

PDS B16 DDR

PDS Engineering Node

Exported on 12/08/2025

Table of Contents

| | |
|--|----|
| 1. Agenda..... | 3 |
| 2. Review Board | 4 |
| 3. Software Overview | 5 |
| 4. Commitments/Improvements/Defect Corrections | 6 |
| 5. Sustaining Activities | 7 |
| 6. Other | 8 |
| 7. Documentation..... | 9 |
| 8. Test Case Explanations..... | 11 |
| 9. Software Status | 14 |
| 10. Open Defect Summary | 17 |
| 11. Action Item Status | 19 |
| 12. Deviations..... | 20 |
| 13. Security Impact Analysis..... | 21 |

1. Agenda

2. Review Board

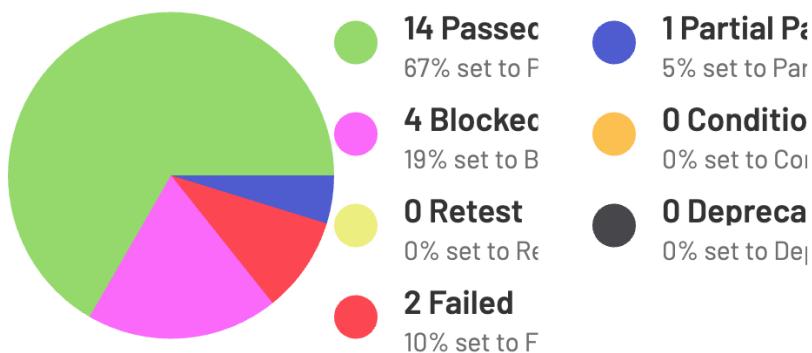
| | |
|---------------------------|---|
| Review Board Chair | Jamie Seung Shin |
| Chief Engineer | Michele Vogt |
| Deputy Chief Engineer | Kyran Owen-Mankovich |
| Assurance Engineer | Lyle Barner |
| Security Systems Engineer | Mike Pajevski |
| Task Manager | Jordan Padams |
| Test Engineer | Richard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

3. Software Overview

- Software Summary: <https://nasa-pds.github.io/releases/16/>
- Release Description Document: <https://nasa-pds.github.io/releases/16/rdd.html>
- Test plan and results for release 16 in Testrail: <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/50775>

4. Commitments/Improvements/Defect Corrections

[B16.testrail-report-20251204.pdf¹](#)



¹ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16.testrail-report-20251204.pdf?api=v2&modificationDate=1764874066000&version=1>

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 ² | Complete |
| Operation Concept | https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/design/system_design/pds4-ops-concept.pdf | 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 |
| Release Plan | https://github.com/orgs/NASA-PDS/projects/18/views/4 | Complete |
| Release Description | https://nasa-pds.github.io/releases/16/rdd.html | Complete |
| Test Plan | https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/50775 | Complete |

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

| | | |
|-------------|--|----------|
| Test Report | <p>(1) Manual: https://cae-testrail.jpl.nasa.gov/testrail/index.php?plans/view/50775</p> <ul style="list-style-type: none"> • (a) B16 - Manual Tests - Requirements - TestRail - 20251204.pdf³ • (b) B16 - Manual Tests - Bugs - High - TestRail - 20251204.pdf⁴ <p>(2) Automation:</p> <ul style="list-style-type: none"> • B16 DOI-Service Automated Tests Run - TestRail - 20251130.pdf⁵ • B16 PDS4 Information Model LDDTool Automated Tests Run - TestRail - 20251130.pdf⁶ • B16 Peppi Automated Tests Run - TestRail - 20251130.pdf⁷ • B16 Validate Automated Tests Run - TestRail - 20251130.pdf⁸ • B16 Registry Automated Test Runs - TestRail - 20251204.pdf⁹ | Complete |
| User Guide | See individual tool documentation. Links in B16 RDD ¹⁰ | Complete |

³ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20-%20Manual%20Tests%20-%20Requirements%20-%20TestRail%20-%2020251204.pdf?api=v2&modificationDate=1764874080000&version=1>

⁴ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20-%20Manual%20Tests%20-%20Bugs%20-%20High%20-%20TestRail%20-%2020251204.pdf?api=v2&modificationDate=1764874093000&version=1>

⁵ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20DOI-Service%20Automated%20Tests%20Run%20-%20TestRail%20-%2020251130.pdf?api=v2&modificationDate=1764571899000&version=1>

⁶ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20PDS4%20Information%20Model%20LDDTool%20Automated%20Tests%20Run%20-%20TestRail%20-%2020251130.pdf?api=v2&modificationDate=1764575032000&version=1>

⁷ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20Peppi%20Automated%20Tests%20Run%20-%20TestRail%20-%2020251130.pdf?api=v2&modificationDate=1764575257000&version=1>

⁸ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20Validate%20Automated%20Tests%20Run%20-%20TestRail%20-%2020251130.pdf?api=v2&modificationDate=1764574868000&version=1>

⁹ <https://wiki.jpl.nasa.gov/download/attachments/1180510566/B16%20Registry%20Automated%20Test%20Runs%20-%20TestRail%20-%2020251204.pdf?api=v2&modificationDate=1764885317000&version=1>

¹⁰ <https://nasa-pds.github.io/releases/16/rdd.html>

8. Test Case Explanations

| Test ID | RLI Type | Title | Test Result | Explanation | Criticality Assessment |
|----------------------------|-------------|---|--------------|--|---|
| C4528 606 ¹¹ | requirement | data-upload-manager#209 ¹² As a user, I can read rclone-generated checksums when checking for existing files in the staging bucket | BLOCKED | Blocked due to the tester losing access to the S3 bucket. | Categorized as must-have, but criticality of failure is LOW. Will still be deployed and Jason Kang will test. |
| C4521 435 ¹³ | requirement | pds4-information-model#939 ¹⁴ As a user, I want to easily identify which IM and LDD version the WebHelp documentation is for | PARTIAL PASS | <p>The ticket does not have clear parameters of what is "easily identifiable". Tester made the subjective call on this one. See TestRail case¹⁵ for more details.</p> <p>From Dev Team: This is the best you are going to get with the current interface without a complete redesign.</p> | Low. The requested information is not ideal, but it is available as expected. |

11 <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/cases/view/4528606>

12 <https://github.com/NASA-PDS/data-upload-manager/issues/209>

13 <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/cases/view/4521435>

14 <https://github.com/NASA-PDS/pds4-information-model/issues/939>

15 https://cae-testrail.jpl.nasa.gov/testrail/index.php?/tests/view/9655579&group_by=cases:section_id&group_order=asc&group_id=235481

| Test ID | RLI Type | Title | Test Result | Explanation | Criticality Assessment |
|----------------------------|-------------|--|-------------|--|--|
| C4523 920 ¹⁶ | requirement | harvest#261 ¹⁷ As a user, I want harvest to raise an error if an attribute is not found in a local data dictionary (LDD) | FAIL | A label was created with one erroneous label, geom:ZZZ_Geometry_Orbit, and otherwise valid data, which was then ingested with harvest. The expected behavior is for harvest to raise an error, but the ingestion successfully completed. | Medium. The bug already exists in production and does not impede use of this tool. A new ticket has been created for this at harvest#292 ¹⁸ . Will tag an incremental release when fixed. |
| C4521 438 ¹⁹ | requirement | registry#113 ²⁰ As a node operator, I want the registry schema to update autonomously / dynamically when new data is ingested | BLOCKED | Blocked because of previous error with harvest#261. | Medium. The bug already exists in production and does not impede use of this tool. Will tag an incremental release when fixed. |
| C4530 714 ²¹ | bug | registry-api#705 ²² Inconsistent support for application/vnd.nasa.pds.pds4+json response format | BLOCKED | Test requires to load data in the registry with obsolete versions of harvest to be identified. | Low. Will tag an incremental release when fixed. |

¹⁶ <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/cases/view/4523920>¹⁷ <https://github.com/NASA-PDS/harvest/issues/261>¹⁸ <https://github.com/NASA-PDS/harvest/issues/292>¹⁹ <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/cases/view/4521438>²⁰ <https://github.com/NASA-PDS/registry/issues/113>²¹ <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/cases/view/4530714>²² <https://github.com/NASA-PDS/registry-api/issues/705>

| Test ID | RLI Type | Title | Test Result | Explanation | Criticality Assessment |
|----------------------------|----------|--|-------------|--|---|
| C4527 916 ²³ | bug | registry-mgr#137 ²⁴ set-archive-status is changing the status of more products than are in the bundle | FAIL | Similar to the example in the ticket, the indicated number of updated products far outnumbers the number of actual products. | Low. A new ticket has been created for this at registry-mgr#170 ²⁵ . Will tag an incremental release when fixed. |

23 <https://cae-testrail.jpl.nasa.gov/testrail/index.php?/cases/view/4527916>

24 <https://github.com/NASA-PDS/registry-mgr/issues/137>

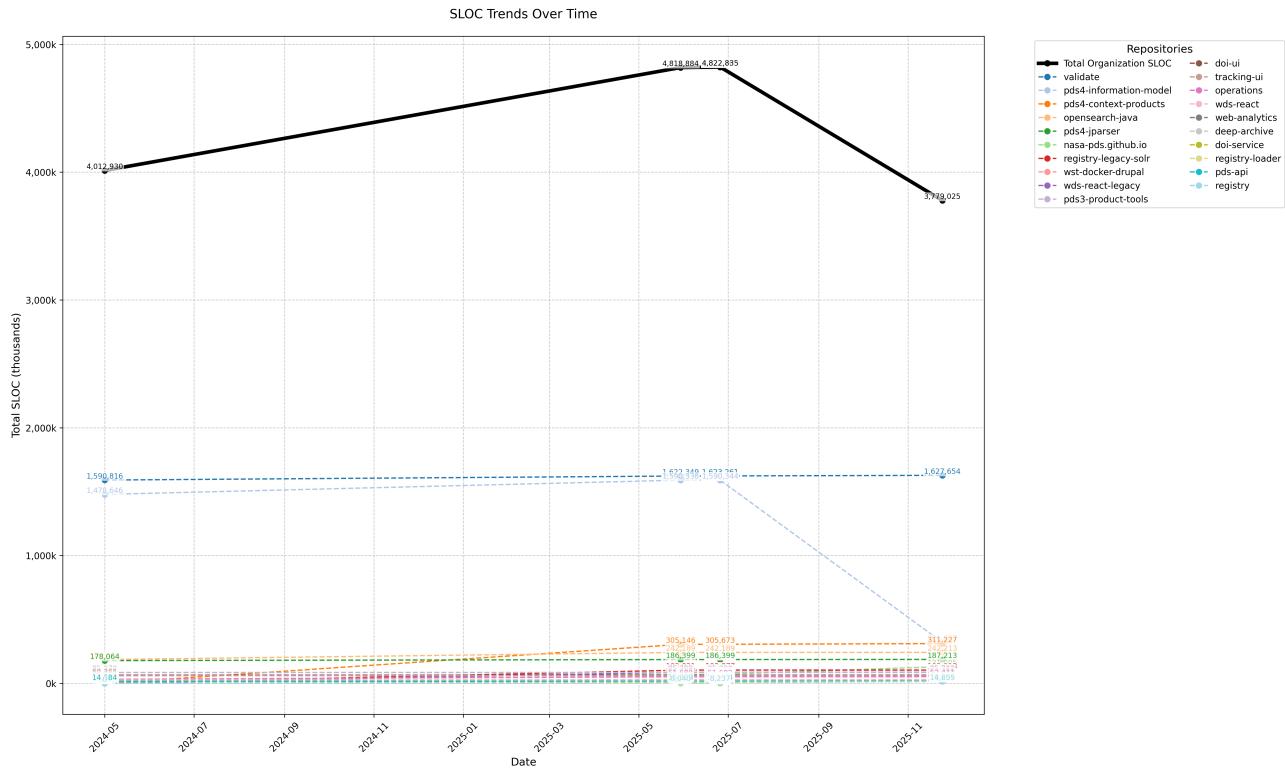
25 <https://github.com/NASA-PDS/registry-mgr/issues/170>

9. Software Status

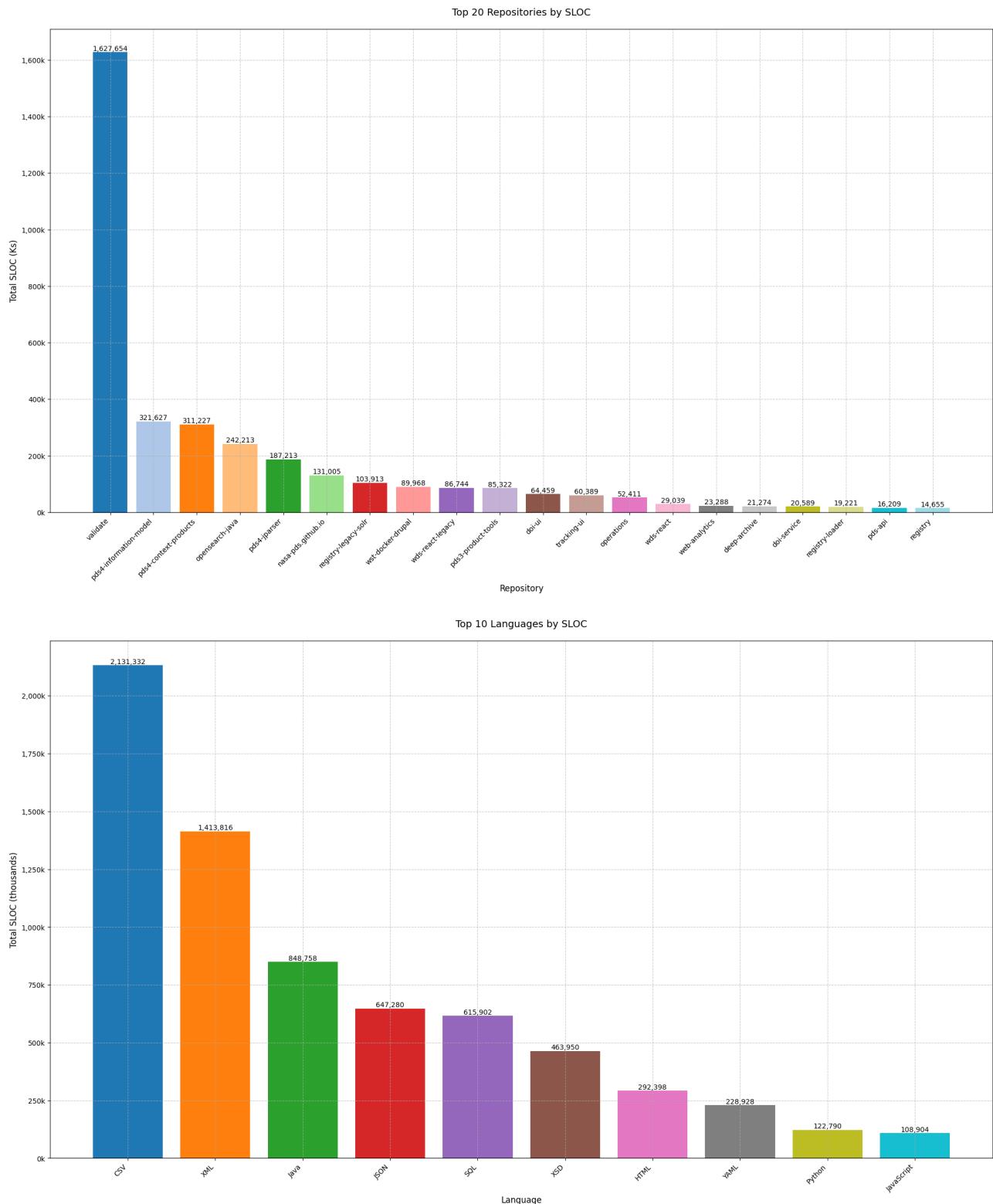
All the PDS Engineering Node software are managed (code, documentations, tickets) under github, in a single organization:

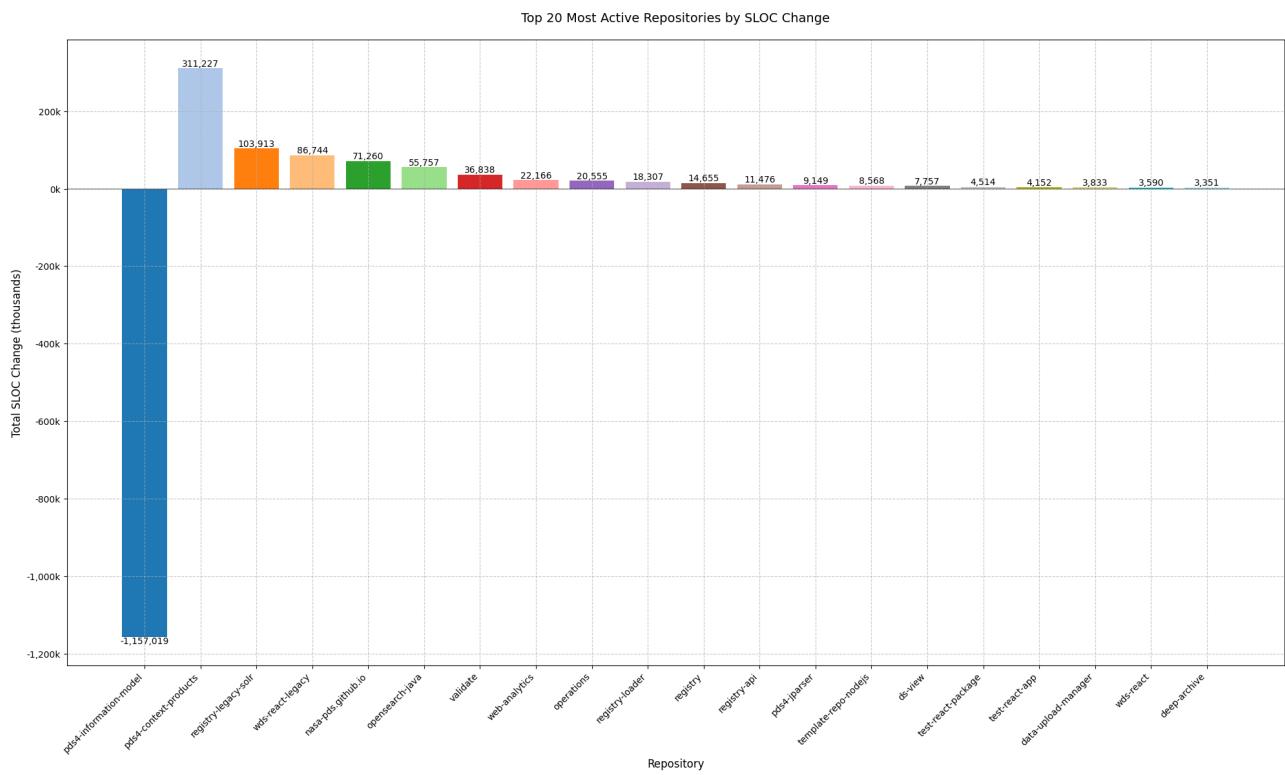
| CM Tool | CM Repository |
|---------|---|
| github | https://github.com/nasa-pds |

The list of the components/version released for build 16 can be found in the [software release catalog²⁶](#).



26 <https://nasa-pds.github.io/releases/16/>





10. Open Defect Summary

| Rating | Definition | Bugs Closed in Build | Total Open Bugs | Bugs Opened Since Last Release |
|----------|---|----------------------|-----------------|--------------------------------|
| Critical | Defect makes the SW unusable for mission operations. Major functions do not work or fail over the course of normal operations. | 1 | 1 | 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. | 21 | 3 | 23 |
| Moderate | Defect has moderate to mild impact on usability of delivered software for mission operations. User experience is degraded but workable. | 29 | 68 | 38 |
| Minor | Defect means software does not work as originally intended, but the defect has little impact on the usability of the delivered software. | 3 | 62 | 8 |
| Total | | 54 | 134 | 71 |

[Google Sheet for tracking this build over build²⁷](#)

Critical or Major Open Bugs, see <https://github.com/orgs/NASA-PDS/projects/6/views/11?filterQuery=label%3As.high%2Cs.critical+is%3Aopen+label%3AB16>

²⁷ https://docs.google.com/spreadsheets/d/1PH4Dh0mCFiLM_spthNcwOFI224Twlg0Rz4amkluYGLY/edit?usp=sharing

| Bug | Comments |
|--|---|
| Ancestry not working properly for SBN ²⁸ | A developer dedicated the full build cycle to this issue. After encountering a performance deadlock, a specific requirement was adjusted to allow progress. |
| Harvest LDD errors don't provide enough context to know what is going on ²⁹ | This bug was deprioritized due to a more critical issue. Its priority can now be adjusted to medium. |

²⁸ <https://github.com/NASA-PDS/registry-sweepers/issues/171>

²⁹ <https://github.com/NASA-PDS/harvest/issues/259>

11. Action Item Status

| Ticket | Title | Status |
|-----------------------------|---|-----------------------------------|
| MGSSAITS-1871 ³⁰ | RFA: Investigate a way to waive software metrics for PDS ³¹ | CLOSED |
| MGSSAITS-1792 ³² | RFA: PDS Software task to identify and implement automated way to capture code coverage ³³ | In work. See ticket for progress. |
| MGSSAITS-1722 ³⁴ | SQA: PDS 14.0 DDR: The task should update the software Classification record ³⁵ | CLOSED |
| MGSSAITS-1326 ³⁶ | Discuss TRR & DDR Templates with Review Board Chairs ³⁷ | CLOSED |
| MGSSAITS-1915 ³⁸ | RFA : Update and Justify Test Status in RDD | Open |

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

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

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

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

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

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

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

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

38 <https://jira.jpl.nasa.gov/browse/MGSSAITS-1915>

12. Deviations

<https://github.com/orgs/NASA-PDS/projects/18/views/9>

13. Security Impact Analysis

| Network security | |
|--|---|
| Confirmation that existing ports were reviewed and disabled if no longer needed: | Confirmed by R. Yaghoobi on 11/20/2025 |
| Description of additional ports required in release: | None |
| Description of security of additional ports (encryption, authentication, etc): | None |
| Software security | |
| Software scan date and method: | https://github.com/NASA-PDS/software-issues-repo/issues/120 |
| Critical and High vulnerability mitigation: | https://github.com/NASA-PDS/software-issues-repo/issues/120 |