

PDS B15.1 DDR

PDS Engineering Node

Exported on 06/03/2025

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1 1. Agenda

2 2. Review Board

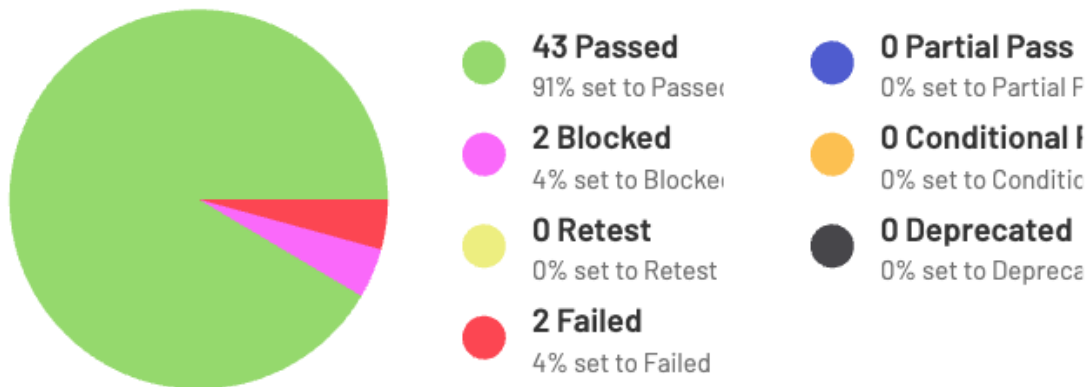
Review Board Chair	Jamie Seung Shin
Chief Engineer	Michele Vogt
Deputy Chief Engineer	Kyran Owen-Mankovich
Assurance Engineer	Eva Bokor
Security Systems Engineer	Mike Pajevski
Task Manager	Jordan Padams
Test Engineer	Catherine Suh/Richard Chen/Ron Joyner
Other Stakeholders	Dan Scholes - Geoscience Node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

3 3. Software Overview

- <https://nasa-pds.github.io/releases/15.1/>
- <https://nasa-pds.github.io/releases/15.1/rdd.html>
- Test plan and results for release 15.1 in Testrail: <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/49478>

4 4. Commitments/Improvements/Defect Corrections

[B15.1.testrail-report-20250602.pdf](#)¹



¹ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1.testrail-report-20250602.pdf?api=v2&modificationDate=1748898151000&version=2>

5 5. Sustaining Activities

None.

6 6. Other

None.

7 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 ²	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/15.1/rdd.html	Complete
Release Plan	https://nasa-pds.github.io/releases/15.1/rdd.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

² <https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/PDS-SMP.pdf>

Test Plan	(1) https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/49478 • (a) B15.1 - Manual Tests - Requirements - TestRail.20250529.pdf³ • (b) B15.1 - Manual Tests - Bugs - Critical - TestRail.20250602.pdf⁴ • (c) B15.1 - Manual Tests - Bugs - High - TestRail.20250602.pdf⁵	Complete
Test Report	(1) Manual: https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/49478 (2) Automation: • B15.1 PDS4 IM LDDTool Automated Tests Run - TestRail.20250529.pdf⁶ • B15.1 Peppi Automated Tests Run - TestRail.20250529.pdf⁷ • Registry requirements_ Automated Test Run 2025-05-29 15_41_14 - TestRail.pdf⁸ • B15.1 Validate Automated Tests Run - TestRail.20250530.pdf⁹	Complete
User Guide	See individual tool documentation. Links in RDD ¹⁰	Complete

³ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1%20-%20Manual%20Tests%20-%20Requirements%20-%20TestRail.20250529.pdf?api=v2&modificationDate=1748538681000&version=1>

⁴ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1%20-%20Manual%20Tests%20-%20Bugs%20-%20Critical%20-%20TestRail.20250602.pdf?api=v2&modificationDate=1748886623000&version=1>

⁵ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1%20-%20Manual%20Tests%20-%20Bugs%20-%20High%20-%20TestRail.20250602.pdf?api=v2&modificationDate=1748898069000&version=1>

⁶ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1%20PDS4%20Information%20Model%20LDDTool%20Automated%20Tests%20Run%20-%20TestRail.20250529.pdf?api=v2&modificationDate=1748545714000&version=1>

⁷ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1%20Peppi%20Automated%20Tests%20Run%20-%20TestRail.20250529.pdf?api=v2&modificationDate=1748546796000&version=1>

⁸ https://wiki.jpl.nasa.gov/download/attachments/1069091834/Registry%20requirements_%20Automated%20Test%20Run%202025-05-29%2015_41_14%20-%20TestRail.pdf?api=v2&modificationDate=1748549501000&version=1

⁹ <https://wiki.jpl.nasa.gov/download/attachments/1069091834/B15.1%20Validate%20Automated%20Tests%20Run%20-%20TestRail.20250530.pdf?api=v2&modificationDate=1748625576000&version=1>

¹⁰ <https://nasa-pds.github.io/releases/15.1/rdd.html>

8 8. Test Case Explanations

New Issues from Failed Tests I&T

Ticket	Comments
NASA-PDS/registry-mgr#109 ¹¹ archive status does not change for all bundle members	See the next row.
NASA-PDS/registry-mgr#112 ¹² As a user, I want to update a bundle and associated collections' and products' archive status given a bundle lidvid	The expanded requirements for NASA-PDS/registry-mgr#109 ¹³ (see above). Updating a bundle's archive status does not update all its collection children and product grandchildren. However, the other aspects of this ticket have passed (i.e., updating a collection updates all its product children, and updating a product also works correctly). A new ticket has been opened for this and described in NASA-PDS/registry-mgr#134 ¹⁴ .

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.

Blocked Tests I&T

Ticket	Comments
NASA-PDS/registry-api#575 ¹⁵ As application support, I want to see in the server side logs the full query being sent to OpenSearch	Because of an AWS integration bug, the latest version of the registry-api has not been deployed in the I&T environment. This blocks the test identified here and the deployment of the upgraded version for our users. Work-around: the previous version of the registry-api works in production. The release of the newly developed features is delayed.

¹¹ <https://github.com/NASA-PDS/registry-mgr/issues/109>

¹² <https://github.com/NASA-PDS/registry-mgr/issues/112>

¹³ <https://github.com/NASA-PDS/registry-mgr/issues/109>

¹⁴ <https://github.com/NASA-PDS/registry-mgr/issues/134>

¹⁵ <https://github.com/NASA-PDS/registry-api/issues/575>

Ticket	Comments
NASA-PDS/harvest#204 ¹⁶ OpenSearch mapping conflict issue when trying to change a type ([illegal_argument_exception])	Because of an unidentified bug on registry-sweeper component, it was not possible to test expected behavior in the I&T environment. The deployment of the upgraded version is blocked until this issue is identified and fixed. Work-around: the previous version of registry-sweeper runs in production.

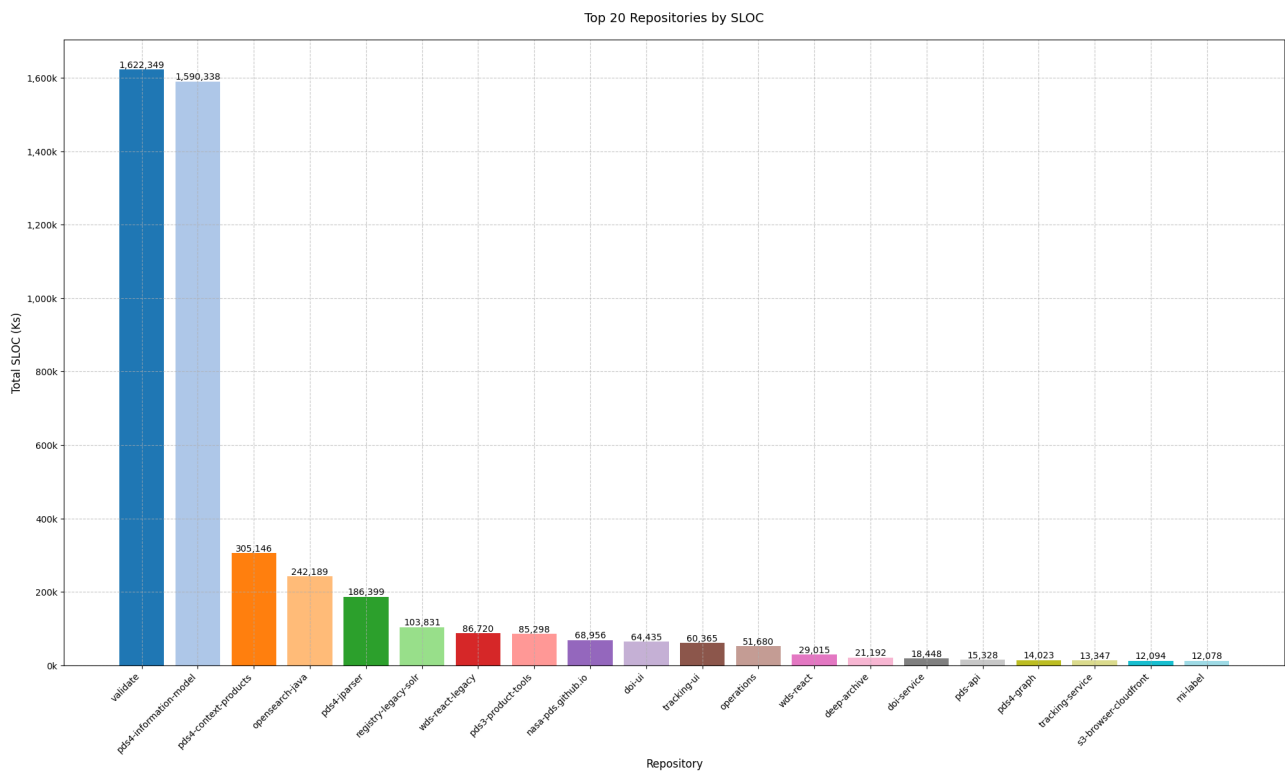
¹⁶ <https://github.com/NASA-PDS/harvest/issues/204>

9. Software Status

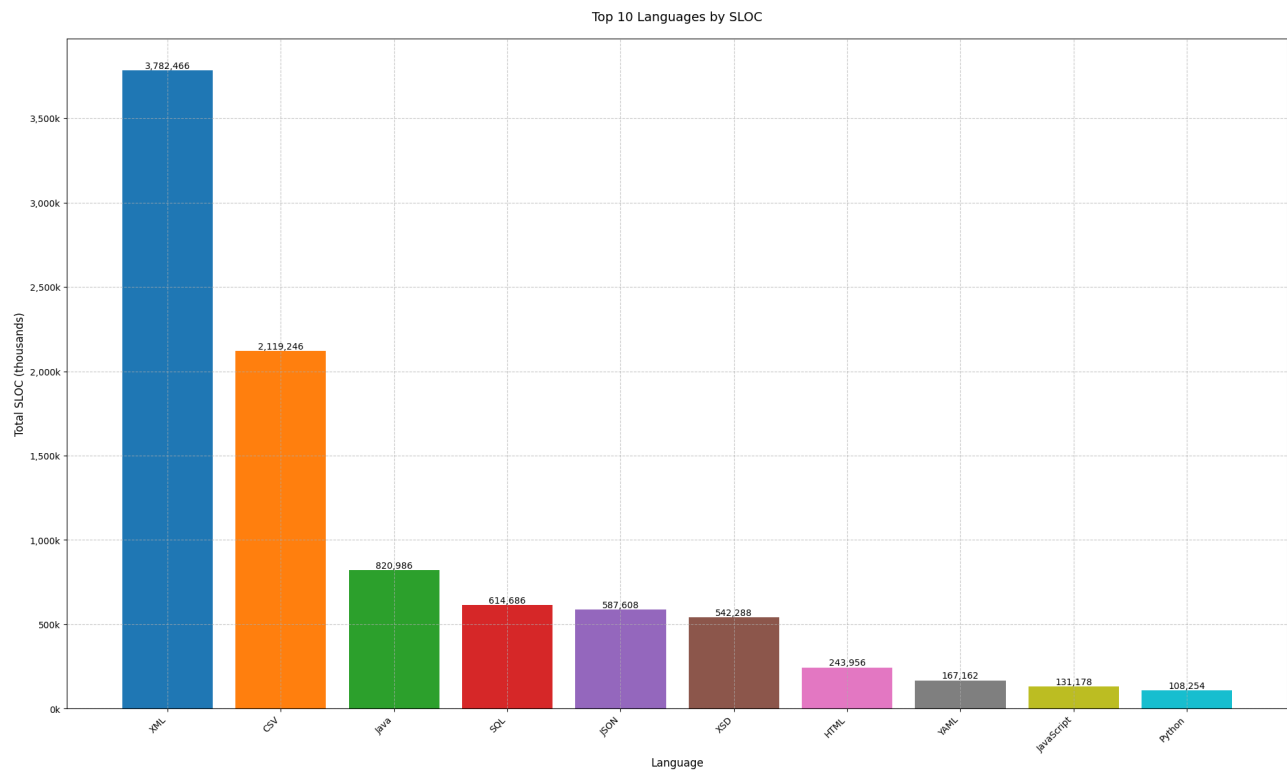
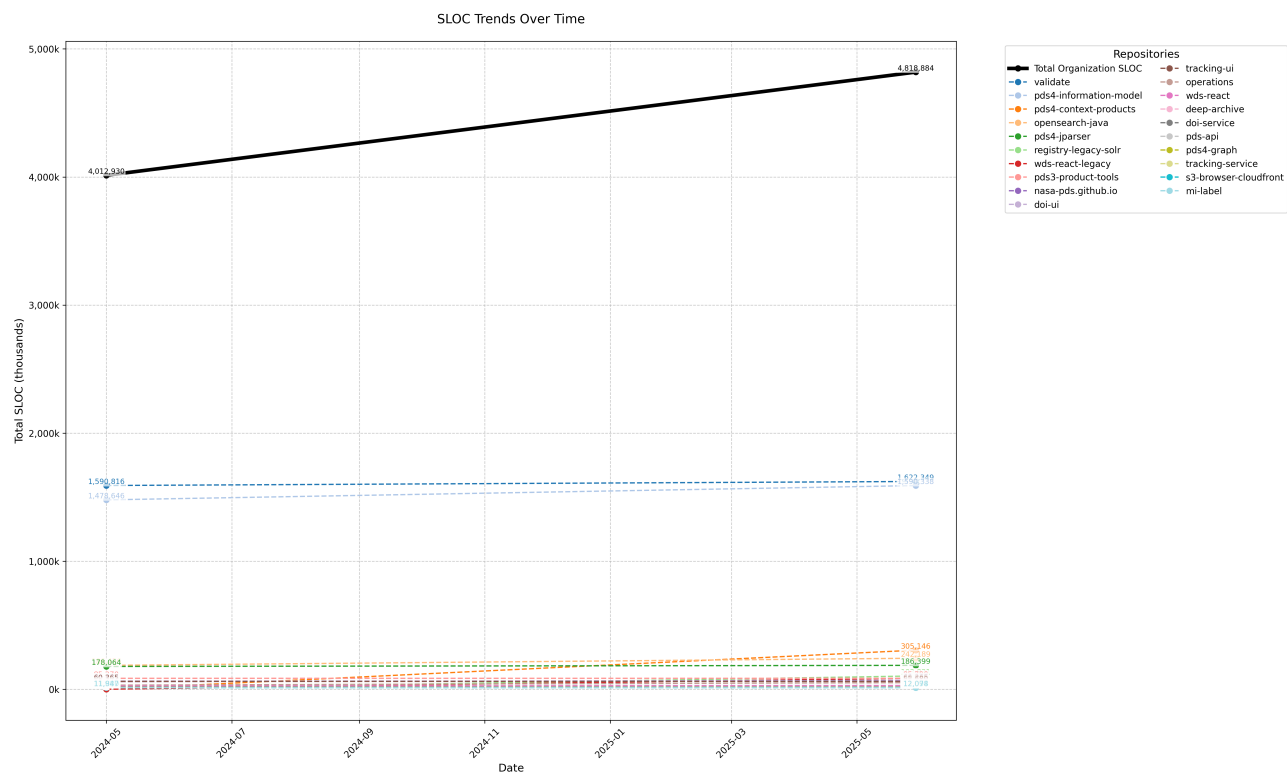
All the PDS Engineering Node software are managed (code, documentations, tickets) under github, in a single organization:

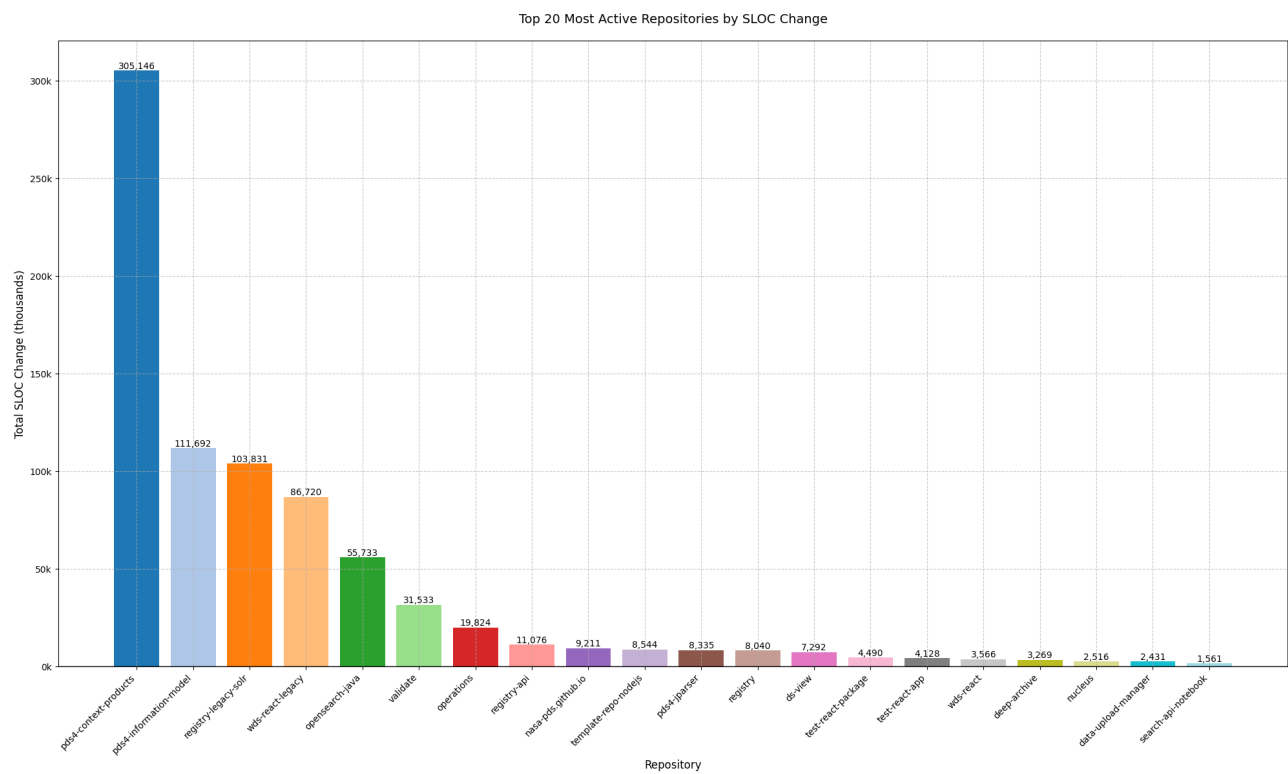
CM Tool	CM Repository
github	https://github.com/nasa-pds

The list of the components/version released for build 15.1 can be found in the [software release catalog](https://nasa-pds.github.io/releases/15.1/index.html)¹⁷.



¹⁷ <https://nasa-pds.github.io/releases/15.1/index.html>





10 10. 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.	13	0
Major	Defect has significant impact on usability of delivered software for mission operations. User experience is difficult and/or cumbersome. Workaround available is arduous.	29	0
Moderate	Defect has moderate to mild impact on usability of delivered software for mission operations. User experience is degraded but workable.	42	3
Minor	Defect means software does not work as originally intended, but the defect has little impact on the usability of the delivered software.	2	1

[Google Sheet for tracking this build over build](#)¹⁸

Critical or Major Open Bugs

Bug	Comments
None	

¹⁸ https://docs.google.com/spreadsheets/d/1PH4DhOmCFiIM_spthNcwOFI224Twlg0Rz4amkluYGLY/edit?usp=sharing

11 11. Action Item Status

Ticket	Title	Status
MGSSAITS-1871 ¹⁹	RFA: Investigate a way to waive software metrics for PDS ²⁰	See SLOC above. Ready for closeout.
MGSSAITS-1792 ²¹	RFA: PDS Software task to identify and implement automated way to capture code coverage ²²	In work. See ticket for details.
MGSSAITS-1722 ²³	SQA: PDS 14.0 DDR: The task should update the software Classification record ²⁴	Classification submitted. Ready for closeout.
MGSSAITS-1326 ²⁵	Discuss TRR & DDR Templates with Review Board Chairs ²⁶	Stale. Ready for closeout.

¹⁹ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1871>

²⁰ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1871>

²¹ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1792>

²² <https://jira.jpl.nasa.gov/browse/MGSSAITS-1792>

²³ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1722>

²⁴ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1722>

²⁵ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1326>

²⁶ <https://jira.jpl.nasa.gov/browse/MGSSAITS-1326>

12 12. Deviations

None.

13 13. 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 ²⁷
Description of security of additional ports (encryption, authentication, etc):	Registry Security Impact Analysis ²⁸
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

²⁷ <https://wiki.jpl.nasa.gov/display/PDSEN/Registry+Security+Impact+Analysis>

²⁸ <https://wiki.jpl.nasa.gov/display/PDSEN/Registry+Security+Impact+Analysis>