PDS B14.0 TRR

Agenda

Contents

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	Tim Mcclanahan - PDS Project Office Kevin Grimes - Cartography and Imaging Sciences Node Dan Scholes - Geoscience Node at Wash U Mike Drum – SBN at Planetary Science Institute

Software Overview

Work Product	DMS Doc and Revision ID	DMS Document Status
Test Plan	https://pds-engineering.jpl.nasa.gov/content/build_14.0_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	https://nasa-pds.github.io/releases/14.0/rdd.html	N/A

Commitments / Improvements / Defect Corrections / Sustaining Activities

See B14.0 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
- Docker container, Debian GNU/Linux 11 (bullseye)

Key/New Test Cases

See B14.0 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 50 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	pds-api / harvest	PDS	GChen	1

4	registry api	PDS	GChen	3
5	doi service,devops	PDS	GChen	1
6	Registry-loader, Data-upload-manager, registry-harvest-legacy, registry-loader, registry-mgr-legacy, registry-pds3-catalog, registry-sweepers, search-api-notebook, portal-tasks	PDS	GChen	5
				Total 15 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%3AB14.0