

Release Build 11.0.0 Test Plan

This addresses how EN plans to test every issue in the Release Description, available at <https://pds-engineering.jpl.nasa.gov/development/pds4/11.0.0/release/rdd-11.0.0.html>

Software Changes

Pds Registry App

Improvements

Issue ID	pds-registry-app#20
Issue Type	Improvements
Issue Description	Update Schema Generator for handling special cases where ancestor classes are needed
Comments	
Test Plan	In harvest config file, add elements belonging to parent of ambiguous element. Harvest. Verify new elements.

Issue ID	pds-registry-app#16
Issue Type	Improvements
Issue Description	Design and Implement capability to handle archive_status
Comments	
Test Plan	`registry-manager set-archive-status ...` a few times with variations as described ~80% down in https://nasa-pds.github.io/pds-registry-app/operate/reg-manager.html . Verify the changes via solr.

Issue ID	pds-registry-app#22
Issue Type	Improvements
Issue Description	Enhance documentation for PDS4 Attribute Search deployment and customization
Comments	
Test Plan	Find documentation about PDS4 attributes in registry and harvest documentation

Issue ID	pds-registry-app#38
Issue Type	Improvements
Issue Description	Complete revised trade study on Solr vs ElasticSearch
Comments	
Test Plan	Every test will test this, as ElasticSearch seems to have won

Issue ID	pds-registry-app#6
Issue Type	Improvements

Issue Description	Develop PDS4 Attribute Search capability
Comments	
Test Plan	Modify harvest config file as described in https://nasa-pds.github.io/pds-registry-app/operate/harvest.html , "Extract Metadata by Data Dictionary Class", to extract an element's attribute, then view in solr.

Issue ID	pds-registry-app#7
Issue Type	Improvements
Issue Description	Develop Customization capability for PDS4 Attribute Search
Comments	
Test Plan	Testing #6 tests this

Issue ID	pds-registry-app#8
Issue Type	Improvements
Issue Description	Design and implement Multi-Node Deployment capability
Comments	Current documentation is for solr, which has been replaced
Test Plan	Ask SAs to install.

Issue ID	pds-registry-app#9
Issue Type	Improvements
Issue Description	Design and implement Security and Authorization component
Comments	
Test Plan	Ask SAs to confirm that whatever package(s) in whatever configuration (there's some brutal diagram I can't find from the RDD page) is sufficient for security and authorization. Also, run an https command

Issue ID	pds-registry-app#10
Issue Type	Improvements
Issue Description	Develop capability for handling multiple product versions
Comments	
Test Plan	Clean database. harvest v1.0 of something, then harvest 2.0 and see if solr shows both. Clean database and reverse the order.

Issue ID	pds-registry-app#15
Issue Type	Improvements
Issue Description	Develop cability to deploy Test vs Operations Registry environments
Comments	
Test Plan	Run through commands on https://nasa-pds.github.io/pds-registry-app/operate/test-vs-prod.html

Issue ID	pds-registry-app#11
Issue Type	Improvements

Issue Description	Develop Registry reporting / visualization component
Comments	DUMP THIS
Test Plan	Play with banana as described in https://nasa-pds.github.io/pds-registry-app/reporting/index.html

Issue ID	pds-registry-app#30
Issue Type	Improvements
Issue Description	Design and document Registry cluster expansion approach
Comments	
Test Plan	Tested with #8. Deploy with 1 node. Add another, and see if registry stays up. Test this last if at all.

Defects

Issue ID	pds-registry-app#5
Issue Type	Defect
Issue Description	registry installation's documentation may be insufficient
Comments	
Test Plan	Verify following documents: • https://nasa-pds-incubator.github.io/pds-app-registry/install/solr.html You could add an error section that says if the browser shows 404, check if SOLR_HOME/server/logs/solr.log says it was unable to read /opt/solr/solr.xml, then <code>cd SOLR_HOME; ln -s server/solr/solr.xml; ln -s server/solr/zoo.cfg; chmod 000</code> example, though the last two may not be necessary. • https://nasa-pds-incubator.github.io/pds-app-registry/install/initialize.html Somewhere before <code>registry-manager create-registry</code>, add <code>set REGISTRY_MANAGER_HOME theRightPlace</code> https://nasa-pds-incubator.github.io/pds-app-registry/install/initialize.html Probably don't mention this, but let me note that this is where uninstalling docker from my laptop got this to work, though maybe it was just the rebooting.

Issue ID	pds-registry-app#3
Issue Type	Defect
Issue Description	pds-app-registry doesn't build on Windows
Comments	DUMPED
Test Plan	

Issue ID	pds-registry-app#21
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Issue Type	Defect
Issue Description	Unable to build application due to file size limit
Comments	DUMPED
Test Plan	

Requirements

Issue ID	pds-registry-app#57
Issue Type	Requirements
Issue Description	The service shall accept artifact registrations.
Comments	
Test Plan	Every harvest run tests this

Issue ID	pds-registry-app#58
Issue Type	Requirements
Issue Description	The service shall provide a means identifying relationships between artifact registrations
Comments	
Test Plan	Harvest many things at one time, e.g. a bundle or N bundles or a bunch of context products. Get the package ID somehow (https://nasa-pds.github.io/pds-registry-app/operate/harvest.html), probably from solr Delete that package_id as described in https://nasa-pds.github.io/pds-registry-app/operate/common-ops.html

Issue ID	pds-registry-app#59
Issue Type	Requirements
Issue Description	The service shall maintain configuration regarding the classes of artifacts to be registered.
Comments	
Test Plan	Write a harvest config file that behaves like the EN harvest config files, where only Product_Bundle and _Collection are ingested, or only _Observational and _Document. Harvest. View.

Issue ID	pds-registry-app#56
Issue Type	Requirements
Issue Description	The service shall assign a global unique identifier to a registered artifact
Comments	I'll assume this means LIDVID
Test Plan	Use registry-manager to muck via LIDVID

Issue ID	pds-registry-app#55
Issue Type	Requirements
Issue Description	The service shall allow for queries for registered artifacts
Comments	

Test Plan	Use the curl interface to Elasticsearch.
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Issue ID	pds-registry-app#65
Issue Type	Requirements
Issue Description	The service shall provide a staging capability for artifacts staged for release
Comments	
Test Plan	See pds-registry-app#16 above. Register something, check that it's staged, set archive_status to something else, check that it's no longer staged.

Issue ID	pds-registry-app#54
Issue Type	Requirements
Issue Description	The service should be scalable to enable publishing and management of up to 100 million registrations
Comments	
Test Plan	Create a bundle with 100,000,000 xml labels, probably all pointing to the same .png, and harvest it, query something from it. Measure time for harvest.

Issue ID	pds-registry-app#75
Issue Type	Requirements
Issue Description	The service shall accept metadata for a registered artifact in a defined format.
Comments	
Test Plan	Any harvest tests this

Issue ID	pds-registry-app#74
Issue Type	Requirements
Issue Description	The service shall validate metadata for a registered artifact
Comments	
Test Plan	Harvest an invalid xml file

Issue ID	pds-registry-app#73
Issue Type	Requirements
Issue Description	The service shall require a logical identifier and version be provided for all registered artifacts
Comments	
Test Plan	Harvest an xml file that has no logical identifier

Issue ID	pds-registry-app#72
Issue Type	Requirements
Issue Description	The service shall store metadata for a registered artifact in an underlying metadata store

Comments	
Test Plan	Harvest anything

Issue ID	pds-registry-app#71
Issue Type	Requirements
Issue Description	The service shall allow updates to registered artifacts
Comments	
Test Plan	Harvest an xml file. Change something in it beside the LID or VID. Harvest it again. Check that only 1 record exists.

Issue ID	pds-registry-app#70
Issue Type	Requirements
Issue Description	The service shall allow deletion of registered artifacts
Comments	
Test Plan	Harvest something, then registry-manager delete-data -lidvid <id>

Issue ID	pds-registry-app#69
Issue Type	Requirements
Issue Description	The service shall enable replication of registry contents with another instance of the service
Comments	
Test Plan	Registry-manager export-data; move output file to another machine with an empty db. Registry-manager load-data; check if sympatico (probably visually via solr)

Issue ID	pds-registry-app#68
Issue Type	Requirements
Issue Description	The service shall require checksums as metadata for registry artifact to enable system-wide integrity checking
Comments	
Test Plan	Harvest. Set a checksum wrong and watch harvest fail

Issue ID	pds-registry-app#67
Issue Type	Requirements
Issue Description	The service shall require a subset of file system metadata in order to support data metrics generation
Comments	
Test Plan	Harvest something. Check that solr shows: path, checksum, LID, VID, filesize, file timestamp, MIME type. If appropriate, label file name, associate product file name(s), product class, instrument reference LID, investigation reference LID, spacecraft reference LID, target reference LID

Issue ID	pds-registry-app#66
Issue Type	Requirements
Issue Description	The service shall require user authorization for updating registry metadata
Comments	
Test Plan	After getting security to work (pds-registry-app#9), harvest from a different machine, see if challenge (or rejection) happens.

Pds Registry Harvest

Improvements

Issue ID	harvest#24
Issue Type	Improvements
Issue Description	Implement date conversion from PDS4 date/time strings to Solr format
Comments	
Test Plan	In harvest config file, add "dataType" attribute to some date and/or time field and see how solr views it. Remove that attribute and compare solr.

Defects

Issue ID	harvest#4
Issue Type	Defect
Issue Description	Fix bug where ingested product start_date_time is off by 12 hours
Comments	
Test Plan	Harvest an xml file with start_date_time; verify the value via solr

Issue ID	harvest#29
Issue Type	Defect
Issue Description	Could not parse date in yyyy-MM-ddZ format
Comments	
Test Plan	Same as harvest#4, but make sure value is yyyy-mm-ddZ (no "Thh:mm:ss)

Issue ID	harvest#30
Issue Type	Defect
Issue Description	For multivalued fields only unique values are stored
Comments	
Test Plan	Harvest an xml file with a field with multiple values; make sure N values are the same; verify via solr that that value shows up N times (same order?)

Pds Registry Mgr Elastic

Issue ID	pds-registry-mgr-elastic#3
Issue Type	Improvements
Issue Description	Implement Authentication
Comments	

Test Plan	Like pds-registry-app#66, after getting security to work (pds-registry-app#9) on two machines, `registry-manager delete-data <a href="https://othermachine:8983/solr">https://othermachine:8983/solr</a> `. Actually, this can be tested from the same machine.
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Issue ID	pds-registry-mgr-elastic#7
Issue Type	Defects
Issue Description	update-schema command doesn't work
Comments	
Test Plan	DUMP THIS

Pds Doi Service

Improvements

Issue ID	pds-doi-service#46
Issue Type	Improvements
Issue Description	Implement the command line and parser to release a doi
Comments	
Test Plan	Run pds-doi-cmd. Software is configured to run with a test server

Issue ID	pds-doi-service#4
Issue Type	Improvements
Issue Description	Develop Status / Query API and component for OSTI status of a DOI.
Comments	
Test Plan	This can only be tested with a real request, so pass

Issue ID	pds-doi-service#18
Issue Type	Improvements
Issue Description	Develop DOI metadata automated validation component
Comments	I believe the schema and schematron are hidden. Ask Thomas for them to test better.
Test Plan	Validate the doi xml file with schematron file attached to this issue. Deliberately insert bug to demonstrate effectiveness.

Issue ID	pds-doi-service#29
Issue Type	Improvements
Issue Description	Develop ability to maintain a transaction log database
Comments	
Test Plan	Run pds-doi-cmd, then pds-doi-cmd list

Issue ID	pds-doi-service#31
Issue Type	Improvements

Issue Description	Develop maintain internal database of DOI requests
Comments	
Test Plan	Run pds-doi-cmd list -f

Issue ID	pds-doi-service#32
Issue Type	Improvements
Issue Description	Develop Status / Query capability for querying database and return JSON
Comments	
Test Plan	JSON is the default output, and everything queries the database, so anything tests this

Issue ID	pds-doi-service#33
Issue Type	Improvements
Issue Description	Develop Pending DOI Handler component for iteratively querying OSTI for DOI status until status change
Comments	
Test Plan	pds-doi-cmd check

Issue ID	pds-doi-service#41
Issue Type	Improvements
Issue Description	Develop simple regression test suite for deployment
Comments	
Test Plan	DUMP THIS. THIS WAS FOR SOME EARLY, SPECIFIC ISSUE SINCE RESOLVED

Issue ID	pds-doi-service#42
Issue Type	Improvements
Issue Description	Update documentation for operational installation and usage
Comments	
Test Plan	Check https://nasa-pds.github.io/pds-doi-service/installation/index.html and usage

Issue ID	pds-doi-service#44
Issue Type	Improvements
Issue Description	Perform benchmark tests between original prototype software and new system
Comments	
Test Plan	DUMP THIS LIKE #41

Issue ID	pds-doi-service#56
Issue Type	Improvements
Issue Description	validate the submitted OSTI record against a schema
Comments	

Test Plan	Same as #18 but the error should fail against the .xsd not the .sch
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Issue ID	pds-doi-service#58
Issue Type	Improvements
Issue Description	create full_name when first/last name cannot be parsed
Comments	
Test Plan	Feed appropriate input to pds-doi-cmd and check output

Issue ID	pds-doi-service#60
Issue Type	Improvements
Issue Description	Add configuration documentation
Comments	
Test Plan	View https://nasa-pds.github.io/pds-doi-service/installation/index.html

Issue ID	pds-doi-service#70
Issue Type	Improvements
Issue Description	add check to ensure landing page is online prior to DOI release
Comments	
Test Plan	Run pds-doi-cmd with a LID that has no landing page yet

Issue ID	pds-doi-service#82
Issue Type	Improvements
Issue Description	End to end behave test
Comments	
Test Plan	DUMP THIS LIKE #41

Issue ID	pds-doi-service#19
Issue Type	Improvements
Issue Description	Design REST API and JSON response
Comments	I think this API has not been specified yet.
Test Plan	Run an earlier command via curl + this API. Parse the returned JSON

Issue ID	pds-doi-service#20
Issue Type	Improvements
Issue Description	Develop draft PDS Policy for Assigning DOIs
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#28
Issue Type	Improvements
Issue Description	Re-organize and clean-up code to meet coding standards

Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#1
Issue Type	Improvements
Issue Description	Develop initial requirements and design for DOI Service
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#2
Issue Type	Improvements
Issue Description	Create / Draft a DOI object capability
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#21
Issue Type	Improvements
Issue Description	Reserve a DOI capability
Comments	
Test Plan	pds-doi-cmd reserve

Issue ID	pds-doi-service#22
Issue Type	Improvements
Issue Description	Release DOI capability
Comments	
Test Plan	pds-doi-cmd release

Issue ID	pds-doi-service#24
Issue Type	Improvements
Issue Description	Update Released DOI capability
Comments	
Test Plan	pds-doi-cmd release (of a previously released DOI)

Issue ID	pds-doi-service#25
Issue Type	Improvements
Issue Description	DOI Batch Processing capability
Comments	
Test Plan	Run pds-doi-cmd draft release list with a list of values

Issue ID	pds-doi-service#26
Issue Type	Improvements

Issue Description	Implement initial DOI database and management
Comments	
Test Plan	This is in the background of every test, right?

Issue ID	pds-doi-service#27
Issue Type	Improvements
Issue Description	Develop DOI Status / Query component
Comments	
Test Plan	Tested by other steps

Issue ID	pds-doi-service#40
Issue Type	Improvements
Issue Description	Develop operational documentation and test suite
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#65
Issue Type	Improvements
Issue Description	Revise DOI Service Requirements
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#71
Issue Type	Improvements
Issue Description	initialize production deployment with pre-existing dois
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#83
Issue Type	Improvements
Issue Description	Write procedure documentation
Comments	
Test Plan	DUMP THIS – too high level

Defects

Issue ID	pds-doi-service#72
Issue Type	Defect
Issue Description	node is not provided as contributor in the reserve records
Comments	
Test Plan	pds-doi-cmd reserve, then check if node is in the output

Issue ID	pds-doi-service#55
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Issue Type	Defect
Issue Description	Update default DOI metadata according to changes in requirements
Comments	
Test Plan	Check that pds-doi-cmd's output has the appropriate values for elements identified in this issue, e.g. <title>, <product_type>, ...

Requirements

Issue ID	pds-doi-service#5
Issue Type	Requirements
Issue Description	The software shall be capable of accepting a request to create a draft DOI.
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-doi-service#6
Issue Type	Requirements
Issue Description	The software shall be capable of accepting a request to reserve a DOI.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#7
Issue Type	Requirements
Issue Description	The software shall be capable of accepting a request to release a DOI.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#8
Issue Type	Requirements
Issue Description	The software shall be capable of accepting a request to deactivate a DOI.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#9
Issue Type	Requirements
Issue Description	The software shall be capable of accepting a request to update DOI metadata.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#10
Issue Type	Requirements
Issue Description	The software shall be capable of batch processing >1 DOI requests.
Comments	
Test Plan	pds-doi-cmd reserve -l somespreadsheet

Issue ID	pds-doi-service#11
Issue Type	Requirements
Issue Description	The software shall be capable of autonomously generating the minimum set of DOI metadata from PDS4 Collection; Bundle; Document products.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#12
Issue Type	Requirements
Issue Description	The software shall validate a minimum set of metadata is provided when reserving; releasing; or updating a DOI. This minimum set of metadata will be defined by the PDS DOI Working Group.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#13
Issue Type	Requirements
Issue Description	The software shall validate the DOI metadata when reserving; releasing; or updating a DOI.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#14
Issue Type	Requirements
Issue Description	The software shall maintain a database of PDS DOIs and their current state.
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#15
Issue Type	Requirements
Issue Description	The software shall maintain the ability to manage DOIs through OSTI
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#16
Issue Type	Requirements
Issue Description	The software shall maintain the ability to manage DOIs through DataCite.
Comments	
Test Plan	Not ready yet

Issue ID	pds-doi-service#30
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Issue Type	Requirements
Issue Description	The software shall provide a Status capability that will allow a user to query for the current status of a DOI
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-doi-service#35
Issue Type	Requirements
Issue Description	The software shall provide the capability of producing a DOI Status Report based upon a user-specified query
Comments	
Test Plan	Not ready yet

Pds Deep Archive

Improvements

Issue ID	pds-deep-archive#21
Issue Type	Improvements
Issue Description	Develop one script to run both AIP and SIP generator
Comments	
Test Plan	Run pds-deep-archive normally to see both AIP And SIP generated

Issue ID	pds-deep-archive#24
Issue Type	Improvements
Issue Description	Update software to only include latest collection in when bundle references LIDs
Comments	
Test Plan	Run pds-deep-archive with the “—include-latest-collections-only” flag. <pre>(pds-deep-archive) \$ pds-deep-archive -s PDS_ATM \ -b https://atmos.nmsu.edu/PDS/data/PDS4/LADEE/ \ test/data/ladee_test/mission_bundle/LADEE_Bundle_1101.xml --include-latest-collection-only</pre>

Issue ID	pds-deep-archive#28
Issue Type	Improvements
Issue Description	Update docs to include release instructions
Comments	
Test Plan	Manually verify

Issue ID	pds-deep-archive#55
Issue Type	Improvements
Issue Description	Add READMEs to AIPs and SIPs
Comments	

Test Plan	Look for the README file in the bundle.
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Issue ID	pds-deep-archive#63
Issue Type	Improvements
Issue Description	Add timestamp to SIP / AIP product LIDs and filenames
Comments	
Test Plan	Generate product with aipgen and sipgen, and verify the filename has the timestamp in it, eg: insight_cameras_v1.0_20200601_aip_v1.0.xml And with a LID of : urn:nasa:pds:system_bundle:product_aip:insight_cameras_v1.0_20200601

Issue ID	pds-deep-archive#65
Issue Type	Improvements
Issue Description	Update software to handle Document_File.directory_path_name
Comments	
Test Plan	Create a XML that specifies the path of the document, run sipgen and then verify the document location.

Issue ID	pds-deep-archive#8
Issue Type	Improvements
Issue Description	Document SIP Gen component into Node Delivery procedures
Comments	
Test Plan	DUMP THIS – too high level

Issue ID	pds-deep-archive#13
Issue Type	Improvements
Issue Description	Improve SIP Gen performance for very large data sets
Comments	
Test Plan	For this go-around, benchmark performance

Issue ID	pds-deep-archive#29
Issue Type	Defect
Issue Description	SIP and Transfer Manifest duplicate files and LIDVIDs
Comments	A specific bundle from LADEE caused this error
Test Plan	Run against that bundle then another LADEE bundle

Issue ID	pds-deep-archive#39
Issue Type	Defect
Issue Description	SIP Generator not outputting correctly for spice example bundle
Comments	A specific bundle from NAIF caused this error
Test Plan	Run against that bundle then another NAIF bundle

Issue ID	pds-deep-archive#41
Issue Type	Defect
Issue Description	AIP Generator not outputting correctly for spice example bundle
Comments	
Test Plan	Test with #39

Issue ID	pds-deep-archive#44
Issue Type	Defect
Issue Description	SIP label contains invalid manifest URL using file path
Comments	A specific label caused this error
Test Plan	Run against that label, then a similar one

Issue ID	pds-deep-archive#64
Issue Type	Defect
Issue Description	Software does not exit after running against large data set
Comments	A specific bundle caused this error
Test Plan	Run against that bundle, then a similarly large bundle

Issue ID	pds-deep-archive#69
Issue Type	Defect
Issue Description	Software appears to be excluding all the products associated with the collections
Comments	A specific EPOXI bundle caused this error
Test Plan	Run against that bundle, then another EPOXI bundle

Issue ID	pds-deep-archive#71
Issue Type	Defect
Issue Description	AIP Generator outputs duplicate records in the checksum / transfer manifest
Comments	A specific InSight documentation bundle caused this error.
Test Plan	Run against that bundle, then another one with multiple collection versions

Issue ID	pds-deep-archive#82
Issue Type	Defect
Issue Description	Output SIP uses backslash in output URLs on Windows
Comments	
Test Plan	Run on any bundle and look for backslashes (bad) in SIP and AIP files

Issue ID	pds-deep-archive#75
Issue Type	Defect
Issue Description	Invalid filenames to match SIP / AIP LIDs
Comments	

Test Plan	Run on any bundle. Output SIP and AIP filename should match their LIDs
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Issue ID	pds-deep-archive#78
Issue Type	Defect
Issue Description	Standalone AIP Generator Fails
Comments	
Test Plan	Run aipgen by itself

Issue ID	pds-deep-archive#59
Issue Type	Defect
Issue Description	Update Usage instructions to more clearly define command-line arguments
Comments	
Test Plan	Check that documentation says that for the bundle's URL on the command line, the bundle needs to be downloaded

Issue ID	pds-deep-archive#77
Issue Type	Defect
Issue Description	Deep Archive doesn't do Windows
Comments	
Test Plan	Check that pds-deep-archive, sipgen, and aipgen work on Windows

Issue ID	pds-deep-archive#45
Issue Type	Requirements
Issue Description	The tool shall be capable of generating a valid Archive Information Package transfer manifest and PDS4 XML label in accordance with the PDS4 Information Model
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#46
Issue Type	Requirements
Issue Description	The tool shall be capable of generating a valid AIP and SIP products and PDS4 XML label in accordance with the PDS4 Information Model
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#47
Issue Type	Requirements
Issue Description	The tool shall be capable of generating product manifests from an online Registry Service
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#48
Issue Type	Requirements
Issue Description	The tool shall be capable of generating product manifests by crawling a file system using the information contained within the specified bundle and collection products
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#49
Issue Type	Requirements
Issue Description	The tool shall generate a product manifest based upon the specification of a bundle as input
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#50
Issue Type	Requirements
Issue Description	The tool shall include products in the manifests based upon the relationships described in the PDS4 bundle and collection metadata
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#51
Issue Type	Requirements
Issue Description	The tool shall be capable of accepting a checksum manifest as input to use in place of Registry or on-demand product checksum generation
Comments	Probably not implemented yet. The Usage page does not say how to specify a checksum manifest as input
Test Plan	Run with a checksum manifest specified on the command line

Issue ID	pds-deep-archive#52
Issue Type	Requirements
Issue Description	The tool shall generate a PDS4 label for the SIP and AIP using at least PDS4 Information Model v1.13.0.0
Comments	
Test Plan	Tested elsewhere

Issue ID	pds-deep-archive#53
Issue Type	Requirements
Issue Description	The tool shall require AIP and SIP products contain only products with valid logical identifiers according to the PDS4 Standards Reference

Comments	
Test Plan	Tested elsewhere

\Issue ID	pds-deep-archive#54
Issue Type	Requirements
Issue Description	The Submission Information Package manifest shall be a tab-delimited table with one record per product and four fields per record containing the following fields: checksum value; checksum type; resolvable URL to data product; unique product lidvid for the associated product.
Comments	
Test Plan	Tested elsewhere

Issue ID	validate#215
Issue Type	Improvements
Issue Description	Throw warning when data exists after number of records
Comments	
Test Plan	Tested by existing val217/*.xml

Issue ID	validate#222
Issue Type	Improvements
Issue Description	Reduce error messages for overlapping fields
Comments	
Test Plan	Tested by existing val56*.xml

Issue ID	validate#63
Issue Type	Improvements
Issue Description	Validate Table_Character groups and their specified lengths match the specified group_length
Comments	
Test Plan	Tested by existing val63.xml

Issue ID	validate#209
Issue Type	Improvements
Issue Description	Packed_Data_Fields and bit fields do not validate as expected
Comments	
Test Plan	Validate test data attached to issue. The only Packed_Data_Fields I can find are more ODFs at https://atmos.nmsu.edu/PDS/data/jnogrv_1001 , so test

Issue ID	validate#149
Issue Type	Defect
Issue Description	Update software to check number of records specified in label matches the records in the table

Comments	
Test Plan	Tested by existing val217/*.xml

Issue ID	validate#206
Issue Type	Defect
Issue Description	Validate incorrectly fails ASCII_Integer field that is space-padded (empty) in Table_Character
Comments	
Test Plan	Find Table_Character with ASCII_Integer. Set value to blank. Should pass

Issue ID	validate#219
Issue Type	Defect
Issue Description	validate v1.22.3 has large performance degradation on products with many tables
Comments	
Test Plan	Create a label with 1000s of tables. Watch performance

Issue ID	validate#220
Issue Type	Defect
Issue Description	Incorrect validation of number of records
Comments	
Test Plan	Mostly tested by existing val217/*.xml, but also test the file attached to the issue by radiosci

Issue ID	validate#233
Issue Type	Defect
Issue Description	Product validation does not detect the number of table records correctly for Table + Array object
Comments	
Test Plan	Test on the data attached to this issue, another variant of val217/val220.

Issue ID	validate#177
Issue Type	Defect
Issue Description	Software raises a field_value_overlap error on Table_Binary Packed data fields
Comments	
Test Plan	Tested with validate#209? In any case, test on the data attached to this issue.

Issue ID	validate#234
Issue Type	Defect

Issue Description	Validate gives incorrect records mismatch WARNING for interleaved data objects
Comments	
Test Plan	Oh my god, another variant of 217/220. Test on the data attached to this issue.

Issue ID	validate#243
Issue Type	Defect
Issue Description	validate 1.24.0-SNAPSHOT chokes on a probably good file
Comments	
Test Plan	Test on attached data. Another variant of 217/220? Might not be fixed

Issue ID	validate#203
Issue Type	Defect
Issue Description	Assembly plugin non-fatal errors on Windows
Comments	DUMP THIS. Problem with build
Test Plan	

Issue ID	validate#214
Issue Type	Defect
Issue Description	validate outputs an extra '.'
Comments	DUMP THIS. The behavior that prompted this issue is deliberate.
Test Plan	

Issue ID	validate#15
Issue Type	Defect
Issue Description	Verify that all name/type attribute values correspond to names denoted context products
Comments	I don't think this happens. I am not sure validate should do this.
Test Plan	Test on val15.xml. Validate should complain but doesn't

Issue ID	validate#24
Issue Type	Defect
Issue Description	Update context check to retrieve and use latest context products from EN Registry
Comments	
Test Plan	Back up and edit validate/resources/registered_context_products.json by removing a LID used in a lid_reference by any successful test. Validate to see missing context product error. Validate -u to update that file. Validate same file to see success.

Issue ID	validate#45
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Issue Type	Defect
Issue Description	Check that referenced context products are valid
Comments	SKIP THIS. I doubt this happens, and to test it would require making an operational version of the context product invalid.
Test Plan	

Issue ID	validate#50
Issue Type	Defect
Issue Description	Add new target-manifest flag for user to provide a manifest (file) of file/directory paths to validate
Comments	
Test Plan	Run `validate --target-manifest`

Issue ID	validate#196
Issue Type	Defect
Issue Description	Add new functionality to validate TIFF products used as observational products are uncompressed TIFF
Comments	
Test Plan	Download illegal files from attachment to this issue and test

Issue ID	validate#239
Issue Type	Defect
Issue Description	The tool shall verify bundle directories adhere directory naming standards
Comments	
Test Plan	Create a bundle with bad directory names like fakedata/ and test

Issue ID	validate#247
Issue Type	Requirements
Issue Description	The tool shall accept a pre-defined subset of inputs for specifying the associated schema file(s) as described in this issue
Comments	SKIP. Issue is not closed yet
Test Plan	

Issue ID	validate#248
Issue Type	Requirements
Issue Description	The tool shall verify that a digital objects which comprise observational data may be used in one and only one product
Comments	SKIP. Issue is not closed yet
Test Plan	In a working bundle, duplicate a label and slightly change its LID and filename but the filename its referring to. Add the new LID to the collection, then validate and watch the error.

Issue ID	pds4-information-model#172
Issue Type	Improvements
Issue Description	LDDTool: Add PDS Namespace Registry information to Help output
Comments	
Test Plan	`lddtool -h` (or another option?) to see configured namespaces

Issue ID	pds4-information-model#176
Issue Type	Improvements
Issue Description	LDDTool: Add error counter or flag to enable unsuccessful termination System.exit
Comments	
Test Plan	Run lddtool with bad input, then `echo \$?`, which should print not 0.

Issue ID	pds4-information-model#178
Issue Type	Improvements
Issue Description	LDDTool: Improve error messages to clearly designate between FATAL_ERROR vs ERROR
Comments	
Test Plan	Run lddtool with a nonexistent input file to see FATAL_ERROR. Run lddtool with an input file with a mild syntax error to see ERROR.

Issue ID	pds4-information-model#222
Issue Type	Improvements
Issue Description	LDDTool: Revise the handling of supplying the IM version (alternate version) via command-line
Comments	
Test Plan	Run lddtool normally. Save output files. Run `lddtool -V currentIMVersion` and compare output files.

Issue ID	pds4-information-model#88
Issue Type	Improvements
Issue Description	LDDTool: Add capability to generate LDDs based on user-specified IM version
Comments	
Test Plan	Run lddtool -VsomeOldVersion and see output files named that way

Issue ID	pds4-information-model#158
Issue Type	Improvements
Issue Description	LDDTool: Setup and configure CI/CD and Nightly Builds
Comments	DUMP THIS. Issue about the build
Test Plan	

Issue ID	pds4-information-model#165
Issue Type	Improvements
Issue Description	CCB-284: Streamline process for adding or removing standard values.
Comments	DUMP THIS. Issue about procedure for updating values
Test Plan	

Issue ID	pds4-information-model#166
Issue Type	Improvements
Issue Description	CCB-285: GeoTIFF format as operational PDS4 image
Comments	Implemented? If so, what should we see? My guess:
Test Plan	Find "GeoTIFF" in PDS4_PDS_1F00.sch (and .xsd?) everywhere TIFF is.

Issue ID	pds4-information-model#167
Issue Type	Improvements
Issue Description	LDDTool: Use sch:value-of to display a variable in Schematron validation
Comments	
Test Plan	Add sch:value-of to input to lddtool as described in issue. Maybe ask Mark Bentley for an example to save effort.

Issue ID	pds4-information-model#193
Issue Type	Improvements
Issue Description	CCB-308: IM schematron needs to be updated to handle SI unit prefixes
Comments	
Test Plan	Tested in IM testing, SCMA.CCB308

Issue ID	pds4-information-model#87
Issue Type	Improvements
Issue Description	LDDTool: Enhance software error handling and logging for improved usability
Comments	
Test Plan	I dunno. This is so vague. Evaluate the consistency of the messages in the error log?

Issue ID	pds4-information-model#143
Issue Type	Improvements
Issue Description	CCB-268 how to test this
Comments	
Test Plan	Tested in IM testing, SCMA.CCB268

Issue ID	pds4-information-model#203
Issue Type	Improvements

Issue Description	CCB-290: Add value 'Field Campaign' to Investigation_Area type enumerated value list
Comments	
Test Plan	Tested in IM testing, SCMA.CCB290

Issue ID	pds4-information-model#207
Issue Type	Improvements
Issue Description	CCB-289: Define new class Encoded_Audio to describe supplementary audio data products
Comments	
Test Plan	Tested in IM testing, SCMA.CCB289

Issue ID	pds4-information-model#214
Issue Type	Improvements
Issue Description	CCB-292: New enumerated values for reference_type.
Comments	
Test Plan	Add such a test to IM testing. It's straightforward

Issue ID	pds4-information-model#216
Issue Type	Improvements
Issue Description	CCB-296: Duplicated value in enumerated value list of Product_Context /Internal_Reference /reference_type.
Comments	
Test Plan	Check that that field in PDS4_PDS_xxxx.sch has no duplicated values; the offender was "investigation_to_facility" apparently.

Issue ID	pds4-information-model#218
Issue Type	Improvements
Issue Description	CCB-294: Add enumerated value to Units_of_Pixel_Resolution_Angular
Comments	
Test Plan	Tested in IM testing, SCMA.CCB294

Issue ID	pds4-information-model#220
Issue Type	Improvements
Issue Description	CCB-297: Inappropriate values in permissible values list for Product_Observational/Observation_Area/Target_Identification/Internal_Reference/reference_type
Comments	
Test Plan	Tested in IM testing, SCMA.CCB297

Issue ID	pds4-information-model#130
Issue Type	Improvements

Issue Description	CCB-256: Need method for providing permissible value definitions for external namespaces in Ingest_LDD
Comments	
Test Plan	Tested in IM testing, SCMA.CCB256

Issue ID	pds4-information-model#188
Issue Type	Defect
Issue Description	LDDTool: requires one class with (element_flag = true) even when no classes defined
Comments	
Test Plan	Create Iddinput with no classes, only rules. Lddtool is supposed to allow this, I think.

Issue ID	pds4-information-model#192
Issue Type	Defect
Issue Description	LDDTool combining two consecutive choice blocks into one block
Comments	
Test Plan	Download Ed's two attachments to the issue and see if running Lddtool on the input avoids the problem in the output. Maybe create a second test.

Issue ID	pds4-information-model#227
Issue Type	Defect
Issue Description	LDDTool: erroneously replaces TBD values with null in JSON output
Comments	
Test Plan	Create an Lddtool input with "TBD" in various fields of DD_Attribute and see if the output preserves "TBD", as Lddtool should do.

Issue ID	pds4-information-model#229
Issue Type	Defect
Issue Description	LDDTool: uses wrong version of XSD when referencing IMG dictionary
Comments	
Test Plan	Download the attachments, run Lddtool, check if output Idd references the correct .xsd.

Issue ID	pds4-information-model#168
Issue Type	Defect
Issue Description	LDDTool: Version info bug introduced since v11.2.0
Comments	
Test Plan	`lddtool -version` gives the right version (was 0.0 in one build)

Issue ID	pds4-information-model#230
Issue Type	Defect

Issue Description	LDDTool: update LDD attribute checking to only check for "type" and "_type"
Comments	
Test Plan	Create an attribute xxtype without permissible values. Lddtool should not complain. If changed to xxx_type, Lddtool should complain

Issue ID	pds4-information-model#180
Issue Type	Defect
Issue Description	LDDTool does not handle "unbounded" maximum cardinality in Choice blocks correctly
Comments	
Test Plan	Tested in 10b, SCMA.3, which uses input file im180.xml

The remaining issues do not need to be tested

Issue ID	pds-site-app#1
Issue Type	Improvements
Issue Description	create mockup for training page
Comments	***Is there anything more than a web page?
Test Plan	TBD

Issue ID	pds-api#5 SI
Issue Type	Improvements
Issue Description	Define collection-level search parameters
Comments	***Is anything installed specifically for PDS API? I.e. does the registry automatically serve these requests? Swagger.json points to pds.nasa.gov as well as others. Do I need to change those to my test machine? Where would I place the modified swagger.json? What does the URL look like – http://localhost/collections/q=??? *** The issues for Pds Api* remind me of DOI – is it sufficient for the tests to verify the functionality of
Test Plan	TBD

Issue ID	pds-api#6
Issue Type	Improvements
Issue Description	Assign and iterate over applicable API spec sections with API WG
Comments	
Test Plan	TBD

Issue ID	pds-api#8
Issue Type	Improvements
Issue Description	Design and elicit requirements for PDS API Spec

Comments	
Test Plan	TBD

\Issue ID	pds-api#10
Issue Type	Improvements
Issue Description	Propose an initial server stub based on swagger output
Comments	
Test Plan	TBD

Issue ID	pds-api#11
Issue Type	Improvements
Issue Description	Identify a framework to generate python api client from a swagger file
Comments	
Test Plan	TBD

Issue ID	pds-api#1
Issue Type	Improvements
Issue Description	Design initial collection-level search API
Comments	
Test Plan	TBD

Issue ID	pds-api#4
Issue Type	Improvements
Issue Description	Convert PDS API Spec to Open API
Comments	
Test Plan	TBD

Issue ID	pds-api-service#1
Issue Type	Improvements
Issue Description	Test the documentation generation from swaggerhub
Comments	
Test Plan	TBD

Issue ID	pds-wds#5
Issue Type	Improvements
Issue Description	Select tertiary color palettes
Comments	***what in the world is wds?
Test Plan	TBD

Issue ID	pds-wds#13
Issue Type	Improvements

Issue Description	Create color styles for PDS color swatches.
Comments	
Test Plan	TBD

Issue ID	pds-wds#15
Issue Type	Improvements
Issue Description	Add bold heading typography styles
Comments	
Test Plan	TBD

Issue ID	pds-wds#3
Issue Type	Improvements
Issue Description	Complete initial PDS App Bar widget for simple web deployment
Comments	
Test Plan	TBD

Issue ID	pds-wds-react#1
Issue Type	Improvements
Issue Description	Add PDS Banner App Bar
Comments	
Test Plan	TBD

Issue ID	pds-wds-web#3
Issue Type	Improvements
Issue Description	Rename bar-section to pds-app-bar-section
Comments	
Test Plan	TBD

Issue ID	pds-wds-web#7
Issue Type	Improvements
Issue Description	Rotate caret for open dropdown
Comments	
Test Plan	TBD

Issue ID	pds-wds-web#4
Issue Type	Requirements
Issue Description	WCAG compliant
Comments	
Test Plan	TBD