

MGSS Review Board Report

Review: PDS Build 14.0 Test Readiness Review (TRR).

Review Date: October 2, 2023

Purpose: Review PDS readiness for subsystem testing. PDS is not required to follow the formal MGSS processes and no formal entry criteria are assessed.

Entry Criteria: informal SQA comments made during the TRR.

Review Board Attendance:

| <i>Person</i> | <i>Role</i> | <i>In Attendance</i> |
|----------------------|---------------------------------------|----------------------|
| Scott Markham | Review Board Chair | Yes |
| Costin Radulescu | MGSS Chief Engineer | Yes |
| Kyran Owen-Mankovich | MGSS Deputy Chief Engineer | Yes |
| Eva Bokor | Assurance Engineer | Yes |
| Mike Pajevski | MGSS System Security Engineer | Yes |
| Jordan Padams | Task Manager | Yes |
| Vivian Tang | Task Cognizant Engineer | Yes |
| Gary Chen | Test Engineer | Yes |
| Miguel Pena | Test Engineer | Yes |
| Tim Mcclanahan | PDS Project Office | no |
| Kevin Grimes | Cartography and Imaging Sciences Node | no |
| Dan Scholes | Geoscience Node at Wash U | Yes |
| Mike Drum | SBN at Planetary Science Institute | no |

Waivers/Liens: none.

RFAs/AIs:

- No formal Requests for Action in this review.

Follow-up Actions:

- The PDS team took a follow up action to perform a small set of tests on the Windows platform based on comments made by Dan Scholes. Dan requested the focus be on Harvest and Validate functions. Jordan want to build up a baseline test set to be run on Windows over the coming PDS releases.
- Jordan stated that he intends to have larger data sets in the subsystem I&T venues to catch some types of issues found when deploying scripts/functions into production and finding issues due to the volume of data eve though the scripts/function passed testing in the subsystem I&T venues.

Meeting Notes and Issues:

- Software Overview:
 - The RDD contains all of the updates to the PDS.
- Commitments:

- Scott Markham asks: For the Registry the requirement “As an operator, I want to be notified of when Registry storage capacity exceeds 75% capacity” is not planned to be tested. This could be difficult to test but is there at least a code inspection for verification? Answer: Jordan states this is for test prioritization and he has seen that emails get generated when the 14.0 system is running notifying above 75% capacity they chose not to write a specific test case.
- Improvements:
 - No comments.
- Defect Corrections:
 - Scott Markham asks: For the Deep-archive the bug fix for “Jenkins Deep Registry Archive ran for the first time, failed” is also not being tested – why? Answer: This failed the first time it was put in a larger data set environment and has been debugged and is now working.
 - Scott Markham asks: For the Registry the two bug fixes delivered have critical and have severities but are not planned to be tested – why? Answer: The increased disk space is a configuration item and can be verified by inspection so was not a priority for writing a test case. The Provenance script which was deployed did not scale on production database and the team fixed the script in the production environment and has seen that it is now working so no test is being developed. Jordan makes a note that a rationale for skipping the testing needs to be added to the tickets.
- Sustaining Activities:
 - No comments.
- Other:
 - No “Other” activities.
- Documentation
 - No comments.
- Test Objectives:
 - No comments.
- Test Environment:
 - Scott Markham asks: The I&T team will test against the PDS Docker server but I didn’t understand where the test data comes from – is it the same data as the developers used? Answer: The I&T team does have a separate pool of test data to test with. Jordan also has a plan to add additional larger data sets.
 - Dan Scholes asks about testing in the Windows environment since he has seen issues once products are released – he particularly wants the Harvest and Validate functions tested. Some Windows users may also use the Transform functions. Answer: Jordan agrees that his team should be testing a baseline set of tests on Windows to ensure no basic functionality is broken. Jordan asks the testers if they can add a specific set of validation tests in the future on Windows. This release Jordan asks the testers to try to add some Windows testing but maybe not the full set.
- Key/New Test Cases:
 - No comments.
- Test Personnel:
 - No comments.

- Test Effort Rational:
 - Jordan requests that instead of work days that work hours be used since not all testers are full time.
- Testing Constraints and Risks:
 - Scott Markham asks: It appears there is a high risk (50%) that registry testing will halt during the testing. It also appears the that with part-time testers the scheduled time for testing has very little or no room for delays – Am I understanding this correctly? Answer: The team does plan some pad time for redeliveries and delays in the registry even though it isn't specifically written Vivian verbally stated there is pad.
- Action Item Status:
 - Kyran states the Action Items can be assigned to him for closure.
- Deviations:
 - No comments.

Board Comments:

Dan Scholes, Geoscience Node at Wash U: Yes, they are ready for testing. Dan notes that Java scripting should work even if tested on a Mac platform and not a Windows. Likes having some Windows testing done to show basic functionality isn't broken.

Eva Bokor, Assurance Engineer: The task is producing better materials every time they present. Eva notes that the task does not follow all of the MGSS MIMTaR requirements at this point but they do cover items they can. Kyran states that they are different from other MGSS tasks and can't meet all of MIMTaR but they strive to meet what they can. Eva states it is better to use MIMTaR as a "reference document" and not a "controlling document".

Mike Pajevski, MGSS System Security Engineer: Good review. Any question he has on code scanning will be handled off-line.

Jordan Padams, Task Manager: Thanks to all attendees. Automated regression tests is a critical activity in order to maintain the quality of the task.

Vivian Tang, Task Cognizant Engineer: Team did a great job planning the testing.

Gary Chen, Test Lead Engineer: Ready for testing

Miguel Pena, Test Engineer: We are ready.

Kyran Owen-Mankovich, Deputy MGSS Chief Engineer: Like the consistency of the presentation. Definitely ready for test. Proceed.