

PDS B15.0 DDR

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2. Review Board

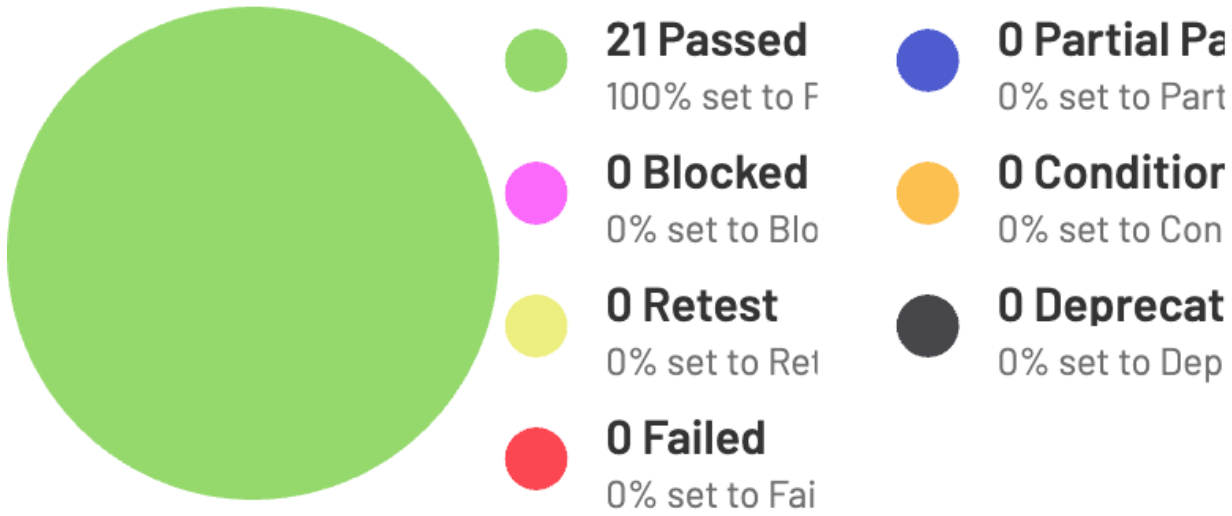
Review Board Chair	Jamie Seung Shin
Chief Engineer	Michele Vogt
Deputy Chief Engineer	Kyran Owen-Mankovich
Assurance Engineer	Eva Bokor
Security Systems Engineer	Mike Pajevski
Task Manager	Jordan Padams
Test Engineer	Catherine Suh/Richard Chen/Ron Joyner
Other Stakeholders	Tim Mcclanahan - PDS Project Office Dan Scholes - Geoscience Node at Wash U Mike Drum – SBN at Planetary Science Institute Jason Kang - Cartography and Imaging Sciences Node

3. Software Overview

- <https://nasa-pds.github.io/releases/15.0/>
- <https://nasa-pds.github.io/releases/15.0/rdd.html>
- Test procedures and results for release 15.0 in Testrail: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48065&group_by=cases:section_id&group_order=asc

4. Commitments/Improvements/Defect Corrections

[B15.0.testrail-report-20241118.pdf](#)



- [PDS4-IM Iddtool Automated Tests Run B15.0](#)
- [Validate Automated Tests Run B15.0](#)
- [Peppi Automated Tests Run](#)
- [Registry requirements: Automated Test Run 2024-09-16 15:13:57](#)

5. Sustaining Activities

None.

6. Other

None.

7. Documentation

Architecture Description	https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/architecture/system_architecture/pds4_system_arch_spec.pdf	Complete
Design Specification	See various design docs in: https://pds-engineering.jpl.nasa.gov/content/key-documents	Complete
Management Plan	https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/PDS-SMP.pdf	Complete
Operation Concept	https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/pds4-ops-concept.pdf	Complete
Release Description	https://nasa-pds.github.io/releases/15.0/rdd.html	Complete
Release Plan	https://nasa-pds.github.io/releases/15.0/plan.html	Complete
Requirements	https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/design/system_design/pds4_system_reqs.pdf	Complete

Task Implementation Plan	https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/pds4-proj-plan-07172013.pdf	Complete
Test Plan	(1) https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48065&group_by=cases:section_id&group_order=asc (PDS.B15.0.TestRail.TRR.20241013.pdf) (2) https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48398&group_by=cases:section_id&group_order=asc&group_id=171289 (Demo Test Report B15.0 - NASA-PDS Engineering Node - Testmo.pdf)	Complete
Test Report	(1) Manual: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48065&group_by=cases:section_id&group_order=asc (2) Automation: <ul style="list-style-type: none"> • PDS4-IM Iddtool Automated Tests Run B15.0 • Validate Automated Tests Run B15.0 • Peppi Automated Tests Run • Registry requirements: Automated Test Run 2024-09-16 15:13:57 	Complete
User Guide	See individual tool documentation. Links in RDD	Complete

8. Additional Testing

8.1.1. Test Automation

8.1.1.1. Postman Automation For Registry

Registry API test results: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48398&group_by=cases:section_id&group_order=asc

15% skipped because the scope of the application has been temporarily reduced during a major migration to a new AWS cloud architecture. The "reduced" scope has been agreed with the PDS API working group gathering the application stakeholders.

Link to Google sheet assessing the coverage of the automated tests against the issues listed in the RDD: https://docs.google.com/spreadsheets/d/1y4SYC_05L3MJsLuvbyMRmSSoiyucuay5BE5J0ZA69YU/edit?usp=sharing

8.1.1.2. Validate Test Automation

Validate test results: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48884&group_by=cases:section_id&group_order=asc&group_id=232792

8.1.1.3. LDDTool Test Automation

LDD tool test results: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48885&group_by=cases:section_id&group_order=asc

At the time of the report (11/08/2024) one error was remaining. TO DO

8.1.1.4. Peppi Test Automation

Test report: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/runs/view/48854&group_by=cases:section_id&group_order=asc&group_id=232561

The links between the tests and the github tickets/requirements is not provided in this version. But the specific code test coverage is 100%:

from the pytest automated test report:		
----- coverage: platform darwin, python 3.11.4-final-0 -----		
Name	Stmts	Miss
Cover		

--		
src/pds/peppi/client.py	113	0
100		

9. Test Case Explanations

N/A.

10. Software Status

All the PDS Engineering Node software are managed (code, documentations, tickets) under github, in a single organization:

CM Tool	CM Repository
github	https://github.com/nasa-pds

The list of the components/version released for build 15.0 can be found in the [software release catalog](#).

Open action to review this with TBD person from MGSS for specific requirements and tools to do so (e.g. SLOC).

11. Open Defect Summary

Rating	Definition	Opened Since Previous Release	Known Open Bugs
Critical	Defect makes the SW unusable for mission operations. Major functions do not work or fail over the course of normal operations.	12	2
Major	Defect has significant impact on usability of delivered software for mission operations. User experience is difficult and/or cumbersome. Workaround available is arduous.	17	0
Moderate	Defect has moderate to mild impact on usability of delivered software for mission operations. User experience is degraded but workable.	36	10
Minor	Defect means software does not work as originally intended, but the defect has little impact on the usability of the delivered software.	7	1

Defect Tracking Metrics

All known bugs with possible work-arounds for users are available on the release notes for each released component. <https://nasa-pds.github.io/releases/15.0/index.html>

Critical or Major Open Bugs

Bug	Comments
NASA-PDS/registry-sweepers#124 sweepers not run(ning) against geo-prod	This issue is on-hold until sweepers component runs again on the new Registry setup
NASA-PDS/registry-sweepers#148 Unable to search for `cassini` LDD attributes in ISS datasets	This is being worked on but not closed yet.

No work-around for these issues: this results in a degraded behavior of our API where newly uploaded products would not be fully searchable. This is acceptable because our partners loading data were not fully able to load new products while we are fine-tuning the harvest process with them.

12. Action Item Status

1. [MGSSAITS-1722](#) SQA: PDS 14.0 DDR: The task should update the software Classification record

13. Deviations

None.

14. Security Impact Analysis

Network security	
Confirmation that existing ports were reviewed and disabled if no longer needed:	Confirmed by S. Neely on 05/29/2024
Description of additional ports required in release:	Registry Security Impact Analysis
Description of security of additional ports (encryption, authentication, etc):	Registry Security Impact Analysis
Software security	
Software scan date and method:	https://github.com/NASA-PDS/software-issues-repo/issues/97
Critical and High vulnerability mitigation:	https://github.com/NASA-PDS/software-issues-repo/issues/97