.github.io/releases/13.1/rdd.html

8 Sustaining Activities

See[7]B13.1 RDD. Any tasks that do not contain a "badge" in the I&T column are either sub-tasks of a larger requirement / bug fix, or a sustaining task.

7 https://nasa-pds.github.io/releases/13.1/rdd.html

9 Other

None

10 Documentation

These are not explicitly denoted in the RDD or task descriptions. Any documentation updates requiring I&T inspection will be tagged the same as other improvements.

11 Test Objectives

Ensure modified tools are

- Functioning correctly
- Meeting user needs
- Meeting requirements

12 Test Environment

- Command line tools will be tested on the terminal app in Mac OS.
- When testing API calls, the server will be launch in the docker container.
- Dev team is developing/testing on the dev server with developer's test data, and I&T team is testing on docker servers with test data included.

The software tested can be run on any machine with sufficient resources. At EN:

- Macbook running macOS 13.2.1, 32GB memory
- Macbook running macOS 13.2.1, 16GB memory
- [8]pds-int.jpl.nasa.gov, Oracle Linux 8.7, 16GB memory
- Docker container, Debian GNU/Linux 11 (bullseye)

8 http://pds-int.jpl.nasa.gov

13 Key/New Test Cases

See[9] B13.1 RDD.

9 https://nasa-pds.github.io/releases/13.1/rdd.html

14 Test Personnel

Person	Role	Assignment	Availability
Gary Chen	Lead EN I&T Tester	Lead PDS I&T	0.45/40
Miguel Pena	EN I&T Tester	Support PDS I&T	0.5/40

15 Test Effort Rationale

- The total estimated time to execute the test procedures is 92 hours.
- With two part time testing engineers, it will take about three weeks to finish the tests.

#	Test ID	Mission	Tester	Days to Perform Test
1	Pds4 Information Model	PDS	MPena	2
2	validate	PDS	MPena	3
3	registry / harvest, Registry-Common/Registry-mgr	PDS	GChen	6
4	api/api-client	PDS	GChen	3
5	doi service/doi-ui	PDS	GChen	2
6	wds-web, portal-tasks,	PDS	GChen	3
				Total 19 days

16 Test Constraint And Risks

These planned tests fully depend on Registry Docker fully functioning, including bringing up swagger web and loading test data from existing test folders.

- IF installation and configuration of external software packages goes poorly THEN testing of the registry will halt until solved WITH LIKELIHOOD OF 50%.
- IF software changes and fixes come in THEN those tests will need to be rerun WITH LIKELIHOOD of 90% and CONSEQUENCE OF resetting the number of days needed for testing.
- IF DataCite's interface works poorly THEN many components of DOI service will halt WITH LIKELIHOOD of 90%.
- IF documentation of pds-api-client is not complete THEN testing of the pds-api-client will halt until solved WITH LIKELIHOOD OF 90%.

17 Action Item Status

Action Item	Status	Comment
MGSSAITS-1204 Setup Meeting to determine official PDMS document repository	Open	Meeting by end of this FY.
MGSSAITS-1205 Meet with Mike Pajevski to discuss Semmle scans on java script	Open	Scans added to all repos. Email sent to Mike P. and Elyssa on 4/3 with links to scan results.
MGSSAITS-1206 PDS should follow MGSS standard for reporting defects at a DDR	Open	Done as of B13.0 DDR.

18 Deviations

See Deviations reviewed and approved by PDS Software Working Group.

https://github.com/NASA-PDS/pds-swg/issues?q=is%3Aissue+label%3Achange-request+label%3AB13.1+