

# **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

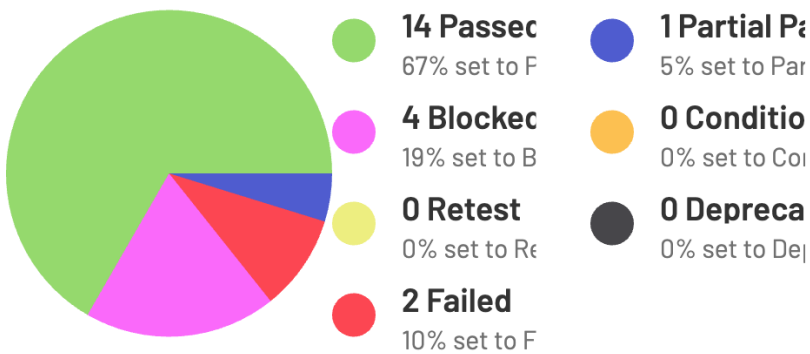
Review Board Chair	Jamie Seung Shin
Chief Engineer	Michele Vogt
Deputy Chief Engineer	Kyran Owen-Mankovich
Assurance Engineer	Lyle Barner
Security Systems Engineer	Mike Pajevski
Task Manager	Jordan Padams
Test Engineer	Richard Chen, Catherine Suh
Other Stakeholders	Dan Scholes - Geoscience Node at Wash 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.pdf](#)<sup>1</sup>



<sup>1</sup> <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	<a href="https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/architecture/system_architecture/pds4_system_arch_spec.pdf">https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/architecture/system_architecture/pds4_system_arch_spec.pdf</a>	Complete
Design Specification	See various design docs in: <a href="https://pds-engineering.jpl.nasa.gov/content/key-documents">https://pds-engineering.jpl.nasa.gov/content/key-documents</a>	Complete
Management Plan	<a href="https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/PDS-SMP.pdf">https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/PDS-SMP.pdf</a> <sup>2</sup>	Complete
Operation Concept	<a href="https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/pds4-ops-concept.pdf">https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/keydocuments/pds4-ops-concept.pdf</a>	Complete
Requirements	<a href="https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/design/system_design/pds4_system_reqs.pdf">https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/design/system_design/pds4_system_reqs.pdf</a>	Complete
Task Implementation Plan	<a href="https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/pds4-proj-plan-07172013.pdf">https://pds-engineering.jpl.nasa.gov/sites/default/files/documents/pds2010/pds4-proj-plan-07172013.pdf</a>	Complete
Release Plan	<a href="https://github.com/orgs/NASA-PDS/projects/18/views/4">https://github.com/orgs/NASA-PDS/projects/18/views/4</a>	Complete
Release Description	<a href="https://nasa-pds.github.io/releases/16/rdd.html">https://nasa-pds.github.io/releases/16/rdd.html</a>	Complete
Test Plan	<a href="https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/50775">https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/50775</a>	Complete

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

Test Report	<p>(1) Manual: <a href="https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/50775">https://cae-testrail.jpl.nasa.gov/testrail/index.php?/plans/view/50775</a></p> <ul style="list-style-type: none"> <li>• (a) B16 - Manual Tests - Requirements - TestRail - 20251204.pdf<sup>3</sup></li> <li>• (b) B16 - Manual Tests - Bugs - High - TestRail - 20251204.pdf<sup>4</sup></li> </ul> <p>(2) Automation:</p> <ul style="list-style-type: none"> <li>• B16 DOI-Service Automated Tests Run - TestRail - 20251130.pdf<sup>5</sup></li> <li>• B16 PDS4 Information Model LDDTool Automated Tests Run - TestRail - 20251130.pdf<sup>6</sup></li> <li>• B16 Peppi Automated Tests Run - TestRail - 20251130.pdf<sup>7</sup></li> <li>• B16 Validate Automated Tests Run - TestRail - 20251130.pdf<sup>8</sup></li> <li>• B16 Registry Automated Test Runs - TestRail - 20251204.pdf<sup>9</sup></li> </ul>	Complete
User Guide	See individual tool documentation. Links in B16 RDD <sup>10</sup>	Complete

<sup>3</sup> <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>

<sup>4</sup> <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>

<sup>5</sup> <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>

<sup>6</sup> <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>

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

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

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

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

## 8. Test Case Explanations

Test ID	RLI Type	Title	Test Result	Explanation	Criticality Assessment
<a href="#">C4528606</a> <sup>11</sup>	requirement	<a href="#">data-upload-manager#209</a> <sup>12</sup> 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.
<a href="#">C4521435</a> <sup>13</sup>	requirement	<a href="#">pds4-information-model#939</a> <sup>14</sup> As a user, I want to easily identify which IM and LDD version the WebHelp documentation is for	PARTIAL PASS	The ticket does not have clear parameters of what is "easily identifiable". Tester made the subjective call on this one. See <a href="#">TestRail case</a> <sup>15</sup> for more details.  From Dev Team: This is the best you are going to get with the current interface without a complete redesign.	Low. The requested information is not ideal, but it is available as expected.

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

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

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

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

<sup>15</sup> [https://cae-testrail.jpl.nasa.gov/testrail/index.php?tests/view/9655579&group\\_by=cases:section\\_id&group\\_order=asc&group\\_id=235481](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
<a href="#">C4523920</a> <sup>16</sup>	requirement	<a href="#">harvest#261</a> <sup>17</sup> 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_Orbiter, 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 <a href="#">harvest#292</a> <sup>18</sup> . Will tag an incremental release when fixed.
<a href="#">C4521438</a> <sup>19</sup>	requirement	<a href="#">registry#113</a> <sup>20</sup> As a node operator, I want the the registry schema to update autonomously / dynamically when new data is ingested	BLOCKED	Blocked because of previous error with <a href="#">harvest#261</a> .	Medium. The bug already exists in production and does not impede use of this tool. Will tag an incremental release when fixed.
<a href="#">C4530714</a> <sup>21</sup>	bug	<a href="#">registry-api#705</a> <sup>22</sup> 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.

<sup>16</sup> <https://cae-testrail.jpl.nasa.gov/testrail/index.php?cases/view/4523920>

<sup>17</sup> <https://github.com/NASA-PDS/harvest/issues/261>

<sup>18</sup> <https://github.com/NASA-PDS/harvest/issues/292>

<sup>19</sup> <https://cae-testrail.jpl.nasa.gov/testrail/index.php?cases/view/4521438>

<sup>20</sup> <https://github.com/NASA-PDS/registry/issues/113>

<sup>21</sup> <https://cae-testrail.jpl.nasa.gov/testrail/index.php?cases/view/4530714>

<sup>22</sup> <https://github.com/NASA-PDS/registry-api/issues/705>

Test ID	RLI Type	Title	Test Result	Explanation	Criticality Assessment
<a href="#">C4527916</a> <sup>23</sup>	bug	<a href="#">registry-mgr#137</a> <sup>24</sup> 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 <a href="#">registry-mgr#170</a> <sup>25</sup> . Will tag an incremental release when fixed.

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

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

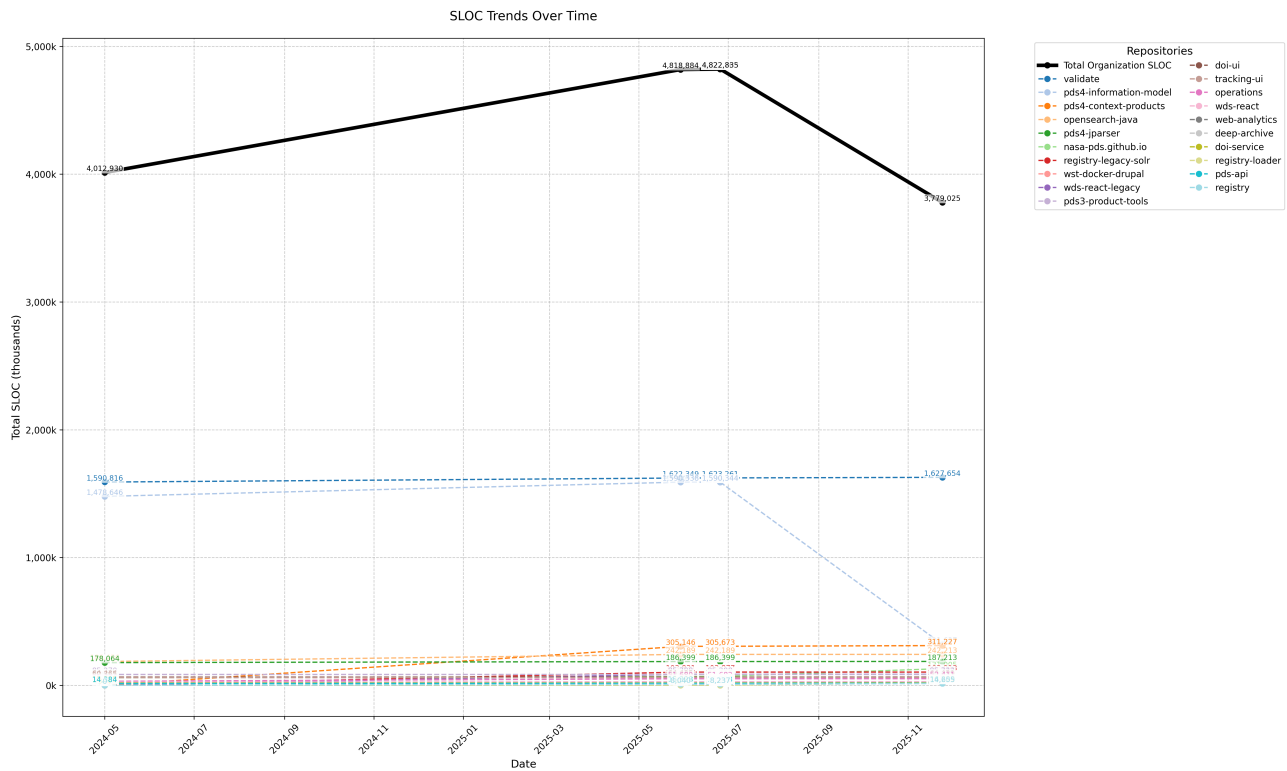
<sup>25</sup> <https://github.com/NASA-PDS/registry-mgr/issues/170>

# 9. Software Status

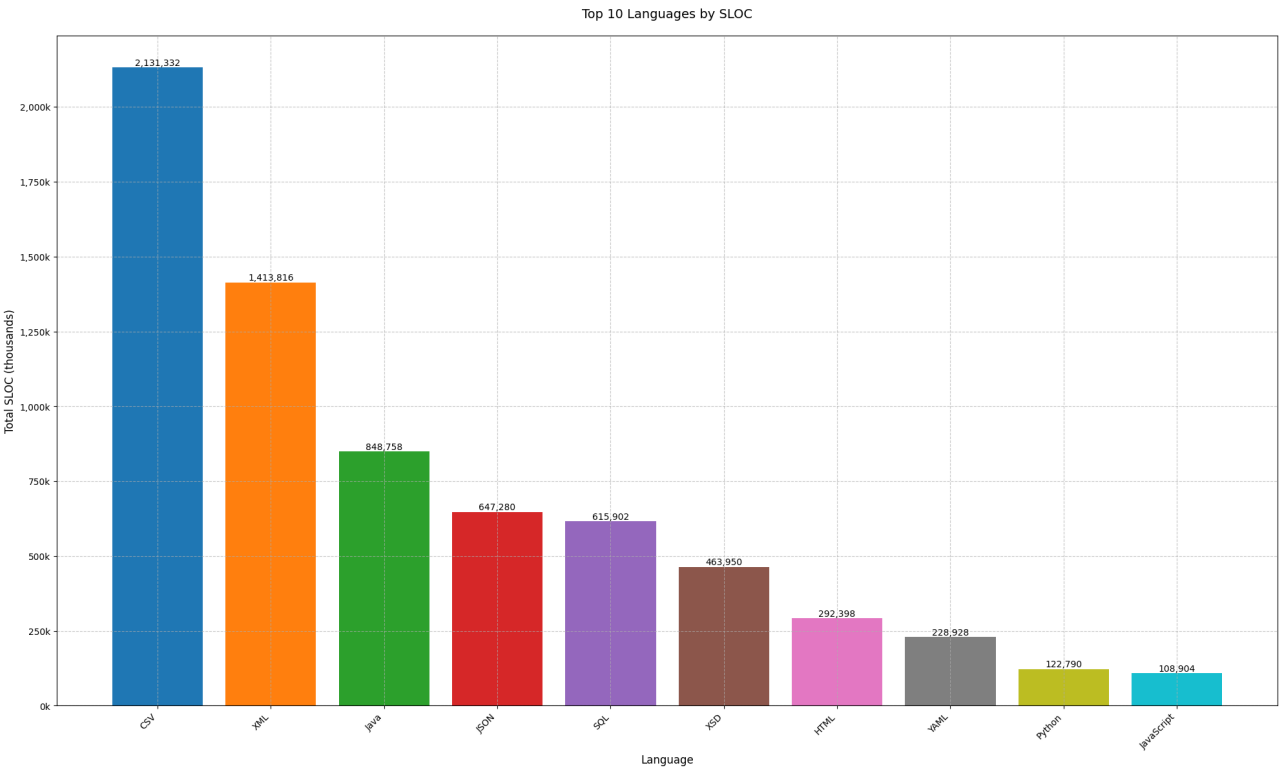
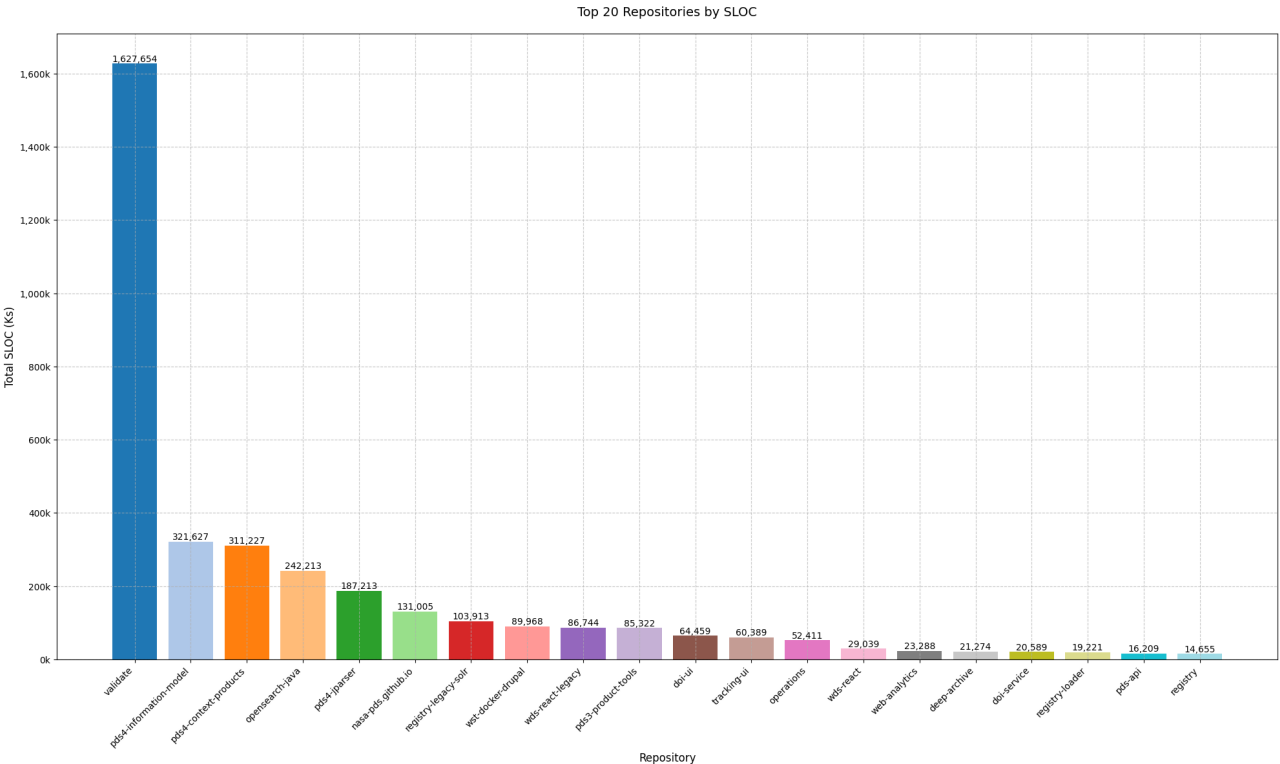
All the PDS Engineering Node software are managed (code, documentations, tickets) under github, in a single organization:

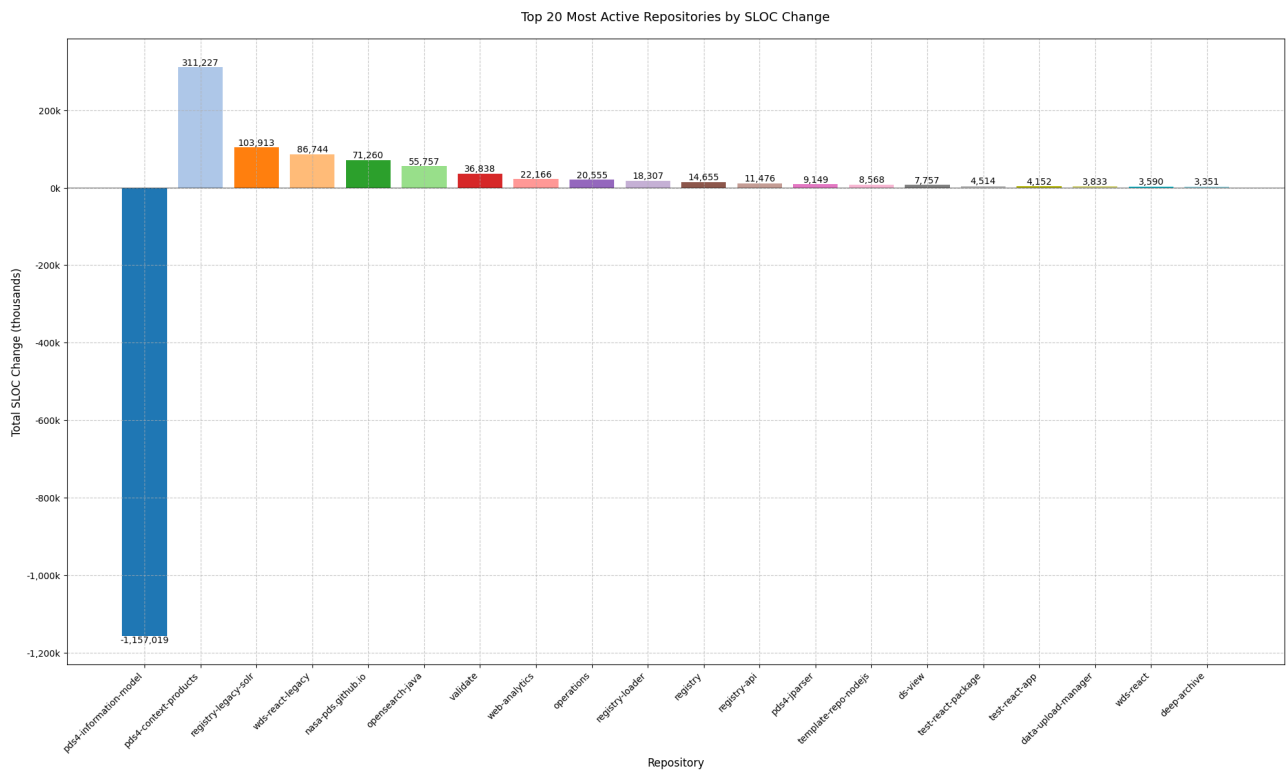
CM Tool	CM Repository
github	<a href="https://github.com/nasa-pds">https://github.com/nasa-pds</a>

The list of the components/version released for build 16 can be found in the [software release catalog](#)<sup>26</sup>.



<sup>26</sup> <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 build](#)<sup>27</sup>

**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>

<sup>27</sup> [https://docs.google.com/spreadsheets/d/1PH4DhOmCFiIM\\_spthNcwOFI224Twlg0Rz4amkluYGLY/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1PH4DhOmCFiIM_spthNcwOFI224Twlg0Rz4amkluYGLY/edit?usp=sharing)

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

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

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

## 11. Action Item Status

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

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

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

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

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

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

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

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

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

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

## 12. Deviations

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

## 13. Security Impact Analysis

<b>Network security</b>	
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
<b>Software security</b>	
Software scan date and method:	<a href="https://github.com/NASA-PDS/software-issues-repo/issues/120">https://github.com/NASA-PDS/software-issues-repo/issues/120</a>
Critical and High vulnerability mitigation:	<a href="https://github.com/NASA-PDS/software-issues-repo/issues/120">https://github.com/NASA-PDS/software-issues-repo/issues/120</a>