

PDS B14.1 TRR

Agenda

Contents

Review Board

Review Board Chair	Scott Markham
Chief Engineer	Kyran Owen-Mankovich
Assurance Engineer	Eva Bokor
Security Systems Engineer	Mike Pajevski
Task Manager	Jordan Padams
Test Engineer	Gary Chen/Miguel Pena
Other Stakeholders	Tim Mcclanahan - PDS Project Office Dan Scholes - Geoscience Node at Wash U Mike Drum - SBN at Planetary Science Institute Jason Kang - Cartography and Imaging Sciences Node

Software Overview

Work Product	DMS Doc and Revision ID	DMS Document Status
Test Plan	https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/42093&group_by=cases:section_id&group_order=asc	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	<i>To be developed after TRR</i>	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	<i>To be developed after testing is completed</i>	N/A
System Deployment Guide	See individual tool Installation Guides.	N/A
Release Description	https://nasa-pds.github.io/releases/14.1/rdd.html	N/A

Commitments / Improvements / Defect Corrections / Sustaining Activities

See [B14.1 RDD](#). Any tasks that are either "yellow" or "green" in the I&T column are either sub-tasks of a larger requirement / bug fix, or a sustaining task that require testing.

Other

None

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.

Test Objectives

Ensure modified tools are

- Functioning correctly
- Meeting user needs
- Meeting requirements

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 13.5.2, 32GB memory
- Macbook running macOS 13.6, 16GB memory
- pds-int.jpl.nasa.gov, Oracle Linux 8.8, 16GB memory
- pds-int-win, Windows Server 2022, 18 GB memory
- Docker container, Debian GNU/Linux 11 (bullseye)

Key/New Test Cases

[See B14.1 RDD.](#)

Test Personnel

Person	Role	Assignment	Availability
Gary Chen	Lead EN I&T Tester	Lead PDS I&T	0.4/40
Miguel Pena	EN I&T Tester	Support PDS I&T	0.5/40

Test Effort Rationale

- The total estimated time to execute the test procedures is 45 hours.
- With two part time testing engineers, it will take about two weeks to finish the tests.

#	Test ID	Mission	Tester	Hours to Perform Test	Days to Perform Test
1	Pds4 Information Model	PDS	MPena	2.5	1
2	validate	PDS	MPena	10.5	3
3	ds-view, harvest, Ldd-manager, mi-lable	PDS	GChen	9	3

4	registry-api, registry-common, registry-harvest-legacy, registry-mgr-legacy	PDS	GChen	6	2
5	doi-ui, feedback-widge, pds-api-clien, planetary-data-cloud	PDS	GChen	4	1
6	registry-pds3-catalog, registry-sweepers, roundup-action, search-ui-legacy, software-issues-repo, transform	PDS	GChen	13	4
				Total 45 hours	Total 14 days

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.

Action Item Status

Action Item	Status	Comment
MGSSAITS-1204 Setup Meeting to determine official PDMS document repository	Closure pending	
MGSSAITS-1205 Meet with Mike Pajevski to discuss Semmle scans on java script	Closure pending	
MGSSAITS-1206 PDS should follow MGSS standard for reporting defects at a DDR	Closure pending	Done as of B13.0 DDR.

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%3AB14.1>