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January 09, 2020
Notes by Debra Kazden

**Version 2 - January 16, 2019
~ These Version 2 notes include two corrections:
1) CCB-264 = Lyle volunteered to check the PDS4 documentation for places that need updating if LF only passes.
2) The last discussion was about CCB-277, which was not listed in the agenda because it was new. It was not about CCB-276, we did not discuss that one.

Known Attendees: C. DeCesare, M. Gordon, E. Guinness, L. Huber, R. Joyner, D. Kazden, J. Mafi, A. Raugh, B. Semenov and R. Simpson Known Observers: M. Bentley (alternate for T. Lim), T. Hare and P. Lawton,

DDWG Agenda
(Included in email sent January 7, from E. Guinness, DDWG agenda for Jan 9)

Agenda

I. Continue discussing change requests might make the next build deadline.

1) CCB-186 - ASCII String and UTF8 String whitespace handling. Anne will look at this when she has time.

2) CCB-220 – Add ability to specify many source products via table. DDWG should be reviewing the updates to the proposed solution and giving Cristina feedback.

3) CCB-222 – Add citation text to Citation Information. Joe and Anne discussed this request in the context of supporting DOIs. So, the solution may be more complex than what has been proposed.
4) CCB-255 – Namespace version dependencies are not documented in IM. Steve and Anne agreed on one proposed solution. Anne to update ticket with definition of new class.

5) CCB-260 – PDS4 label files do not have a unique file extension. This may be needed to be able to archive xml files and possibly Ingest LDD files.

6) CCB-264 - Make Line Feed an allowable record delimiter. DDWG agreed that this change would apply to all classes that use record delimiter. Steve was asked to change the TA to note that the change is not backwards compatible for users.

7) CCB-272 – Reinstate Array 1D. Asked DDWG to please review and comment on this request. It is not clear whether there is a consensus on this issue. I posted a comment from Joe on PPI's take for arrays.

8) CCB-273 – Remove permissible values from id reference type. Several members had concerns about moving type values to a LDD. I asked Joe about PPI use of composite structure and he responded that they don't use it.

9) Possible bug in validating LID formation rule in lid reference and lidvid reference. These are defined as data types ASCII LID and ASCII LIDVID. However these data type do not have a schematron rule to enforce only using lower cases letters as is the case for the schematron rules of logical identifier, which has a data type of ASCII Short String Collapsed. – Still not sure if this should be a bug fix or a SCR. Steve was going to think about it.

10) CCB-274 – Add attribute mission flag ldd to Ingest LDD. Attribute name has been changed to dictionary type as suggested at the last telecon. Any comments? Is this ready for a TA?

11) CCB-275 - Make Ingest LDD file archivable
(Discussed)

II. Review status.

1) CCB-204 - Define and enforce best practices for LDD. Steve is tracking this as a software issue. If Steve finds that a model change is needed, the DDWG will get involved.

2) CCB-209 - Correct tagged objects. Status from Steve and Dick.

3) CCB-276 – Query Model – Phase 2. New SCR.
(Not Discussed)

III. Parked.

1) CCB-205 - Additional constraints/best practices for LDD. This probably will be done after build deadline.
(Not Discussed)

IV. Other topics?
(CCB-277)

VI. Set next telecon date –Suggested date: Jan 16. Trying to meet weekly in Jan and early Feb as needed **(January 16)**

DDWG Telecon

Steve H. is on travel

CCB-138 was passed by the CCB. They are in the process for CCB-271 now. We should hear something soon.

I. Continue discussing change requests might make the next build deadline

CCB-186 - ASCII String and UTF8 String whitespace handling See https://pds-jira.jpl.nasa.gov/browse/CCB-186

Not sure if any work has been done on this yet.
~ Not yet.

Question: Is there any urgency with this?
Answer: Unsure.
~ It's been in the queue awhile.

CCB-220 - Add ability to specify many source products via table See https://pds-jira.jpl.nasa.gov/browse/CCB-220

Team lead is waiting for input on document changes. Not sure what needs to be changed.

Question: Are there still two possible solutions?
Answer: No. One approach was selected. The updates to jira reflect that.

Let's try to move this along. If there are no comments by next week we will ask Steve to do a TA. Probably the necessary changes would be in the DPH.

Action Item - Christina will look at previous document changes, figure out what's needed.

Question: Any comments?
Answer: (Silence)

CCB-222 - Add citation text to Citation Information See https://pds-jira.jpl.nasa.gov/browse/CCB-222

No progress has been made since last email to Ed about this.
~ There was a discussion at AGU. That will be written up and sent to the group **(Action Item - Joe)** when there's time.

Question: Do we need this for the next build?
Answer: Doubt it can be done for the next build. The issue is more complex than just adding parameters to the IM. There are some parameters that are there that just are not formatted to get the DOI information we need. The suggestion is that we could have a separate form. Maybe eventually a separate DOI information class.
~ That makes sense, rather then jerry-rigging.
~ Maybe it could be merged in version 2.
~ This will need to be coordinated with Jordan. Wouldn't expect it for the next build.
~ We will leave it on our list, but move it to a lower section.

CCB-255 - Namespace version dependencies are not documented in the Information Model See https://pds-jira.jpl.nasa.gov/browse/CCB-255

Unclear if any changes have been made to the ticket yet.
~ The problem is that the design was done, then changes were made, and when tested it was found that it wouldn't work. Waiting for a new solution now.

Action Item - Anne will nudge **Steve** on this one.

Steve had sent email on this to Ed about a new possible solution, but it's unclear.

CCB-260 - PDS4 label files do not have a unique file extension See https://pds-jira.jpl.nasa.gov/browse/CCB-260

There's no strong lead on this. Unsure if anyone has any comments. There was discussion on this. Jordan said it would be easy to do, but it's unclear what's preferred.
~ This is a big deal. If we are going to do it we need to spend time on it.
~ Someone disagrees. The question is how this will affect the software and if we need it. We will also need some documentation.
~ There might be a migration step.
~ No. There's no need to force people to migrate. Almost no impact.

Question: Would the .xml file extension still be a legal name for a PDS4 label?
Answer: Until version 2 we would have to tell the validator if labels are .xml or something else. Can't mix them. We would need a switch that tells the software how to find the answer.
Another Question: Would this change in version 2?
Answer: Yes. Ideally, we would apply for a mine type and going forward we would use the new one.

Action Item - Ed will go back to **Jordan** and work on a plan to move this forward.

We do need to do this to make the ingest file archivable.

We just need a battle plan.

Question: Is this for this build?

Answer: Unsure.

~ This would require modification to the software. Not difficult, but would need to implement and test. We might not have enough time to make this build.

~ **Action Item - Ed** will talk to **Jordan** to see if this can be in this build.

~ Not sure how far apart the IM release and the tool release are.

~ Not sure what the tool release plans are for this time.

CCB-264 - Make the Line Feed (LF) character an allowed record delimiter See https://pds-jira.jpl.nasa.gov/browse/CCB-264

We've had discussions and agree it would apply to all places record delimiter appears. Discussions are documented in the comments. Document review shows it's in the SR, not sure about the Concepts document or the DPH. We will need to do some revisions if this passes. We need a volunteer for that.

~ Lyle volunteered to check the PDS4 documentation for places that need updating if LF only passes.

~ The DSV standard needs to be updated or at least looked at. We use it for table delimited. That requires CRLF, if we are adding LF, that's not compatible.

~ Our documents need to be updated if this passes - that goes beyond the DSV standard.

Question: Has anyone checked with EN about the software impact?

Answer: Jordan didn't say it was impossible. Steve says it will have a moderate impact.

Another Question: What do we do for tools - change the SCR for the software group?

Answer: We've had this discussion before.

~ Worried about tracking the changes that have to be made by various groups.

~ Not sure of the process.

Question: Not sure we need to do this, but if this passes, are we going to require that bundle or collections only use one? Will there be any restrictions?

Answer: The requested change is just that we make LF a value in record delimiter.

~ Checking consistency is a big amount of work. As written, I think we can have both.

~ Yes, as written, but not sure that's desirable.

~ We should have the software team access this.

~ We need the document team to be aware of the changes.

A side issue for Trent - we need to be able to inform users that things like this are coming. There's no way to do so yet.

~ Yes. Trent can discuss this with Jordan. We do publish release notes.

~ Those are after the fact. We should warn DPs of what changes may be coming. It might be good to have a public forum where people can discuss their preferences.

~ Trent can start thinking about this.

CCB-272 - Reinstate Array 1D in the Information Model See https://pds-jira.jpl.nasa.gov/browse/CCB-272

There have been a few comments - in email and on jira.

~ One of the comments is that a DP is unclear if this is a validation issue. Sees the IM issue. Would be happy to use a schematron rule. Happy either way.

~ Someone agrees that this could be a schematron rule.

There already has to be a schematron rule. When defining arrays - already Oxygen isn't happy until everything is defined.

Question: Was the DP using Oxygen or a text editor?

Answer: That shouldn't matter. Validation shouldn't crash either way.

Another Question: Which IM?
Answer: 1.11.0.0.
Action Item - Anne will try to reproduce the problem.
~ When designing tables errors pop up until everything is defined.
Another Question: Was there more then one array in the label?
Answer: Can't remember. **Action Item - Mark** will send it to Anne to test.

CCB-273 - Remove permissible values from id reference type See https://pds-jira.jpl.nasa.gov/browse/CCB-273

Not sure it's worth discussing this now.

Question: Are there any comments?
Answer: The same ones as before.
~ We need to interact with Steve to move forward.

Possible bug in validating LID formation rule in lid reference and lidvid reference This is not a CCB yet.

Steve sent a note about this topic. Still thinks it's reasonable to call this a bug fix as long as ASCII LID can only use lower case.

Question: Couldn't a pattern be used?
Answer: ASCII LIDVID is defined as you would expect.
~ No, there are two parts to this. ASCII LID is not being used and not constrained to lower case.
~ It should be re-written.

Question: Is a CCB filed?
Answer: No. Bug fix. Ed will go to Steve to see if an SCR needs to be written. **(Action Item-Ed)** ~ Someone thinks the solution is a pattern rather than a schematron rule.
~ Whatever. Don't like to get into implementation.

CCB-274 - Add attribute dictionary type to Ingest LDD See https://pds-jira.jpl.nasa.gov/browse/CCB-274

Question: Are there any new comments? There was one posted asking how mission got changed to project. Project seems more generic.
Answer: Someone prefers project, and missions see themselves as projects.
Another Question: Can we define each somewhere?
Answer: Yes. We need to document the three tiers of dictionaries.

The Concepts document has a section on LDDs, but it really only talks about missions. It would be nice to have definitions laid out. Project implies that a space agency is involved.
~ If it's defined, the overlap of the meanings would be clear. A bigger issue is the difference between the types. Thought there was an SCR. Will go back and check **(Action Item- Ed)**, but we shouldn't hold this up for this build.
~ The same thing in CCB-275 (see next agenda item). It would be nice to get this clarified.
~ The two SCRs should be consistent in their terminology.
~ They are, but not consistent with the Concepts document.
~ The changes to the Concepts document need to be included in the SCR.
~ Yes.

Still not sure where project came from.
~ Got in from reporter.
CCB-275 - Make Ingest LDD file archivable See https://pds-jira.jpl.nasa.gov/browse/CCB-275

This is a replacement for CCB-210 (Need to preserve the Ingest LDD file as part of a PDS4 Product) and CCB-212 (Add Modification History to Ingest LDD). Didn't have definitions for type in the SCRs. This is a new SCR, but we have been discussing this for over a year. Think we should be voting soon. One change would be adding edits to the Concepts document to the Requested Changes. In the description it talks about our current system and what we will do going forward - product namespace, label and ingest file, ingest schema, product LDD supplemental. Ingest file becomes an archive product, part of the EN bundle. A user guide has to be included. A regression test suite. Has to be ingested in the registry. It was pointed out that we need firm documentation on how to do all this. Some is already available in git-hub. There's a question about why we are not requiring LDDtool for all LDDs.
~ LDD tool should be required.
~ Not sure it's onerous. Easier.
~ Happy to remove the restriction.

Action Item - Mitch will add an explanation of the dictionary tiers, remove the restriction and update the documentation.

Question: Is there anything else that needs to be done? Can we vote in two weeks?
Answer: Need to see a full up mock up first.
~ That would make the proposal more concrete to evaluate.
~ Two weeks might be optimistic. We still need to see a good example of a regression test suite.
~ There is one for the Spectral LDD.

Action Item - Mitch and Anne will talk about this. **Everyone** really needs to look at this and let Mitch know if there is anything you don't understand. It's been two years since CCBs 210 and 212 went in.

Question: Comments?
Answer: (Silence)

II. Review status.

We have a few from Steve that we were going to check up on.

A new SCR was added this morning by Anne.

CCB-277 - Design and implement needed support for sky survey archiving See https://pds-jira.jpl.nasa.gov/browse/CCB-277

This is for survey data. Not sure it will be an issue for anyone besides SBN.

Question: Any idea what changes to the model?
Answer: Maybe add a type, a context product, maybe a new type of target.

Will need to see the current context product guidelines and stay consistent.

We will discuss this again. Maybe not for this build.

VI. Set next telecon date

We will meet again next Thursday, January 16.

Action Item - Everyone needs to work on action items and make comments on the SCRs. We want as many as possible for the next build.
We don't want to vote on ten things at once at the last minute.

DDWG Notes 2020-01-16
title: DDWG Notes 2020-01-16
layout: default
date: 2020-01-16

January 16, 2020
Notes by Debra Kazden

Known Attendees: C. DeCesare, M. Gordon, E. Guinness, L. Huber, S, Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, A. Raugh, B. Semenov and R. Simpson Known Observers: T. Hare and P. Lawton

DDWG Agenda
(Included in email sent January 14, from E. Guinness, DDWG agenda for Jan 16)

Change Requests need to be finalized and approved by mid-February to make the next build.
CCB is in the process of voting on CCB-271.

Agenda

I. Change requests might make the next build deadline.

1) CCB-220 – Add ability to specify many source products via table. Cristina to add needed documentation changes.

2) CCB-260 – PDS4 label files do not have a unique file extension. Ed to discuss a plan of action with Jordan.

3) CCB-264 - Make Line Feed an allowable record delimiter. Lyle to check on what documentation needs updating. Otherwise ready to vote.

4) CCB-272 – Reinstate Array 1D. Anne volunteered to do some testing of current model.

5) Possible bug in validating LID formation rule in lid reference and lidvid reference. These are defined as data types ASCII LID and ASCII LIDVID. However these data type do not have a schematron rule to enforce only using lower cases letters as is the case for the schematron rules of logical identifier, which has a data type of ASCII Short String Collapsed. – I plan to submit a change request.

6) CCB-274 – Add attribute dictionary type to Ingest LDD. Are we going to use project as the third value? If so, does the value meaning need to include both project and mission?

7) CCB-275 – Make Ingest LDD an archival product. Decided that LDDtool should be required for all LDDs. Group would like to see a mock-up of proposed organization for a LDD collection.
(Voted to Pass CCB-264 once jira is updated)

II. Review status, if time.

1) CCB-186 - ASCII String and UTF8 String whitespace handling. Anne posted a possible solution.

2) CCB-204 - Define and enforce best practices for LDD. Steve is tracking this as a software issue. If Steve finds that a model change is needed, the DDWG will get involved.

3) CCB-209 - Correct tagged objects. Status from Steve and Dick.

4) CCB-222 – Add citation text to Citation Information. Joe and Anne discussed this request in the context of supporting DOIs. So, the solution may be more complex than what has been proposed.
5) CCB-255 – Namespace version dependencies are not documented in IM. Steve and Anne agreed on one proposed solution. Anne to update ticket with definition of new class.

6) CCB-273 – Remove permissible values from id reference type. Several members had concerns about moving type values to a LDD.

7) CCB-276 – Query Model – Phase 2. New SCR.
(Not Discussed)

III. Parked for next build cycle.

1) CCB-205 - Additional constraints/best practices for LDD. This probably will be done after build deadline.
(Not Discussed)

IV. Other topics?
(No)

VI. Set next telecon date –Suggested date: Jan 23. Trying to meet weekly in Jan and early Feb as needed **(January 23)**

DDWG Telecon

The CCB has passed CCB-271. No issues reported.

There has been a lot of email and jira activity this week. A couple of items are close to completion. We will start with those.

I. Change requests might make the next build deadline.

CCB-220 - Add ability to specify many source products via table See https://pds-jira.jpl.nasa.gov/browse/CCB-220

Last time the ticket needed the documentation changes added.
~ Still in progress. Will finish soon. Email will be sent when the ticket is ready. **(Action Item- Christina**)

We have a few weeks.

Question: Any comments?
Answer: (Silence)

CCB-260 - PDS4 label files do not have a unique file extension See https://pds-jira.jpl.nasa.gov/browse/CCB-260

Ed discussed this with Jordan. Sent email to the group. Jordan says we should go with one extension type in a bundle. A switch can be added to tools to handle the case. Might be able to make this build.

Question: Should we move this forward?
Answer: Someone didn't understand what Jordan thought we were proposing. Got confused. Thought we only wanted a new file extension. He was talking about changing the file extension for products.
~ Someone thinks we could take an XML file and give it any extension we want. That would work. There was more. This SCR is to make a fundamental change in how we name our PDS4 labels.
~ Thought this was for data that is XML - that we would pick some other extension for the labels. That's not what Jordan said.

~ He said in a bundle we could pick what the extension would be.
~ Right, we don't want different extensions scattered through a bundle.
~ We should add that to the documentation.
~ Someone is not sure they agree, but okay.
~ We don't have to rush this.

A couple of things - thought Jordan wasn't as clear as we need. Need to say new extension for labels. People have to choose one. Need to be clear if data is XML then there's a new extension for the labels. Need to decide what the extension would be - unsure of the restrictions.
~ A bit of paperwork to a standards body.
~ We can google mime types to get the list of current ones. Need high level work, descriptions, etc.
~ That should be in the SCR.
~ Yes, people want to see this.
~ We need someone at EN to do the work.
~ We should figure out what we want. Maybe second choice too.
~ There's no uniqueness required.
~ There must be advantages to being unique. Let's try to do that.

Don't think this SCR is overly complicated, but maybe we shouldn't rush this. Willing to edit the ticket. **(Action Item-Ed)** ~ It's worth noting that getting a mime type is a separate issue.
~ Someone likes LBLX
~ If people have something to suggest...(missed something) At least we know the path forward. We should be able to wrap this up this spring.

Question: Any Comments?
Answer: Thought this was for version 2.
~ Advocating to make it mandatory in version 2. Up to then, it's optional.
~ Someone asked Jordan if we care if it's mandatory at some point and he didn't seem to care.
~ It's good to have a transition period.
~ If it's mandatory in version 2 it will make migrations onerous.
~ Would only change the extension. Could be done on command line - and then update the registry.
~ But NAIF is keeping all checksums and manifests - files won't match.
~ Thought NAIF was never migrating anyway.
~ NAIF thought everyone had to go to version 2.
~ Someone thought that version 2 would include new stuff, but that once you adapt a version in PDS4 that you are done and all versions will continue to be supported.
~ No. Tools will stop supporting version 1. That's my recollection of the plan.
~ Let's table this for now.
~ Can't unchange if we make something mandatory.
~ We can visit this at version 2, but it's unclear that we have to migrate from version 1.X to version 2. Strong objection to the idea that that's required.
~ Glad to hear that.

We won't rush this. Will think about what the ticket should say, what the new extension should be and if it should become mandatory. We don't want this to bite us later.

CCB-264 - Make the Line Feed (LF) character an allowed record delimiter See https://pds-jira.jpl.nasa.gov/browse/CCB-264

Lyle volunteered to go through the documents to see what needed to be changed. He did that. Ed made comments. Think the ticket is ready, but with liens. The document team would like to see where the updates are needed in the Requested Changes, and the TA says there's no impact to the Concepts document and the DPH, but there are.

Question: Does Steve want to update the TA?
Answer from Steve: Will be glad to update the TA. **(Action Item- Steve)** ~ Steve, as author, also has to put the locations of document changes in the list of Requested Changes.
~ Those statements in the comments... can cut and paste.

Question: Do people think they are ready to vote with liens? Any Objections?
Answer: (Silence)

**The Vote to send CCB-264 to the CCB with liens:
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - No
IPDA - Yes
NAIF - Abstain
PPI - Yes
Rings - No
RS - No
SBN - ("Is whatever an option?") Yes**

Six yes votes. It passes. Once the changes are made we will alert the CCB.

Question: Is this for the next build? When is the release date? Need to update the SBN wiki.
Answer: End of March for schema and tools. Systems later.
Another Question: Will this impact the PDS Viewer tool?
Answer: **Action Item - Anne** will check with Lev, but it shouldn't.
Another Question: Is Lev still in the picture with the tool?
Answer: We can try emailing him, but will test the tool first.
~ Someone would be surprised if it doesn't work.
~ He was coding to a very specific standard.

CCB-272 - Reinstate Array 1D in the Information Model See https://pds-jira.jpl.nasa.gov/browse/CCB-272

Background was given last week. Anne was going to do some testing.
~ Anne added comments in jira. Someone agreed with her that it's very reasonable to add validation check. There's a hole in the model. A schematron rule would be good.
~ No real opinion about array 1D versus array. Very little difference. No opinion, but for general array, followed the logic and found numbers can be different. We can fix that. People who care can argue the rest.

Don't want to force PPI to make changes. Schematron reasonable. But adding array 1D is fine for model driven architecture. Don't see a reason why there would be a problem.
~ Assuming this passes, we still need schematron rule. We need that.
~ Yes, that's the point. We are duplicating validation. There was a hole, so we need to add a schematron rule.

Question: Do we need to add that to the ticket?
Answer: Yes.
~ The only place it's needed is in generic array.
Another Question: Does anyone have an issue with this?
Answer: PPI wouldn't use this. The reason for generic array is we also have 4D and could do 5D in the future. We discussed adding 4D and it was suggested we use generic array. We have a very strong objection to 1D.
~ The bigger picture is that at the time we needed composite structure to link structures together and PPI went ahead with their approach, but composite structure now exists and that would link things. The way object orientated

development works - more consistent. Better approach for developing. Needed for exoplanets. Many projects are using composite structure. Not trying to force PPI to make a change.

~ For exoplanets, if it's specifically needed, fine, but thought we developed on a specific need, not principal.

~ There is a need for 1D. Can later request 4D. It's consistent and backwards compatible.

~ Didn't want to add more classes for no particular reason. It looks difficult for new users if there are so many classes you can't even fit them in a book.

~ The problem if you are using an array is where all the constraints go that you need to specify. We need to add a schematron rule and have software. Not sure why we aren't sticking with the original paradigm.

~ Generic array is easy to understand. My software will handle it.

~ Software can be written for 1D, 4D, whatever.

~ That argument works both ways.

~ No. In object orientated model driven....(interrupted) ~ We're not getting anywhere.

Question: If 1D array is reinstated, but PPI prefers generic class, would they be forced to use 1D?
Answer: No.
Another Question: What about in version 2?
Answer: Confused. Not proposing base class array be changed to abstract. Don't see why CDFs would have to change. There are two paths. You're precluding the use of one path for no reason.

~ Philosophy behind specific classes so generic software could scan labels. There is a modeling discipline involved for specific software. Something like array doesn't have all the tags. May not matter. LDD that defines the CDF structure gives the structure. Argument in making abstract class concrete was for data users so they could meet their deadlines. If there's an LDD around the generic arrays, that's fine. No strong opinion.

~ Good point. If there's a need to have a complex structure and no time to go through the DDWG, then array is good. IMG is planning more complicated composite structures.

~ Our instructions to DPs is to use the most specific class for your data products.

~ PPI's solution required three LDDs. We will see that more. Whole point of composite structure was to eliminate that need. That was the original design intent. Extensions are added in a controlled manner. Keeps the model...(interrupted)

Action Item - Steve update the ticket, do the TA. Not sure people are on this now, but do remember if there is a more specific class you have to use it. That would force PPI to change.

~ They could use a waiver.

CCB-278 - Fix errors in logical identifier, ASCII LID, ASCII LIDVID, and ASCII LIDVID LID definitions See https://pds-jira.jpl.nasa.gov/browse/CCB-278

There are a few bugs in our system.

Action Item - Everyone review this. We will discuss it next time.

CCB-274 - Add attribute dictionary type to Ingest LDD See https://pds-jira.jpl.nasa.gov/browse/CCB-274

This will go in the ingest LDD class - a new attribute. Thought we were pretty settled, then we had a discussion over using project or mission. Don't think it matters as long as people know when to use it. This goes with CCB-275 (see next agenda item)

CCB-275 - Make Ingest LDD file archivable See https://pds-jira.jpl.nasa.gov/browse/CCB-275

Steve is working on a problem in LDDtool. It was noticed that EN puts mission in their structure and we may get non-mission project LDDs. Might want to have both project and mission. Would need to update CCB-274 for this too. If this passes, we don't need CCB-274, but it's less problematic as long as dictionary type is the same in both.

~ Someone objects to having both mission and project. People won't know what to choose. Plus, what about individual data providers.

~ Someone disagrees. CCB-274 should be withdrawn. Dictionary is the wrong name. Was going to try to mock up CCB-275, but couldn't. Have to prototype. Need a full design. Adding attribute with the wrong name won't help. Bigger problems that need integrated solution. Will be a lot of effort.
~ The whole issue of the directory structure with mission was a fluke. That can be changed.
~ It's in the namespace.
~ I understand. It shouldn't be there. Unfortunate it happened. Didn't have a separate directory.
~ That was to have things with the same name in directories - ground based and mission.
~ Talking about different things.

Question: Instead of dictionary type do we want namespace type?
Answer: Yes. Confusing to have several words for the same thing. We need to wrangle the vocabulary so non-PDS experts can understand. Need to be very careful about language.
~ Another issue was about the proposed product LDD supplemental. Was to capture output of LDDtool that isn't captured elsewhere. It puts out a bunch of stuff that would be an additional product. But if it's not meant to be archival things we could get rid of this.
~ The question in an archive is who will use things. JSON files might be used in software. More liberal. I would include it if it was produced.

We're over our hour here. There's a lot of work for these two SCRs.

Question: Who will do the work and when?
Answer from Mitch: When is a problem. I'm going to be teaching gravity to sixth grade students.
~ Just push them over. They'll get the concept.
~ Mitch is very busy this month.
~ **Action Item - Anne** will work on this and **Mitch** will try to respond.
~ Anne is six inches from a wall trying to do this for the Spectral LDD. Unsure what the structure will be. These are schema, they don't get superseded. Unclear how to move forward.
~ Complex problem. Snapshots.
~ All snapshots are valid.
~ I mean build. Each build would capture everything.
~ EN has a schema product. It is captured in a collection, which is specific.
~ Anne needs to see the tree.
~ All versions are retained in the collection. Not superseded. Thought some of that was captured in the SCR.
~ The concern is what happens underneath. How this will be slotted into the directory tree. Can have 17 files that all have the same name.
~ File name includes the IM and LDD version. Unique file names.
~ Take this off-line. It won't be ready next week. Maybe in two weeks. Keep the email thread going.

VI. Set next telecon date

We are done for today. Hopefully next week we can get to CCB-220. Maybe 272 and 278. Maybe 186 and 255.

We will meet January 23 and see where we stand.

DDWG Notes 2020-01-23
title: DDWG Notes 2020-01-23
layout: default
date: 2020-01-23

January 23, 2020
Notes by Debra Kazden

Known Attendees: C. DeCesare, M. Gordon, E. Guinness, L. Huber, S, Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, A. Raugh, B. Semenov and R. Simpson Known Observers: P. Lawton

DDWG Agenda
(Included in email sent January 21, from E. Guinness, DDWG agenda for Jan 23)

I. Change requests might make the next build deadline.

1) CCB-220 – Add ability to specify many source products via table. Cristina working on documentation changes.

2) CCB-260 – PDS4 label files do not have a unique file extension. Please note your preferred extension on JIRA.

3) CCB-272 – Reinstate Array1D. Continue discussion.

4) CCB-278 – Fix errors in logical identifier, ASCII LID, ASCIIVID and ASCII LIDVID LID. Review and comment. **(Discussed)**

II Discussion deferred until 1/30

1) CCB-274 – Add attribute dictionary type to Ingest LDD. Are we going to use project as the third value? If so, does the value meaning need to include both project and mission?

2) CCB-275 – Make Ingest LDD an archival product. Decided that LDDtool should be required for all LDDs. Group would like to see a mock-up of proposed organization for a LDD collection. **(Brief Discussion)**

III. Review status, if time.

1) CCB-186 - ASCII String and UTF8 String whitespace handling. Anne posted a possible solution.

2) CCB-204 - Define and enforce best practices for LDD. Steve is tracking this as a software issue. If Steve finds that a model change is needed, the DDWG will get involved.

3) CCB-209 - Correct tagged objects. Status from Steve and Dick.

4) CCB-222 – Add citation text to Citation Information. Joe and Anne discussed this request in the context of supporting DOIs. So, the solution may be more complex than what has been proposed.

5) CCB-255 – Namespace version dependencies are not documented in IM. Steve and Anne agreed on one proposed solution. Anne to update ticket with definition of new class.

6) CCB-273 – Remove permissible values from id reference type. Several members had concerns about moving type values to a LDD.

7) CCB-276 – Query Model – Phase 2. New SCR.

(Brief Discussion of CCBs 204 and 209)

IV. Parked for next build cycle.

1) CCB-205 - Additional constraints/best practices for LDD. This probably will be done after build deadline.
(No Discussion)

V. Other topics?
(No)

VI. Set next telecon date –Suggested date: Jan 30. Trying to meet weekly in Jan and early Feb as needed.
(January 30 - half hour later then usual)

DDWG Telecon

If we want to meet next week, on January 30, we will have to meet later than our usual time due to a conflict with the Mars2020 DAWG. We will discuss this at the end of today.

I. Change requests might make the next build deadline.

CCB-220 - Add ability to specify many source products via table See https://pds-jira.jpl.nasa.gov/browse/CCB-220

There was a lot of discussion during the week on this due to the document changes. A lot of updates were made. However, the tiger team had some more discussion that means that the ticket needs further updating before we can vote. **Action Item for Everyone** is to look over the proposed document changes for the DPH and the SR.

The tiger team will close ranks, clean up the ticket and then we can all review it and a TA can be done. Unsure when this will be ready. Hopefully we can vote soon.
~ The deadline for the build is Valentine's Day, Feb 14.
~ That's the CCB deadline.
~ DDWG would need to vote by February 6.

The team will try to have this ready for review and a TA for next week.

CCB-260 - PDS4 label files do not have a unique file extension See https://pds-jira.jpl.nasa.gov/browse/CCB-260

Last time there was a lot of discussion on this. Everyone was asked to comment in jira. There was lots of discussion. Not feeling any urgency to get this in this build. Asked people to comment on that in jira. Not many comments.
~ A July comment was updated.
~ We discussed not using XML for labels ten years ago. Failed to pick a unique extension at the time. Someone knew it would come back to bite us and it has.
~ Arguing about history.

Question: Which do you prefer?
Answer: LBLX.
Another Question: Other comments?
~ October comment said the same thing. If there are no new comments now then the reporter can edit the SCR.
Action Item - Ed will email **Anne** with what to say in the SCR edits. Will re-read the whole thing first.

Question: We could do a strawman. Does anyone object to LBLX?
Answer: (Silence)

Someone does have a general comment. Don't care, but concerned that we're using names to indicate something. In general, using links in PDS4 - people know it's a label, rarely scan a directory. Original argument was the huge overhead of software. Don't think there is. Concerned about the impact.
~ Label name is not in the IM. Hard to know where the root tag is. Backwards compatibility issues for people who have used extensions in their code or have registered.
~ LIDVID in transfer to NSSDC - we give label to root product. They pull them across.
~ Because we give them a list. Our code has to figure out what a label is.
~ We're far afield.

CCB-272 - Reinstate Array 1D in the Information Model See https://pds-jira.jpl.nasa.gov/browse/CCB-272

Steve Hughes sent email with a diagram to assist with this discussion. (See RE: DDWG agenda for Jan 23, sent January 23, DesignPaths-200123-b.jpg attachment.)

This was initially submitted to re-instate 1D array, but now we are discussing more. Proposing two paths you can use - one is composite structure and one is what PPI did with CDF. The proposal is to allow both. The question is if we allow crossovers/mixing. Need a schematron rule to fix the original issue and a standard that affects this. The picture is to describe what's in the comments. Composite structure object orientated hierarchy or network of structured classes. There are issues. The current standard says DPs have to use the most specific class available. The red relationship in the diagram is being forced on us by the SR. Line 1 and Line 2 are how things are designed. Gray lines show additional approaches. So, we want to change the standard. It blocks the composite structure and new array types. Would be more functional once we throw in array base. Code gets complicated in network of classes. People can create what they want - 1D and 4D are already being done. Can't !
 use them in approach 1, but can in 2. An issue is that we lose control of what people are doing in approach 2. Need to allow approach 2 so PPI can continue with CDF, but we want composite structure to be used too. In summary, SCR now asks for schematron to validate the network of classes approach and to try to change the standard to say choose one and be consistent.

Question: Choose one of what?
Answer: One approach.
~ Someone rejects all of this.
Another Question: How does composite structure refer to the pieces without local internal reference area? In the dictionary area?
Answer: In file area observation.
~ So, they are directly related. Okay, so there are not two methods. One way defines relationships.
~ Option 2 was used when option 1 was in development. PPI used option 2.
~ These are not really options for doing the same thing. They are not interchangeable.
~ That's what happened.
~ There's a difference between building a house or a car.
~ Not sure where we are going.
~ Don't want this to shout down the proposal. We should have array 1D, but not for this reason. Reject the diagram, but think we do need the array 1D class.
~ I'll let that stand.

Question: So, you favor array 1D and not changing the standard from saying people have to use the most specific class?
Answer: If you choose composite structure and most specific class, that makes sense, but right now SR allows local internal reference.
~ If we change the standard, you could use array, array 2D or array 2D image for an image.
~ We can't add array 1D without changing the standard or it will force PPI to change.

See 9.F Class Selection in SR.

If option 1 - people have to use the most specific. PPI using array blocks forward progress on composite structure.

It's concerning there's no specific software. If generic data type, having specific object get in SR might happen as generic - so can meet an archive deadline. Surprised to see such specific language in the SR.
~ Someone does not follow that generic array is a problem for generic software.
~ No. Someone could write software that makes assumptions.
~ That makes sense. For CDF - dozens of arrays in a CDF file. Unwieldy if have to use specific array class.
~ In composite structure, would want specific arrays and software would know what to do.
~ Okay.

Question: Other comments?
Answer: Someone didn't see the emailed diagram, but wants to know why you can't follow path 1, use composite structure and use generic array with axis equals 1. Wants to know why that isn't allowed.
~ That's what's being forced. It's not an extension.
~ Forget it - just not seeing the problem.
~ Extensions put more information into the IM and software.

Ten D array is okay with me.
~ It's not that we can't allow it. Precluding.

PPI likes the dual approach, just not mixing base array class with more specific ones. Like that solution, but unsure how the rule should be written.
~ Someone is very nervous now. We went from array to array 2D because we were seeing multiple constraints on array. We wanted to make sure people used the correct extension. I'm having trouble with people picking and choosing.
~ We have a spectral cube thing - files with similar sized array 2D images. Not clear about quality map or bad pixel map - should be array 2D image. that's where I just might call it array 2D, so it's not confused with an image.
~ If it's not an image or map it's array 2D.

Question: So why object to array 1D?
Answer: I see where you are going...
Another Question: Is there a use case we can see?
Answer: Exoplanet. I do think the rest use most specific is important to option 1.

I think use most specific always. If we add 1D PPI has to change.
~ We don't want to force that.
~ MAVEN uses an older version of the IM.
~ That's okay until a new mission wants to use CDF.

We need to see wording for changes in the standard. Not sure what's being proposed.
~ The issue is the red line in the diagram. As currently written, a composite structure with a 1D array and a 2D array couldn't specify the 1D array.
~ We need to see the wording.

Someone is not sympathetic to any of this.

CCB-278 - Fix errors in logical identifier, ASCII LID, ASCII LIDVID, and ASCII LIDVID LID definitions See https://pds-jira.jpl.nasa.gov/browse/CCB-278

This is a bug and people were asked to comment on it last time. Only one comment made - was on length. Unsure if we should extend the SCR. There was also some email on this. It will be attached to jira.

Question: Any comments?
Answer: Someone sort of likes where this is going.

Action Item - Ed will add the email comments to jira.

We will pick this up next time.

II. Discussion deferred until 1/30

CCB-274 - Add attribute dictionary type to Ingest LDD and CCB-275 - Make Ingest LDD file archivable See https://pds-jira.jpl.nasa.gov/browse/CCB-274 and https://pds-jira.jpl.nasa.gov/browse/CCB-275

There's been a lot of discussion on these. Unsure if Anne and Mitch have talked yet. Wonder if people will be ready for this next Thursday.
~ Anne tried to make a mock up. Kept finding holes. Thought it needed to be prototyped, so tried that. As trying to do that, realized there wasn't enough information to do it. Many complications. Not everything is defined. Couldn't prototype. Emailed Jordan about the dictionary process. No draft even. Dead in the water. Very complicated issue.
~ Won't be ready by next week. Thought we were there, but unanticipated gaps. Will go beyond this build. Would be nice to meet face to face, but no F2F planned in March. Will have to keep working this. No reason to keep this on the agenda for the next build.
~ We will keep it on the list of things we're working on.

Question for Steve: Impacting work on LDDtool?
Answer: Willing to accept - we can remove CCB-274. Impact is that I need to do something.
~ Should do CCB-274.
~ We should retain both project and mission for now.
~ Three levels, and the third level is project and mission.
~ There might be differences in what LDDtool does for well funded missions and less funded individuals.

~ Question: Is this going to happen before I retire?

Action Item - Anne and Mitch - converge on the values.

CCB-274 will need a TA

Question: What about individual data providers?
Answer: That's project. We need very clear definitions.

III. Review status, if time.

Question: does anyone want to discuss anything in section 3?
Answer: Yes.

CCB-204 - Define and enforce best practices for discipline and project dictionaries See https://pds-jira.jpl.nasa.gov/browse/CCB-204

This has five parts. The first four are done. Fifth is very interesting, but can't be done with the current IM. This goes back to CCB-272 and composite structure methodology. I feel 204 is done for this build. Part 5 can go in a different build.

Question: What is part five?
Answer: The fifth suggestion.

More software orientated issues.
~ Do what was done with CCB-203.
~ Report to Jordan that software issues taken care of. Can close this.

CCB-209 - Correct Definitions of Tagged-*-Object See https://pds-jira.jpl.nasa.gov/browse/CCB-209

Steve gave Dick a prototype in December. Thought it would be straight forward, but Dick doesn't understand it. Has some new things. Needs more work. Need to discuss terminology.

Action Item - Steve and Dick will keep working on it.

VI. Set next telecon date

Next Thursday, January 30, there is a Mars2020 DAWG. It overlaps with this meeting.

Question: Can we start at 10:00 A.M. Pacific?
Anne: Okay
Dick: Okay
Tanya: Can't make it. Will ask Mark to stand in.

We are making progress. It would be nice to get through some more before Trent jumps in, but better to get things right then to hurry.

DDWG Notes 2020-01-30
title: DDWG Notes 2020-01-30
layout: default
date: 2020-01-30

January 30, 2020
Notes by Debra Kazden

Known Attendees: C. DeCesare, M. Gordon, E. Guinness, L. Huber, S, Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin, A. Raugh and R. Simpson Known Observers: T. Hare, P. Lawton and J. McAuley

DDWG Agenda
(Included in email sent January 27, from E. Guinness, DDWG agenda, Jan 30; Note later start time)

I. Continue discussions

1) CCB-220 – Add ability to specify many source products via table. Ticket is still being finalized. However, DDWG members need to review the material to be familiar with the requested changes.

2) CCB-260 – PDS4 label files do not have a unique file extension. Ed to review the ticket and suggest updates to Anne.

3) CCB-272 – Reinstate Array 1D. Working on a draft change to section 9F of the standards reference.

4) CCB-278 – Fix errors in logical identifier, ASCII LID, ASCIIVID and ASCII LIDVID LID. Review and comment. Comment from Anne added to the ticket.

5) CCB-274 – Add attribute dictionary type to Ingest LDD. Are we going to use project as the third value? If so, does the value meaning need to include both project and mission?

6) CCB-275 – Make Ingest LDD an archival product. Decided that LDDtool should be required for all LDDs. Group would like to see a mock-up of proposed organization for a LDD collection.
(Discussed)

III. Review status, if time.

1) CCB-186 - ASCII String and UTF8 String whitespace handling. Anne posted a possible solution.

2) CCB-204 - Define and enforce best practices for LDD. This is really a software issue. Steve has implemented 4 of the 5 requested changes. He will close this CCB in the same manner as CCB-203.

3) CCB-209 - Correct tagged objects. Status from Steve and Dick.

4) CCB-222 – Add citation text to Citation Information. Joe and Anne discussed this request in the context of supporting DOIs. So, the solution may be more complex than what has been proposed.

5) CCB-255 – Namespace version dependencies are not documented in IM. Steve and Anne agreed on one proposed solution. Anne to update ticket with definition of new class.

6) CCB-273 – Remove permissible values from id reference type. Several members had concerns about moving type values to a LDD.

7) CCB-276 – Query Model – Phase 2. New SCR.
(Brief Discussion)

IV. Parked for next build cycle.

1) CCB-205 - Additional constraints/best practices for LDD. This probably will be done after build deadline. **(Not Discussed)**

V. Other topics?
(No)

VI. Set next telecon date –Suggested date: Feb 6. Last telecon before the build deadline.
(February 6)

DDWG Telecon

We are close to the deadline. Hopefully a few more will be passed to the CCB.

The Mars2020 meeting was cancelled, so there wasn't a conflict after all.

We need to vote by next meeting - February 6. We'll do what we can.

I. Continue discussions

CCB-220 - Add ability to specify many source products via table See https://pds-jira.jpl.nasa.gov/browse/CCB-220

The tiger team met before this telecon. They addressed issues and have a path forward. There will be a number of changes made to the Requested Changes section in jira, including the removal of 3-7 because we won't be using a reference. Basically, the plan is that if using source product internal or external for a lot of products - you will use a table. There are two distinct ways of describing source products. The differences are outlined in the documents. Examples extend table-delimited. They need schematron rules added. It will work as the inventory class works. The team will update the ticket, edit the Requested Changes to describe the new classes and schematron rules.
~ Also, analogues to inventory, will include a reference type.

The plan forward is that the ticket will be cleaned up, and the tiger team will review it. A TA can be done in parallel. Once it's updated, people can take a look. We would like to vote on it for this build.

Action Items - Christina will make the changes in jira by tomorrow, **Ed and Mitch** will review the changes, and **Steve** will do the TA. **Everyone** will review this and be ready to vote next week.

Announcement: Christina will be leaving JPL/PDS on February 7.
~ She will be missed.
~ This is a positive change for Christina.

Question: Any comments?
Answer: (Silence)

CCB-260 - PDS4 label files do not have a unique file extension See https://pds-jira.jpl.nasa.gov/browse/CCB-260

Last telecon we decided not to rush this. There's been some email and the ticket was updated. Work will continue. We will discuss this again post build deadline. We are moving forward, but don't want to rush this because it is a significant change.

CCB-272 - Reinstate Array 1D in the Information Model See https://pds-jira.jpl.nasa.gov/browse/CCB-272

We might be able to finish this one. There has been a lot of email. There are ancillary issues with documentation and how people choose what class to use.
~ The issue is to address section 9.F of the SR. A first pass was done - didn't change the verbiage, but added two qualifications. First is that DPs need to use the most specific appropriate class for composite structure and can ask for more extensions, second that DPs need to use the most appropriate class - for ones made with an LDD. Lower case composite structure. This allows PPI to continue. Word smiths can fix this. There have been some comments.
~ The proposed wording is confusing. We need to work on this more.
~ People found the second qualification to be confusing.
~ Qualification 2 is confusing because it talks about a generic composite structure.
~ We need terminology that explains the CDF structure design. Word smithing is fine. This should apply to composite structure.

Question: Why call the PPI CDF a composite structure?
Answer: It exists. It's something - a network of fundamental structures. Needs a name. Don't have to call it composite structure. Could call it Bob.
~ Okay with calling it the CDF structure. Two structures is shooting ourselves.
~ Just want to make sure we don't impact the CDF structure.

We can't vote until the wording is fixed.
~ Someone agrees. Want to see the final wording before voting.
~ Agreement.

Question: Why can't PPI use array 1D?
Answer: PPI put a comment in jira. One product has 41 arrays in it. It's easier to identify separate arrays and look for the number of axis in them. For that sort of structure it makes more sense to use base array.
~ So, ignoring the standard to have one special piece of software. We came up with generic classes and extensions for software. Trying to understand why when we are trying to have a clean, consistent build, why we are codifying this.
~ Good argument.

Question from PPI: Do you want us to respond to this now?
Answer: You know the concern. It's a weird situation. We can discuss it more.
~ Not sure what software is being talked about based on the class - not sure it would help with CDF.
~ Looking for consistency. If the software checks arrays and looks for axis, fine, but why use any specific arrays if some are specific then all should be specific. Mixing the two seems odd.
~ PPI is using base array everywhere. No mixing.
~ So it's logical - like an ISIS cube.
~ Yes.
~ Okay.

Action Item - Steve and Dick will work on the documentation.

This conversation has been very useful. For the network choice it's generic only - no mixing. Hadn't raised that issue.

Wording has to be clear that if there's a single data object the standard applies. We don't want to change that.

Question: Any comments?
Answer:(Silence)

CCB-278 - Fix errors in logical identifier, ASCII LID, ASCII LIDVID, and ASCII LIDVID LID definitions See https://pds-jira.jpl.nasa.gov/browse/CCB-278

This is a bug. There have been a few comments - email and test cases. Unsure if a different approach is needed. Some comments about length too. Not sure we want to go into that.

Question: Any comments?
Answer: Okay with leaving length to a different SCR.

There was a comment related to how specific the Requested Changes are. Thinks people who know how to do it should do it.
~ That's the point. The Requested Changes are clear enough that the right people can do the work.

Question: Is Steve okay with this if it has to be implemented?
Answer from Steve: Will look into it. **(Action Item)**
~ This needs a TA.
~ Specific change is not specified. Thought there was something. An issue.
~ Someone thought it could be fixed with a well written pattern in schema.
~ Need experts to help with this.
~ Schematrons are attached.
~ Will go forward.

Question: Other comments?
Answer: (Silence)

CCB-274 - Add attribute dictionary type to Ingest LDD and CCB-275 - Make Ingest LDD file archivable See https://pds-jira.jpl.nasa.gov/browse/CCB-274 and https://pds-jira.jpl.nasa.gov/browse/CCB-275

Talking about these together.

Question: Has there been any progress? Think we decided this wouldn't be for this build?
Answer: Thought CCB-274 could be done now and CCB-275 could be done later.
~ Yes, we need CCB-274. Need to agree what it will be.
~ Someone prefers CCB-275. Three tiers of dictionary - common, discipline and everything outside PDS - missions, projects, etc. Think there's potential for a lot of LDDs in tier 3. Thought we could divide by mission and non-mission.
~ Someone is uncomfortable with the bifurcation of tier 3. Currently, EN has mission in the naming of the directory tree. Thinking of mission and project, but project can be something else. Would allow more values for type.

Question: How will this keyword be used in LDDtool?
Answer: It would replace command line argument. No major impact.
~ It alters the namespace and loosens constraints at tier 3.
Another Question: For EN directory - it was originally for organization. Are we going to continue with that?
Answer and Another Question: Table that for now. The impact on the SCR is unclear. If we have project on the third tier - how will that affect LDDtool? Will that alter the namespace?
Answer: Right now we just have a mission folder. It could be a significant impact. Unclear.
Another Question: If we stick with the current nomenclature - can we add a fourth tier later?
Answer: The tool could deal with it, but it will affect operations.

Question: Has anybody had to make an LDD for a research project?
Answer: In the works.
Another Question: Did you use mission in the namespace?
Answer: If that's how it has to be done.

We should leave three tiers for now and research the operational impact. We could add project later. For LLDtool it would be a minimal impact.

Question: So, leave it as mission?
Answer: Yes.

~ There will be another SCR in the future. Slash mission in namespace in future might be misleading. Need to make sure documentation is very clear.
~ Think we want to change mission back to project.

Question: Should we fix the Requested Changes? Capture somewhere that mission is also for research projects and that in the future we might add another standard value? Can we live with this for now?
Answer: Would need to fix definitions. Discipline LDD definition is circular.
~ This is gerry rigging for a system that hasn't been designed yet. LDD creators are working with us. We can tell them what to do for now. Can figure this out for the long term later.
~ Someone agrees. Seems like removing dash m switch from command line - puts mission in the namespace.
~ Yes, and for now, oh well, that's how it goes.
~ Someone agrees. Dash m is being used.

So we are going ahead with CCB-274 - getting rid of dash m. Not worried about project for now. Remove the double T. We will do CCB-275 later.
~ Minimal solution.

Action Item - Steve make project mission, take out TT. Do a TA. Make sure it's consistent.

Hopefully, we can vote next time.

III. Review status

CCB-186 - ASCII String and UTF8 String whitespace handling See https://pds-jira.jpl.nasa.gov/browse/CCB-186

This is still in review status. Assignee is unclear if there's still something they need to do.

Action Item - Ed will look at this this week

Anne and Pat will be on travel next week. Would like to clear this up.

Reduce the list for Trent.

CCB-222 - Add citation text to Citation Information See https://pds-jira.jpl.nasa.gov/browse/CCB-222

This is on hold for now.

CCB-255 - Namespace version dependencies are not documented in the Information Model See https://pds-jira.jpl.nasa.gov/browse/CCB-255

There's a draft solution for this.
~ Yes. Thought it was ready for this build.
~ Someone agrees.

Action Item - Ed will look and make sure this is up to date.

CCB-276 - Implement Query Models – Phase 2 See https://pds-jira.jpl.nasa.gov/browse/CCB-276

This has three parts. A query model is already created. Specified the attributes. Implementation was to create schematron rule. Step two - in the ingest LDD - when defining an attribute - include query model. It should be optional and repeatable. Step three is query model has to be defined to exist as a separate entity in the IM. For now, we just need to add an attribute to LDD.
~ Someone is confused about how they would use this. The Spectral DD is like a query model itself.

~ Yes.

~ Most LDDs define a query model for the metadata for that discipline.

~ What's missing is something that says it's a query model that harvester can search.

~ That would be a nice option.

We've been talking about query models for ten years, so we can harvest specific attributes.

~ Query models put requirements on DPs.

~ There are different query models.

Question: Likes this, but new attribute for every attribute in LDD? Not in every class?

Answer: If the issue is do you know the context of the attribute for harvest/search, then yes.

~ Just wanted to get this out.

~ So a generic attribute might belong with class.

Moving forward, there's no Requested Changes. Our 2 existing query models - schematron rules, required, and primary results summary, which we don't require for bundles and collections.

~ Thought that's what we agreed to.

~ Yes, but it's a bug.

~ **Action Item - Steve** will fix that.

Question: Will this be ready for a vote?

Answer: Not sure.

VI. Set next telecon date

Our hour is up.

Question: Anything else?

Answer: (Silence)

We will meet next Thursday at the normal time.

DDWG Notes 2020-02-06
  title: DDWG Notes 2020-02-06
  layout: default
  date: 2020-02-06

February 06, 2020
Notes by Debra Kazden

  Known Attendees: C. DeCesare, M. Gordon, E. Guinness, L. Huber, S, Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson
  Known Observers: D. Hollibaugh-Baker, T. Hare, J. McAuley and J. Stone (alternate for Anne Raugh)

DDWG Agenda
(Included in email sent February 4, from E. Guinness, DDWG agenda for Feb 6)

  I. Ready for voting

  1) CCB-220 – Add ability to specify many source products via table. Revisions have been posted. Should be ready to vote once TA is revised.

  2) CCB-274 – Add attribute dictionary type to Ingest LDD. Ticket has been revised. Ready to vote?

  3) CCB-278 – Fix errors in logical identifier, ASCII LID, ASCIIVID and ASCII LIDVID LID. TA complete. Ready to vote?

  4) CCB-272 – Reinstate Array 1D. Not clear if the documentation changes are settled? TA done.
  (Voted to pass SCRs 220, 274 and 278 to CCB)

  II Status check

  1) CCB-186 - ASCII String and UTF8 String whitespace handling. Ed to review the ticket (not done).

  2) CCB-204 - Define and enforce best practices for LDD. This is really a software issue. Steve has implemented 4 of the 5 requested changes. He will close this CCB in the same manner as CCB-203.
  3) CCB-209 - Correct tagged objects. Status from Steve and Dick.

  4) CCB-222 – Add citation text to Citation Information. Solution may be more complex than what has been proposed.

  5) CCB-255 – Namespace version dependencies are not documented in IM. III. Ed to review the ticket (not done).

  6) CCB-260 – PDS4 label files do not have a unique file extension. Ed to find areas where PDS4 documentation needs to be updated.

  7) CCB-273 – Remove permissible values from id reference type. Several members had concerns about moving type values to a LDD.

  8) CCB-275 – Make Ingest LDD an archival product. Decided that LDDtool should be required for all LDDs. Group would like to see a mock-up of proposed organization for a LDD collection.

  9) CCB-276 – Query Model – Phase 2. New SCR.
  (Some Brief Discussions)

  III. Parked for next build cycle.

1) CCB-205 - Additional constraints/best practices for LDD. This probably will be done after build deadline. **(Not Discussed)**

IV. Other topics?
(Thank you to Ed for being our leader)

V. Set next telecon date –Suggested date: Feb 20. Trent Hare will start leading the DDWG with this telecon
(February 20)

DDWG Telecon

Jessie is here for SBN.

Debbie will continue as note-taker. Ed has sent Trent her contact info.

This is Cristina's last DDWG.

I. Ready for voting

We have three items to vote on, possibly a fourth too.

CCB-220 - Add ability to specify many source products via table
See https://pds-jira.jpl.nasa.gov/browse/CCB-220

This has been updated for the comments and has a TA.

Question: Is anyone not ready to vote?
Answer: Someone hasn't looked since last night, but already knows how they are going to vote.

Question: What happens if you do both?
Answer: Don't see why that would be a problem.
~ If different reference types you could have both. Nothing to prevent it. With different reference types there maybe a good reason to use both.
~ Nothing prevents it.

Question: Can EN do the implementation based on the changes last night?
Answer: Only the documentation changed last night.
~ The XSD file has very little in it.
~ Changed it weeks ago, several times. Unsure how examples are added to the IM.
~ Implemented in the IM.
~ The question is if there's enough information to do it.
~ Yes.

**The Vote for CCB-220
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Present
PPI - Yes
Rings - Yes
RS - Abstain

SBN - Yes**

8 yes votes, 1 not voting and 1 abstain. This will be passed to the CCB.

CCB-274 - Add attribute dictionary type to Ingest LDD
See https://pds-jira.jpl.nasa.gov/browse/CCB-274

There has been some revision work. Unclear if the value meanings have been updated or if it's been reviewed yet.

Not everyone has seen the updates, but if they are improvements - happy.
~ Used wording consistent with the Concepts Document. Lien is to use language in the comments.

Question: Is anyone not ready to vote on this yet?
Answer: (Silence)

**The Vote for CCB-274
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Present
PPI - Yes
Rings - Yes
RS Yes
SBN - Yes**

9 yes, 1 not voting. This will be passed to the CCB.

CCB-278 - Fix errors in logical identifier, ASCII LID, ASCII LIDVID, and ASCII LIDVID LID definitions
See https://pds-jira.jpl.nasa.gov/browse/CCB-278

We decided last time that this is ready to go.

Question: Anyone not ready to vote?
Answer: (Silence)

**The Vote for CCB-278
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Present
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

9 yes and 1 not voting. This will be sent to the CCB.

CCB-272 - Reinstate Array 1D in the Information Model
See https://pds-jira.jpl.nasa.gov/browse/CCB-272

There has been bunches of email on this one. Unsure if it's ready. All the discussion is about the documents. Related to how PPI is doing CDF format - a series of arrays versus people who use composite structure.

Question: Where do we stand?
Answer: A lot of email. Converging on definitions. Making progress. One request was for an example for exoplanet. Provided that. Several possible examples. (Speaker is breaking up - difficult to hear) Impression is that progress is being made. Last time there was a request for an example of array 1D wavelength. Making progress. More to do to update the text in the standard.
~ Working on trying to figure out all the definitions. Working on the generic composite structure problem and mixing that definition with the composite structure class. We need to work on 9.F and how it applies to CDF. Discussing issues with PPI too. May need to throw out 9.F or make it optional or re-craft it in some way. Still quite a bit of work to do. Making progress.
~ Huge breakthrough - talking about two design paths. Different approaches to deal with. Not one rule for both. 9.F is good for existing composite structure. Feeling optimistic.

The concern is that if 9.F is in there then in cases where there's a generic class or a specific class, we want DPs to use the most specific class. We don't want DPs to use different classes.
We need to hammer this out. What PPI is looking for is a rather broad exemption for the CDF design method.
~ The composite structure approach shouldn't allow array base. Have to use well defined subclasses. That's why these two approaches need to be very distinct. CDF approach is harder to solve, but we don't want to impact composite structure. Divide this up and move forward.

Keep hammering on it.
~ Stuck now. Can't fix validating axis problem - and exoplanet needs array 1D.

Question: For exoplanet, would it help to re-instate 1D without the 9.F part?
Answer: 1D would be good, but in a few months will be requesting extensions. Can't promise not to do that.
~ That's fine. How it's supposed to work.
~ That would force PPI to use array 1D.
~ They are already ignoring 9.F.
~ It would complicate it if schematron rules were added.
~ That would be a problem.
~ Yes, but as to the use the most specific that's appropriate, PPI would argue that that's not appropriate for CDF. Okay separating 9.F issue.

Action Item - Joe, Dick and Steve need to discuss what approach they want.

9.F is there, followed by two qualifications. Thought that was sufficient to exempt PPI form 9.F.
~ No, because that's only for composite structure class. Don't want to do that. Qualification 1 exempts everything in PDS except composite structure.
~ Agrees. Need to fix the wording **(Action Item - Dick)**

Moving on...

II. Status check

There were lots of action items...

CCB-186 - ASCII String and UTF8 String whitespace handling
See https://pds-jira.jpl.nasa.gov/browse/CCB-186

Ed had an action item to look at this and did do so after the agenda was sent out. The problem statement says two data types exist in the IM and SR and are defined to collapse white space. SR suggests these are white space preserved. Not seeing that. Definition in the SR is very terse. Not sure what the intent for the SR was. Proposed change would collapse the white space. Action item was to check status. Unsure if it's ready.

Jesse reported that Anne wants this to wait for the next build. It needs more discussion and review.

We'll save this for next time.

CCB-204 - Define and enforce best practices for discipline and project dictionaries
See https://pds-jira.jpl.nasa.gov/browse/CCB-204

This was in progress. Was going to be closed out.
~ Correct.

CCB-209 - Correct Definitions of Tagged * Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

Question: Any comments on this?
Answer: There were some questions to answer.
Action Item - Steve will look at it.

There's a slight chance it could be closed for this build.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

No progress to report.

CCB-255 - Namespace version dependencies are not documented in the Information Model
See https://pds-jira.jpl.nasa.gov/browse/CCB-255

Proposal from Anne. She had a suggested class to add to the identification area, but needs more details. Unsure what's required and optional. Need more basic information on how it will be implemented. Will bring it up next time. Pretty solid proposal for us to hash out.
~ Anne thought this was resolved. Jesse will let her know there's more to do.
~ Originally, there were two approaches. Think we need a few more details in the ticket. If Anne has questions about this she can email Ed.
~ Steve and Anne had significant discussions on this. Her proposal is reasonable.

CCB-260 - PDS4 label files do not have a unique file extension
See https://pds-jira.jpl.nasa.gov/browse/CCB-260

Ed still has an action item to look at the documentation.

Work will continue on this.
~ Anne told Jesse she has time next week.

CCB-273 - Remove permissible values from id reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-273

Unsure if this is clear to everyone. If you remember CCB-256 (Need method for providing permissible value definitions for external namespaces in Ingest LDD, see https://pds-jira.jpl.nasa.gov/browse/CCB-256) - mechanism to specify

reference types, so mechanism is what we're talking about. Work is in progress on this. Moving forward. Will be in this build

Someone is still concerned about doing this is LDDs.

CCB-275 - Make Ingest LDD file archivable
See https://pds-jira.jpl.nasa.gov/browse/CCB-275

This will be worked on. Hopefully end of February or early March.

IV. Other topics?

Question: Any other issues?
Answer: Thanks to Ed for hosting. It's a difficult position and Ed did a good job.
~ Ed: Thank you. Not going anywhere. Will help Trent.
~ People second that Ed did a good job.

V. Set next telecon date

Our next telecon will be February 20. Trent will lead us. Ed will help Trent with the agenda.

Trent will try to be as calm and collected as everyone else here.

Ed sent Ron an email with the votes.
~ Ron got it.

If there's something to do there will be email. Hopefully, we will not have to meet on February 13.

DDWG Notes 2020-02-20
title: DDWG Notes 2020-02-20
layout: default
date: 2020-02-20

February 20, 2020
Notes by Debra Kazden

Known Attendees: E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin, A. Raugh and R. Simpson
Known Observers: P. Lawton and "Mike from IMG"

DDWG Agenda
(Included in email sent February 18, from T. Hare, DDWG agenda for Feb 20)

I. Ready for voting
1) CCB-279 Mis-Matched axes and Axis Array Specifications - is a bug fix

2) CCB-280 Ambiguity in Application of Most-Specific-Class Requirement - is only documentation

3) CCB-281 Make File Area Observational nillable in Product Observational
(Discussed)

II Status check

0) <s>CCB-272</s> – Reinstate Array 1D. split into 3 tickets (Dick Simpson):
    1)CCB-272a re-instates Array 1D. That's the most straightforward; but, in its present form, it may need a bit more justification, most of which is now under Additional Information. Steve should check whether the narrative is correct and edit if not.
    2)CCB-272b would add a validation check that axes is consistent with the number of Axis Array specifications. I don't do Schematron, so I don't know whether the recommended fix actually works. As a bug fix, this should be a slam dunk.
    3)CCB-272c would change the wording in SR 9F. It's not a technical change to the IM, and it's not as cut-and-dried as some might like;
(Voted to pass all three to the CCB - they became 272, 279 and 280)

4) CCB-186 - ASCII String and UTF8 String whitespace handling. Ed to review the ticket (not done).

5) CCB-204 - Define and enforce best practices for LDD. This is really a software issue. Steve has implemented 4 of the 5 requested changes. He will close this CCB in the same manner as CCB-203.

6) CCB-209 - Correct tagged objects. Status from Steve and Dick.

7) CCB-222 – Add citation text to Citation Information. Solution may be more complex than what has been proposed.

8) CCB-255 – Namespace version dependencies are not documented in IM. III. Ed to review the ticket (not done).

9) CCB-260 – PDS4 label files do not have a unique file extension. Ed to find areas where PDS4 documentation needs to be updated.

10) CCB-273 – Remove permissible values from id reference type. Several members had concerns about moving type values to a LDD.

11) CCB-275 – Make Ingest LDD an archival product. Decided that LDDtool should be required for all LDDs. Group would like to see a mock-up of proposed organization for a LDD collection.

12) CCB-276 – Query Model – Phase 2. New SCR.
(Some Discussion)

III.Parked for next build cycle.

1) CCB-205 - Additional constraints/best practices for LDD. This probably will be done after build deadline.
(No Discussion)

IV. Other topics?

1) CCB: SCRs 220, 274, 278 passed without dissent

2) Rejected - CCB-264: Make the Line Feed (LF) character an allowed record delimiter. Referred back to the DDWG for additional work. See new comments.
(Discussed)

V. Set next telecon date –Suggested date: March 3.
(Next meeting will be March 12)

DDWG Telecon

This is Trent's first meeting as the leader of the DDWG.

No one from NAIF or Rings is here today.

The agenda has been updated since it was sent out. Unsure if we will be voting on anything today. The SCR to reinstate array 1D has been split into three SCRs.

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

This one is still pretty new. Not everyone likes it. Comments have been added in jira. If we vote today, someone will vote no. People should take a look.
~ There's no TA.

Comment on procedure - before we vote we need a TA and when things are implemented it is done from the Requested Changes section. This one doesn't have that yet. Need it before we can vote.

Question: Is discussion necessary?
Answer: Someone doesn't see a reason for having this. There's no digital product and they still want to use a product observational. Don't like where this is headed.
~ The background is that this came up a few times, including for Shoemaker-Levy in PDS3. There were nillable results. There are other examples too. It was tabled at the time, but it has come up again. One suggestion was to put up a banner that says no data. Currently working with IMG node and they have a situation where there is no file associated with their observations. Considered making it nillable. No data, no digital object to point to. Seems consistent with what we have done for attributes.
~ Instead of writing a null image there is no product observational.
~ This is a spacecraft that was woken up. No team, no pipeline. Nothing digital submitted because nothing was detected.

Question: So why archive it?

Answer: No detection from that instrument is useful to know.

~ So, the file area should be null.

Another Question: Why not have a document that says there are no results?

Answer: Not sure how you would do that.

~ It's okay to say no results, but no digital object is different from the question. If there's no digital object there's no reason to have a file area.

~ If there's nothing then it's not a product.

~ There's a subtle difference between the scientific objectives.

~ If there's no digital object there's no need for a product. PPI has examples of that for the Ulysses mission in PDS3, but there are no labels pointing to nothing.

~ The difference is that there was an attempt to get something.

~ That's not the only case. We have non-digital data from early PDS. It still has valid metadata. People need to have a way to search and find the results.

Question: What would they have gotten if there was a detection?

Answer: A magnitude in those pixels.

~ Could put something in to represent the null result.

~ So, the observation was made, but no data.

~ It was a dormant spacecraft. No team. The spacecraft was woken up, but no data.

~ This seems to be getting into archiving analysis - something that should be in a research paper. Unsure PDS would archive this.

Question: Is there any other way to do this?

Answer: Someone can think of other ways, but wouldn't consult DDWG. Would jerry rig the standard. Would not fake data.

~ So this can be solved without a change to the standard and we can be done with it.

~ Would prefer to have a solution in the standards, but too much discussion now over something that really only affects a tiny bit of data.

Question: Is there any other possible solution?

Answer: Could fake something, but not sure anything should be done.

Another Question: So we don't want to change? Think this solution is consistent with what we've done. Nil it.

~ If we nil the file area we destroy the product observational.

~ Product observational was defined fifteen years ago. We need to evolve. Can nil it and move on.

~ We wouldn't have used a different definition fifteen years ago.

~ Just looking for a reasonable solution. Don't think just the definition is a good enough reason.

~ Our definitions are pretty fundamental to what we're doing.

~ Definitions change. The model is the more important part. Model allows for nil.

Question: Are we worried about abuse?

Answer: Not worried about abuse, just don't like changing a fundamental definition.

We need to move forward.

~ This needs a Requested Changes section with a justification for Nil Reason, then a TA before we can vote.

~ Would also like to see an example.

Action Items - Steve - edit the SCR to include a Requested Changes section, add an example and do a TA.

CCB-272 - Reinstate Array 1D in the Information Model, CCB-279 - Mis-Matched axes and Axis Array Specifications, and CCB-280 - Ambiguity in Application of Most-Specific-Class Requirement
See https://pds-jira.jpl.nasa.gov/browse/CCB-272, https://pds-jira.jpl.nasa.gov/browse/CCB-279 and https://pds-jira.jpl.nasa.gov/browse/CCB-280

This has been split into three separate SCRs. It sounds like progress has been made.

Someone is open to voting on this one now.

Question: Comments?
Answer: Someone agrees - open to a vote.
~ Think this could still make the current build.
~ If we vote on it all, then it's easy enough to get it in.

Question: Any last comments?
Answer: We should vote on all three at one time.

**The Vote for CCB-272
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Not Here
RS - Yes
SBN - Yes**

Question: Do we need any discussion on CCB-279? It's a bug fix.
Another Question: If it's a bug fix, do we need to vote?
Answer: Let's vote. The CCB can decide if it's a bug fix.

Question: It says it's non-backwards compatible. Really?
Answer: It could result in a new error in something that previously passed validation.

**The Vote for CCB-279
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Not Here
RS - Yes
SBN - Yes**
Question: CCB-280 is documentation only. Any comments?
Answer: Confused about the second paragraph. Not sure there's a requirement that we have to use references. Unsure if it would confuse people, but don't think that should stop us from voting.
~ Someone else also thought it was confusing and awkward. It's hard to define the word "appropriate."
~ This is going to be a subjective decision. Hard to code an appropriate criteria.
~ We can add a warning, but it would flood the validation with warnings.
~ These concerns are minor. Shouldn't stop the vote.

Someone is unclear on the comment about the second paragraph.
~ Composite structures that use local internal references and IDs - the wording just made it seem required to use those.

~ If you use the class composite structure you are required to use the appropriate class. Think there is a little sandbox where PPI can do CDF with an LDD. That's not the composite structure class. Can't code that.
~ Let's move forward.
~ We can modify it.

**The Vote for CCB-280
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Abstain
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Not Here
RS -Yes
SBN - No**

CCB-186 - ASCII String and UTF8 String whitespace handling
See https://pds-jira.jpl.nasa.gov/browse/CCB-186

Ed had the action item to review this. We discussed it last time. We have UTF8 String and ASCII String - they are only used for character type data in tables. If we don't want white space removed we should make the change. They are the only allowable types for character data in a table. Software would remove whitespace. The question is if that's how we want it to work. Unsure why other types are not allowed. There was a proposed solution to change the definition to preserve white space.
~ Someone thinks the changes are bigger, especially in delimited tables. Fields are problematic if there might be record delimiters. The definitions are unclear. Hard to write a program to handle it all. Created the data types so could write simple, universal parsing routines, but it doesn't work. The idea is to go back. Not messing with white space might be important for the data. Thought the SCR stuff in the attached files just needed to be moved into the Requested Changes.

Question: So changing to preserving white space?
Answer: Not relevant. White space padding isn't relevant. It depends on the type of data.
~ Someone is not an expert - no real objection.
~ This would prevent character fields from having non-printing characters in them, so it wouldn't be backwards compatible.

Someone believes there was an SCR about non-printing characters that got pushed off the list because no one cared. We can look for that.

This is confusing. Maybe it would be better if this were made more clear.
~ No one would put these in their data fields, so we don't need to worry.
~ PPI thought we might run across this for LF.

Would change the definitions and help with validation.

We need a TA and for Anne to edit the SCR. **(Action Item - Anne)**
~ It will be done for the next build.

CCB-204 - Define and enforce best practices for discipline and project dictionaries
See https://pds-jira.jpl.nasa.gov/browse/CCB-204

Question: Do we need to discuss this?

Another Question: Can't we just close this?
Answer: Yes. Last time, for CCB-203, we just needed Jordan to know. This is closed on Jordan's side.

Question: Do we call this a non-voting close?
Answer: Thought it was on the software side.
~ Call it closed and email Ron. **(Action Item - Trent)**

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

DDWG Notes 2020-03-12
—March 12, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Evans, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, D. Kazden, T. Lim, J. Mafi, S. McLaughlin, B. Semenov and R. Simpson
Known Observers: P. Lawton

DDWG Agenda
(Included in email sent March 10, from T. Hare, DDWG agenda for March 12, 2020)

I. Ready for voting
none that I can tell.

II. Status check

1. CCB-273 – Remove permissible values from id reference type. Needs TA but otherwise ready for vote.

2. CCB-209 - Correct tagged objects. Status from Steve.

3. CCB-222 – Add citation text to Citation Information. Solution may be more complex than what has been proposed.

4. CCB-276 – Query Model – Phase 2. New SCR.

5. CCB-281 - Make File Area Observational nillable in Product Observational. Reporter(s) will look at improvements to the SCR.
(Discussed)

III. Parked for next build cycle.

notes: 1-8 are getting parked due to other priorities for Anne. Unless Mike D., Pat L., Jesse S. can take them over.

1. CCB-186: ASCII/UTF8 String Definitions

2. CCB-256: LDDTool Permissible Values for External Namespaces

3. CCB-260: PDS4-specific file extension

4. CCB-278: ASCII/LIDVID type irregularities

5. CCB-222: DOI metadata in Citation Information. Anne, "substantial work", Joe helping

6. CCB-275: Make Ingest LDD Archivable. Anne, "substantial work"

7. CCB-255: Namespace Dependencies

8. CCB-277 - Design and implement needed support for sky survey archiving.

9. CCB-205 - Additional constraints/best practices for LDD.
(Brief Discussion)

IV. Other topics?

1. CCB: SCRs 272, 279, 280 passed without dissent

2. CCB-203, CCB-204 verified closed

3. Rejected - CCB-264: Make the Line Feed (LF) character an allowed record delimiter. Review CCB comments (email). --need to update software and then re-try?

4. CCB-283 - (new introduce?) Change reference type document to associate to document to product

5. CCB-282 - (new introduce?) Naming Rule Inconsistencies for Directories and Bundle and Collection Products **(Discussed)**

V. Set next telecon date –Suggested date: March 26.
(March 26)

DDWG Telecon

Not everyone is receiving the emails from Trent. He can send individual emails to people if that's needed.
~ Confirmed that everyone on the call has the agenda.

We are welcoming Mike Drum today. He will help take over some for Anne.

We will look at status checks first, unless there's anything we want to vote on.

II. Status check

CCB 273 - Remove permissible values from id reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-273
This might be close to ready for a vote, but still needs a TA.

It would be helpful to have a real example - discipline set of values.

Question: Does that exist?
Answer: No problem. Would be good. Will create a few examples. Been focused on the build, will get to this by the next meeting. **(Action Item - Steve)**
~ The build has priority.

Question: We sent three things to the CCB. Do we wait to hear from them?
Answer: We usually get an email from Steve Joy. If the CCB passes something Ron takes care of the jira bookkeeping.
~ Good to know. Some existing jira tickets can probably disappear. Trent got the master spreadsheet from Ed.
Wondering if the three CCBs can be pushed into 10.B if they were approved.
~ Someone thought they were approved.
~ The CCB voted yesterday. We haven't heard from Steve Joy if they were approved yet.

Question: Has anyone heard from him yet?
Answer: Not yet.
~ It usually wouldn't matter, but this time it's time critical.
~ Trent will wait to hear from Steve Joy. Hopes that for this meeting there isn't a ton to discuss.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

Nothing has been done on this one.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

Nothing has been done on this one either.

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

Nothing done on this one yet.

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

This one is controversial.

Question: Any thoughts on getting this one going?
Answer: No progress yet.
Another Question: Is there a team working on this?
Answer: No, just me.

##CCB-274 - Add attribute dictionary type to Ingest LDD
See https://pds-jira.jpl.nasa.gov/browse/CCB-274

(This has already been voted on.)

There's still an issue here - deprecation. We need a discussion on this SCR. The issue is that the -m option is still in LDDtool to specify a mission dictionary. We didn't really address that. It's been suggested we remove it in a new SCR. Unclear what to do. There is an error message with implementation now. Jordan suggested deprecating the -m. We need to decide if we leave it in.

Question: Why did Jordan want to deprecate it instead of removing it?
Answer: Good system engineering.
~ Someone thought the intent was to remove the -m and why we had to add the dictionary type keyword. We could take it out and alert the dictionary stewards to the change.
~ Yes, we could send them an email to let them know they could get an error.

Someone would vote to remove the -m and include instructions about it, but not a good software engineer.

Question: Can we do an unofficial vote? A strawman?
Answer: Someone understands Jordan's position. It's easier for users, but since there's not a huge audience for LDDtool thinks it's okay.
~ Strawman vote to deprecate the -m.
~ ATMOS is not ready to vote. Unsure.

Question: Do we need to wait?
Answer: Someone else isn't comfortable voting now.
~ If there's no vote, EN will have to deprecate it now. Deal with it properly.
~ Let people vote so that Jordan can know what the DDWG says.

**The Vote to remove the -m ("minus m")
CIS - Yes
EN - Yes

GEO - Yes, remove.
IPDA - Yes
NAIF - Abstain
PPI - Yes
Rings - Yes
RS - Abstain
ATMOS - Yes**

Question: Do any changes need to be made to the ticket?
Answer: That's why we shouldn't be voting now.
~ We already voted on this SCR. This is to either deprecate or remove the -m option. We all thought it was okay t remove it.

Question: Does this go to the CCB?
Answer: Not necessarily. This was for Steve. When he goes back to Jordan, Jordan can decide to deprecate anyway.
~ This SCR passed in February.
~ This is about the mechanics of the implementation.
~ Was recommended in CCB-204 to do what we just said. Will add a comment in jira. **(Action Item - Steve)**

Back to CCB-273 (See above) and Version 2

Someone will add a comment to jira about moving the Id reference types to discipline LDDs. It looks like a work around.
~ We did say we want some concrete examples.

Would like to suggest we streamline the process for standard values across the board.

Question: Interesting. Are you considering CCB-256 (Need method for providing permissible value definitions for external namespaces in Ingest LDD, see https://pds-jira.jpl.nasa.gov/browse/CCB-256)? A different process, working on a definition approach.

Action Item - Mitch will review CCB-256 and add a comment in jira for CCB-273.

Question: Is this worth discussing at the F2F?
Answer: If it's not solved by then, and we actually have a F2F.
~ Impacts version 2. I'm wondering what's still being changed in the common model - that's one of the big areas.
~ That's a good lead in to making sure we're all thinking about version 2. Need to think about what needs to be worked on. I see version 2 as a necessary milestone. As missions implement PDS4 there are lots of frustrations.
~ We also have missions starting - Clipper, Juice - it would be better if they start with version 2 rather than 1.x.

Question: Any other comments on version 2 or the F2F?
Answer: There are many things that need to be fixed before version 2.

III. Parked for next build cycle

Numbers 4, 5, 6, and 7 (see Agenda above) are all things that need to be fixed by version 2.
~ We will address them. Will tag them for F2F, which might be virtual. Anne might be backing out of some. Might need people to pick up some of her SCRs. She really wants CCB-222 and 275 done. All her SCRs are parked right now, but volunteers could move them forward.
~ Number 4, CCB-278, has already been passed.

Trent will cross check the lists. **(Action Item - Trent)**

Mike Drum will go over a bunch of the SCRs with Anne and get her thoughts and get familiar with them. Will try to work

on the important ones - especially for version 2.

CCB-222 was in the previous list. Joe is on it and has the next step for moving it forward.
~ Anne said it would be a lot of work.
~ Joe has the action item to write a proposal. Anne was going to review it. Maybe someone else can review it.
~ Trent will push on this, but Anne's happy to help. **(Action Items - Joe, Trent, someone else??)**

Not sure how many of these really need to be in version 2. We might keep some in the parking lot awhile.

The CCB had some pass without descent.
~ There was a misunderstanding about CCB-203 and CCB-204, verified closed.
~ Not everyone got the email exploder about the CCB on LF.
~ We need an action item to Steve and Jordan to get ready for version 2.
~ That would be to Jordan.
~ The CCB wants to access what the impact on EN and tools will be when we move to version 2.
~ Another action is that nodes need to contact their users and DPs and alert them to the eventuality of this.
~ Could send to advisory groups.
~ This discussion would be easier if everybody saw what the CCB sent out. Going to spam.

Action Item - Trent will talk to Emily about this. Might have to email people individually.
Action Item - Everyone needs to let Trent know if they get two emails.

Steve and Jordan have discussed the line feed issue. Jordan does not see it as a problem at all.
~ The CCB doesn't feel that way.

Question: Any comments? If we can get the software to be forward compatible maybe we can finally get this passed.
Answer: Someone found and read the CCB email. There's nothing about software.
~ It says update the PDS tools.
~ It says the tools should be agnostic going forward. There's no requirement for EN to change.
~ Someone disagrees.
~ Could be an assessment.
~ Could solve the problem by fixing it to begin with.
~ Semantics. I believe the action is to make sure the tools are fixed if we are supporting this.
~ So, we need a message from Jordan - and ETA for fixes so we know if this can happen. Probably a version 2 change.

Question: Shouldn't this be a software SCR?
Answer: Yes, absolutely. Think for awhile that we didn't have a response from the SCR.
** Action Item - Trent** will put it in jira.

IV. Other topics?

We have two new SCRs.

CCB-283 - Change reference type document to associate to document to product
See https://pds-jira.jpl.nasa.gov/browse/CCB-283

This is from Dick. He is building a radio science document bundle with an explanation of how to unpack binary files. Realized no document to product in the reference list. Proposing changing document to associate to document to product.

If we do it for this, it will change other references to associate in all cases.
~ Think so.
~ Someone has a strong opinion on this. There's no trouble adding reference document to product, against a change to

document to associate.
~ Sounds like you are not for a change, prefer an addition.
~ Yes. We should define the new value. At most, we could deprecate it, but that would be it. We need two SCRs.
~ Someone is okay with deprecating, but wants document to product.
~ Two SCRs. One to add document to product and one to deprecate document to associate.

Someone only sees document to associate used in one place. Don't see a problem with changing it.
~ Don't want to debate. There are two issues. Against this as one SCR. No problem separating them out. Something defined that's been there awhile - it's better to deprecate it. Shouldn't just change it.

Question: Why can't both exist?
Answer: They can. Let's address them separately. Two different issues to discuss. Let's make this two SCRs.
~ Someone doesn't see why we need two SCRs. We can add document to product. If add that and keep document to associate then we will have two values with the same definition. We can edit the SCR to deprecate document to associate.

Action Item - Trent will put this on the status list. We can discuss it next time.

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

This is from Joe. He noticed an inconsistency in the SR, sections 2 and 6. Requirements for naming product bundle and collection files are different. In section 2 the name for a bundle, collection or Readme has to be that word followed by an underscore. In section 6 it says anything is allowed. The validate tool implements section 2. Think a dash should be fine too. This is to change section 2 to match section 6.
~ Should note that section 2 are suggestions. Nothing to do with requirements for archiving. Shouldn't be coded in validate tool.
~ Was a suggestion. If you want to do something different, that's fine.
~ Someone uses collection followed by a dash a lot. Get a warning for EN that it's wrong and need to change products.
~ That's a bug.
~ There's a statement that says not required, but says except in section 6 and the following sections. Ambiguous. Could potentially be a problem.
~ Someone agrees. Very confusing. Needs clean up and we need to find the bug in the tool.
~ Agrees the requirement doesn't really need to be there.

Action Item - Joe will add a software ticket.

It might be a version 2 issue too, to clean up ambiguity.

———

Question: Any last topics?
Answer: (Silence)
~ Trent will try to keep things moving on. Trying to figure out a good method of closing old tickets. Still learning how jira works. Thanks everyone for their patience.

Trent will confirm with Steve Joy what CCBs just passed.

Action Item - Debra will ask Steve after this call and email the answer and also include it in the notes.

The answer is that all three passed - CCBs 272, 279 and 280.

V. Set next telecon date –Suggested date: March 26

DDWG Notes 2020-03-26
title: DDWG Notes 2020-03-26
  layout: default
  date: 2020-03-26

  March 26, 2020
  Notes by Debra Kazden

  Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, D. Kazden, J. Mafi, S. McLaughlin
and R. Simpson
  Known Observers: P. Lawton

  ## DDWG Agenda
  (Included in email sent March 24, from T. Hare, DDWG agenda for March 26, 2020)

  I. Ready for voting

  none.

  II. Status check

  1. CCB-273 - Remove permissible values from id reference type. Needs TA but otherwise almost ready for vote?
Action for Steve, real examples requested.

  2. CCB-209 - Correct tagged objects. waiting - status from Steve.

  3. CCB-222 - Add citation text to Citation Information. Solution may be more complex but Joe has the action item to
write a proposal.

  4. CCB-276 - Query Model – Phase 2. New SCR.

  5. CCB-281 - Make File Area Observational nillable in Product Observational. Reporter(s) will look at improvements to
the SCR.

  6. CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products (bug?, Joe to add
software ticket, withdrawn?)

  7. CCB-283 - Change reference type document to associate to document to product. Steve prefers this to be two
SCRs? (1) add doc to product and (2)
  depreciate doc to associate. Dick wants to change doc to associate to doc to product (more to discuss)

  8. CCB-284 - (new) Streamlined process for adding or removing standard values. Mitch or Dick need to introduce.
  (Discussed)

  III. Parked for next build cycle.

  1. CCB-186 - ASCII/UTF8 String Definitions

  2. CCB-260 - PDS4-specific file extension

  3. CCB-275 - Make Ingest LDD Archivable. Anne, "substantial work"

  4. CCB-255 - Namespace Dependencies

5. CCB-277 - Design and implement needed support for sky survey archiving.

6. CCB-205 - Additional constraints/best practices for LDD.
(Brief Discussion)

IV. Other topics?

1. CCB-272, 279, 280 passed CCB

2. Rejected - CCB-264: Make the Line Feed (LF) character an allowed record delimiter. Review CCB comments (email).
--who tracks updates for software?

3. time permitting - reviewing old/stalled tickets.
(Discussed)

V. Set next telecon date –Suggested date: April 9th.
(April 9)

DDWG Tececon

We have a few add-ons for the agenda today. Nothing to vote on today. Probably because of what's going on in the world we might not have been able to
get much done.

II. Status check

CCB-273 - Remove permissible values from id reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-273

There was a request for real world examples.

A comment was added in jira, which reporter agrees with, and a TA has been done. Given the suggestion in the comment and that CCB-284 (Streamlined
process for adding or removing standard values) was added, think we can table this for now and if that SCR is successful we will withdraw this one.

CCB-284 - Streamlined process for adding or removing standard values
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

There are two comments in jira. Someone thinks this is subverting the system and someone else thinks this doesn't add much.
~ We would have a button in jira for what type of SCR it is - will be a fill in the blank form - with all of the information very easy in the form. Easy,
straight forward, easy for the review team to check. It would be to make adding attributes easier.
~ Think this will be discussed.
~ The hope is that this will streamline the solutions.
~ In order for this to be of any real value IM would need rapid updates and point builds. Don't want to wait six months.
~ Want to minimize the amount of work. Point build isn't just republishing the IM, it's more involved. Don't think that should be part of this SCR.
~ Someone agrees. It's a lot of effort by EN to do a point build.

~ Someone else agrees, but it's important to realize there will be times when we do need a point build. This shouldn't trigger it, but it should be mentioned
in the SCR that the burden is on EN.
~ Yes, but the issue is why this was submitted in the first place. If standard values are handled at the discipline level we don't need a point build.

Action Item - Everyone - should look at this in jira and add comments, suggestions and opinions.

The real bottle neck is the tiger teams. That's where the work is and where things get stuck. Same for CCB-273 (see above).
~ Unless we use this and it automatically starts a small work group to come up with a simple solution. That might save us some time and get things passed.
~ Automatically starting a work group is not defined. Two people are defined, third is not. One person needs to be found. The proposer and someone from EN
and a third person. Essentially the process we have now.

Question: Would a standing work group be better?
Answered with Another Question: When is the last time we rejected a request for a standard value?
Answer: Some of Christina's were altered.
~ That was because of the entire source product SCR. Typically, we spend too much time. Should be rubber stamping. The question is how often we've had to
change one. If we haven't this is moot. Let's just get standard values in and give people a week to review them and that's it.
~ It's not always that simple. Look at CCB-283 (Add reference type value document to data), thought that would be trivial.
~ One concern is that we don't take a systematic look at all of these. The reference types have exploded. Some mean the same thing.
~ The reference types are really weird when you look at them all. We need to take the time to go over them.
~ An SCR was submitted for a value. The team will look at it. Maybe it will need a review for IM version 2. The point is that we need a system with real
forms, guidelines, that's easy to get through so it will be easy for a work group to make recommendations in two weeks. We can streamline the process in
the DDWG.
~ Trent can set up a work group now, but need to get it through the CCB and then wait for the build.
~ Can make it easier with a specific form. We don't have that yet. Need a team to provide what we need, then we get it in jira. Trying to add a simple
branch to jira.
~ We can do it now.

Ed is willing to help with this. Maybe we could just write a simple procedure. This comes in - team is formed - two weeks.
~ Someone feels like we aren't using jira at it's full capacity. We can test this.

Mitch and Ed will work on this. Would also like Ron involved.
~ Ron is not on the call today.
~ Ron's input is needed if we are going to make an additional form for jira.

We're addressing a lot of issues here. Original SCR was just for reference types. Now we are talking about standard values. Back to reference types - they
are not being well managed. Would like a standing committee for reference types. Can start addressing the huge issue of consistency.
~ Someone agrees that reference type is a big issue, but wants a streamlined process for all standard values. Clean up isn't part of this SCR.

~ Would like a table of reference types when new ones can go. Team could keep track and review them.
~ We will discuss this next time.

We need discussion on CCBs 284 and 273. Not being addressed. May need to come back.

Action Item - Mitch, Ed and Ron will discuss all this.
~ We will table this for now and discuss it again in two weeks. If anyone has any brilliant ideas about jira let Trent know **(Action Item)**.
Need to decide if we are talking about reference types or enumerated values.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

Work is planned on this once the build is out the door.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

Joe still needs to write something up for this. There was a bit of discussion, but nothing new. There will be something ready in the next month. Joe missed
the DOI telecon yesterday for personal reasons, but plans to remain on the team
~ Mike reported that Anne said she will still work on this too.
~ AT AGU, Joe and Anne decided that Joe would write a proposal and Anne would review it. Baptiste also wants to review it. Comments are welcome from others
too. The plan is to create a whole new DOI information area that would follow the citation information area. Citation information area is not sufficient and
sometimes is in the wrong format for DOI. This would be a new area for all of the information for the DOI.
~ Steve would also like to see the proposal.
~ Joe will submit the proposal to jira after he gets feedback from a smaller group first.

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

Question: Should this be in the parking lot?
Answer: No, hopefully something next time.
~ Maybe it can be discussed at the next F2F.

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

A comment was added to jira this morning. Someone has no real position on this, but wants to point out that the model needs to support null digital objects.

Question: Any other comments?
Answer: (Silence)

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

The impression someone has it that regardless of software, there are inconsistencies in the documentation. We need to do a clean up. Need to clean up the
SR.

~ Thought that was in the SCR. Talked to Jordan about this and he put in a ticket to update the validate tool. Copied Susie so she would be aware of it for
the document writing team. Section 2 has a lot of recommendations - may be worthwhile to revisit if we want them in the SR or the DPH. SR is supposed to be
rules, DPH is recommendations.

Question: Is this still a jira ticket or a software bug?
Answer: Ticket to update the documents.
~ Two things - a software bug, at least in older versions the wrong rule is implemented, but there's also an inconsistency between sections in SR. Needs to
be cleaned up.

Question: Does the CCB want to approve changes to the SR?
Answer: Generally yes. It's usually a quick electrical vote.
~ That supports the need to keep this ticket. Also, the document writing team will want text provided to put in the SR.

Action Item - Joe will add comments in jira.

CCB-283 - Add reference type value document to data
See https://pds-jira.jpl.nasa.gov/browse/CCB-283

To move this along willing to have two SCRs, one to add document to data product and one to deprecate document to associate and all other associates
because that's meaningless.
~ There are two issues here. The first is to add document to data.
~ We have document to browse product, not to data product. Could change them all.
~ Document to data product is more specific, but the IM has references to data now. We can debate consistency.

Question: Which do you want?
Answer: Document to data is easiest, consistent with what we have already done.

We also need an SCR to remove associate.
~ That will need a lot of discussion. I don't agree.
~ So we actually need three SCRs - document to data, document to associate and to remove or change things like document to browse product to document to
browse.

Action Item - Dick will revise the SCR.
~ This can be further discussed offline.

Mike reported that Anne would like to know if we have considered the implications for the registry and harvest. Swapping relationships out might not be
backwards compatible.
~ Exactly. There could be a major impact to the system. We need to be consistent.
~ PPI may have used document to associate, but we would be happy to change it.
~ It was there at first as a very generic option. To associate and to product are synonymous. To associate is there so if none of the others fit you can
use it. It follows the use the most specific rule. Want to make sure we understand the original purpose.

There will be three SCRs and we will try to access the impact.
~ Maybe four.

Question: Anymore comments?

Answer: (Silence)

_____

There was email from Jordan to ask everyone if we can do a quick survey for what SCRs will be included in the build.
Question: The build they are working on now or the next one for the fall?
Answer: Fall. 1.15. 1.F. 11A
~ We used to send them a list of what we are working on and say there might be more. Jordan just wants a statement to put in a report.
~ These go in as milestones on a schedule with level of effort. We're not dinged if things don't go in.
~ Let him know that priorities might change as new things come into the system.
~ So we shoot for 11A with the new SCRs.
~ If we had the two week turnaround they could all go in.
~ Be optimistic and say the CCB-285 (GeoTIFF format as operational PDS4 image) will be ready for the next build.

Question: Any issues? Any emergencies or parked ones that need to go in?
Answer: Parked ones need a lot of work.
~ They will be kept off the list.
~ Pat said that Anne would object. Having some of these wait a year is unacceptable.

Question: Is there a plan to work on CCB-205 (Additional constraints/best practices for discipline and project dictionaries.)?
Answer: CCBs 203, 204 and 205 were laid out with less chance of being implemented in LDDtool. Will probably need software. Will scan through it, but
suspects the issues will be sent to Jordan.

IV. Other topics?

The CCB passed the last three.

CCB-264 - Make the Line Feed (LF) character an allowed record delimiter
See https://pds-jira.jpl.nasa.gov/browse/CCB-264

Question about this one. It was rejected and now there's a plan to make sure software is updated first. Not sure how we track that. It can be on my to-do
list.
~ We need to keep it on the list. It needs to get done. The hold up is needing tools fixed in advance. Jordan has the action item.

Question: Who tracks this?
Answer: Jordan will add a ticket to EN for tool development. A ticket for 264 will be tracked by Jordan. We need to write up an issue for Jordan.
~ **Action Item - Steve and Lyle** will work on it and get the issue submitted to the issue tracker.

There are also user software impacts.
~ Nodes need to poll their user communities. No one really knows if there will be an impact. We need some metrics on that. DDWG members should talk to
their managers and try to poll their user communities and let us know next time.
~ We're right in the middle of badgering our user community to do the PDS survey. We shouldn't badger them until that is done.
~ Someone agrees.
~ But if we know someone had something, like a git site, we should talk to them.

V. Set next telecon date

Suggested date for the next telecon is in two weeks - April 9.

Trent is still trying to figure out what to do with old, stalled tickets.

Question: Have we ever used the agile board on jira for visualization? We could try it. Allows you to see the tickets in swim lanes. Might be beneficial to
quickly see and track. Just a different way to track the tickets. Might be beneficial. Objections?
Answer: Go for it.
~ Probably zero impact to what we are doing. Just a new way to look at it.

There was a new ticket added - CCB 285 - GeoTIFF format as operational PDS4 image - yesterday. Would like comments.

Question: Does CCB-285 have the white paper attached?
Answer: Yes.
~ Can get it with the link.

Question: Any last comments?
Answer: Stay safe everyone.
~ Next telecon in two weeks.

DDWG Notes 2020-04-09
title: DDWG Notes 2020-04-09
layout: default
date: 2020-04-09

April 9, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, D. Kazden, J. Mafi, S. McLaughlin and R. Simpson
Known Observers: P. Lawton

DDWG Agenda
(Included in email sent April 7, from T. Hare, DDWG agenda for Apr 9, 2020)

I. Ready for voting

none.

II. Status check

--assumed quick check-in/discussion

1. CCB-209 (link) Correct tagged objects. waiting - status from Steve.

2. CCB-222 (link) Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

3. CCB-276 (link) Query Model – Phase 2. New SCR.

4. CCB-281 (link) Make File Area Observational nillable in Product Observational. Reporter(s) will look at improvements to the SCR.

5. CCB-282 (link) Naming Rule Inconsistencies for Directories and Bundle and Collection Products (bug?, Joe to add software ticket)

6. CCB-285 - (new) GeoTIFF format as operational PDS4 image. Trent to introduce.

--for discussion

7. CCB-284 (link) Streamlined process for adding or removing standard values. If this is approved, CCB-273 will probably be unnecessary. More thoughts on
"tiger" team?

--8. CCB-273 (link) Remove permissible values from id reference type. Needs TA but otherwise almost ready for vote? Action for Steve, real examples
requested.

9. CCB-283 (link) adds the new value "document_to_data [original email updated]

-- 10) CCB-286 (new) Deprecate reference type Enumerated Value document to associate

-- 11) CCB-287 (new) Deprecate Four Enumerated Values of reference type Under Class Internal Reference

-- 12) CCB-288 (new) Change Internal Reference reference type to free form te. Note If this SCR is approved, then CCB-283, CCB-286, and CCB-287 become moot.
(Discussed)

III. Parked for next build cycle.

1. CCB-186 - ASCII/UTF8 String Definitions

2. CCB-260 - PDS4-specific file extension

3. CCB-275 - Make Ingest LDD Archivable. Anne, "substantial work"

4. CCB-255 - Namespace Dependencies

5. CCB-277 - Design and implement needed support for sky survey archiving.

6. CCB-205 - Additional constraints/best practices for LDD.
(Brief Discussion)

IV. Other topics?

1. time permitting - reviewing old/stalled tickets.

for example: CCB - 210 (link)
(Some Discussion, not CCB-210)

V. Set next telecon date –Suggested date: April 23th.
(April 23)

DDWG Telecon

Status check

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

There has been some communication on this. Some issues have been addressed, made some progress. Haven't applied the solution yet.

Question: What's the next step? Can we vote next time?
Answer: No. We should put this towards the bottom. Still working through issues. This will take at least a month.
~ Trent will tag it as such **(Action Item - Trent)**

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

No progress on this one yet.

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

No progress on this one yet.

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

This one is still controversial.

Question: Has anyone looked at this yet?
Answer: Reporter realizes he is going against the norm with this, pushing uphill, but did add comments and examples in jira. This is not just relevant to
Shoemaker-Levy.

Action Item - Everyone review this.

We need to get moving forward.

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

Question: Is this still a thing?
Answer: It is. A documentation issue. SR needs to be fixed. Don't remember the last status on it. Will review notes on it and see what the actions are.
~ The tickets in this section are targeted for the next IM.
~ Need to write suggested changes for the document team.

Action Item - Everyone - review and comment on this.

CCB-285 - GeoTIFF format as operational PDS4 image
See https://pds-jira.jpl.nasa.gov/browse/CCB-285

This is an enhancement.

There has been one comment. Reporter tried to reply. Happy to address more comments. This is to allow GeoTIFF as a PDS4 operational image format. Like FITS.
 A PDS4 label is capable of describing it. Not hiding anything.

Question: Will there be instructions for DPs to write compliant GeoTIFFs?
Answer: Yes. These are usually derived. The preferred way to create these is through GDAL. Can put a PDS4 label next to the existing one and check validity.
 Can see if it's a valid TIFF or create a valid TIFF.
~ Someone is still looking for stuff like when CDF SCR was done. There's a paragraph for the SR that lists CDF requirements. Looking for that in the SCR.
The rules it has to abide by and if we need to add something to the DPH. Mechanics - use this, go here - instructions. Want to make sure we have all the
documentation.
~ Need to avoid landmines. Not sure how we get all of the information from the SCR to the DPH or SR.
~ Need to say add this text to this document so the document writing team can cut and paste.
~ SR is the rules, DPH is the instructions.
~ Maybe look at the SCR for CDF. Good example.

CCB-284 - Streamlined process for adding or removing enumerated values.
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

Question: Did we have any more thoughts on this? Tiger team? Flag things differently? Anyone?

Answer: An ad hoc tiger team of Ron, Mitch and Ed are discussing this. Will be ready to discuss with the group next time. This is proposed changes to the
process, not the IM. The team has documents on the proposed change/mechanics. A tab in jira was suggested. Working on some constraints.

Question: Is a new tab technically feasible?
Answer: Yes.
~ The tiger team will get some stuff posted.

Trent looked at Kanban board in jira, at making swimlanes, but would have to take over on all SCRs. Not sure he wanted to jump in on that yet. It was a
quick roadblock. It's just a different way to visualize the tickets. With CCB-284, pushed it under CCB-273.

##CCB-273 - Remove permissible values from id reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-273

Someone agrees with the approach the CCB-284 (see above) team is taking. There might be issues to discuss later. There was an action item to paste in an
example.

##CCB-283 - Add reference type value document to data, CCB-286 - Deprecate reference type Enumerated Value document to associate, CCB-287 - Deprecate Four
Enumerated Values of reference type Under Class Internal Reference, and CCB-288 - Change Internal Reference reference type to free form te(xt)
See https://pds-jira.jpl.nasa.gov/browse/CCB-283, https://pds-jira.jpl.nasa.gov/browse/CCB-286, https://pds-jira.jpl.nasa.gov/browse/CCB-287 and
https://pds-jira.jpl.nasa.gov/browse/CCB-288

This all started because Dick has a document and wanted to point to an example and the only possible reference type was document to associate. Didn't like
that. Proposed adding document to data. We ended up with multiple SCRs.
~ Would like to make the process more systematic. A procedure for making values.
~ There are approximately 3 dozen things to reference from and to reference to for relationships. We end up with over 6000 possibilities. That brings us to
CCB-288, if we're just letting them go through and we're not even sure why we have these then we could relax the requirements and no longer have an
enumerated list.

As to why we need them - semantic technology. Names for relationships. With a name you can do things. Regarding the names provided, we have always known
there was a problem. Now we can classify them. This all started with to associate, which we can replace with product. I argue that it's useful for the same
reason we argued over array 1D. If you don't know what you need and don't want a specific name then associate works. Could change that to product.

Question: But you could put product for everything so what have you gained?
Answer: Loses information if we say product instead of data or document. That has meaning.
~ Agrees, but if all references have to be to a product then that states the obvious and doesn't help.
~ Generalization versus specificity. Same with array versus array 1D.

Question: Does the system use reference type?
Answer: Not yet, but Jordan is considering querying on data type. Could ask for all data and all associated documents.
~ Someone is wondering if we want a bucket. Not sure why we need product or associate to anything.

~ If there's something you are pointing to and you don't want to add a new named reference type - but there's a proliferation of reference types.
~ Nervous about having the bucket. Wondering about making description required. That might be more useful to end user, but less useful to system.
~ Not saying to remove reference type, but to require description.
~ Yes, that would make things more useful.
~ We already require the value meaning. Needs to be available to user. One more thing - why it existed in the first place was as a hook to show what was
possible. It's working as we planned. A release valve for the system - a generic name.

Question: So if we remove the generic ones that would force people to come up with reference types that have meaning. Generic probably made sense, maybe now
we can deprecate it. But in the real world a DP needs something that fits. A bucket helps.

Compliments to Dick for trying to group the reference types. Should be captured in the DPH or a wiki. Can see something useful developing. Clusters of
reference types. Programmers can use that to improve search.

A bigger monster is external references. No reference types. Nothing is a product. Thought internal reference might have a solution. Might want to consider
external reference too, but seems like a lot of work with a small return. Almost totally free form.

A side note - EN is working on creating a repository at JPL, a taxonomy of digital object types. Trying to come up with artifact type list. Need to do it
for everything. Coming up with object types and relationships that make sense. Maybe we can take advantage of that for external.

We all need to look at this. Associate is probably vague. The question is why not say it like it is.

CCB-288 is more than associate. We need to think about if reference type is really being used or could be used.

Question: Do we want to do a breakout on this?
Another Question: Do we need Jordan for this discussion?
Answer: We can begin by deprecating all to associate references, but it is useful to have reference types. We do need to bring Jordan in on this.
~ So we will find out. Associate is probably meaningless, but for 288 we will see if there are some benefits to having reference types. Will put the onus on
Jordan.
~ We need to know how it is used.

We could vote on CCBs 283, 286 and 287 in two weeks. Could get them out of the way and put 288 on the agenda for the F2F.
~ Probably a virtual meeting. Leaning towards voting in two weeks. We can revisit it and wait if we're not ready.

People may have used to associate.
~ If used it it would have been because there wasn't something more specific.
~ If people used it they would have to go back.
~ It's valid in the current IM and people can continue with that.
~ It will be deprecated in the future.
~ We should check with ongoing missions.

We will cut this off now. Will vote on 283, 286 and 287 next time. 288 will be discussed with Jordan.
~ Jordan can be invited to join us next time if he has the time and wants to, but he may need more time to do research.

We need TAs on these if we are going to vote.
Action Item - Steve

III. Parked for next build cycle.

Question: Does anything need to jump up the list? We can check with Anne about what she wants for the next build.
Mike will check with her.
(Action Item - Mike)
~ Mike will help take over for her.

Things are a little fluid, but Trent gave a report to Jordan on what we are working on.

One Anne wanted looked at is CCB-205 (Additional constraints/best practices for discipline and project dictionaries, see
https://pds-jira.jpl.nasa.gov/browse/CCB-205.) Would prefer it for the next build.
~ Trent will try to do swimlanes thing for old tickets or bring them up on the calls. Looking at 205 now. Seems like it might be taken care of. Wonders if
this still has any meat.
~ There's an LDD working group looking at some high level stuff. Maybe we should park 205 and see what they say.
~ We can let them know there are things that could be parked. We are adding a lot more tickets than we are getting through.

IV. Other topics?

Our next F2F meeting in July will likely be virtual. A lot to think about for version 2 for that meeting. Maybe we'll address CCB-288 then too. Hopefully,
version 2 will bring stability.

Someone wanted to wait for version 2 until there is a robust sampling of data products. Not sure we are there yet.
~ Someone doesn't see version 2 coming right away, but we do need to decide what we want to see.

If we don't have version 2 for Europa Clipper and JUICE then there's no point having version 2.
~ Backwards compatibility issue.
~ Someone thought deprecated things would no longer be allowed in version 2. Not backwards compatible.
~ When you jump to a major version it's allowed to not be backwards compatible. It's a big step.
~ For the mechanics, it's not a big deal to deprecate stuff.
~ We have active missions using different versions of the IM. It all works at the same time. Goal should be to have newer missions using version 2.

We need to identify what changes we need that are non-backward compatible changes. Discussing this at the F2F is a good idea. It won't happen soon.
~ We just need to start thinking about it.
~ We'll probably need non-backwards compatible changes after version 2 too.
~ Yes, but will have to deprecate, not break stuff.

V. Set next telecon date – Suggested date: April 23rd.

Our next meeting will be in two weeks on April 23rd. We will be voting on a few SCRs. Think about old tickets and backwards compatibility in the meantime.

DDWG Notes 2020-04-23
title: DDWG Notes 2020-04-23
layout: default
date: 2020-04-23

April 23, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin, B. Semenov and R. Simpson Known Observers and guests: P. Lawton and J. Padams

DDWG Agenda
(Included in email sent April 22, from T. Hare, DDWG agenda for Apr 23, 2020)

0. Front-matter

1. possible discussion on CCB-288 (new) with Jordan on the need for enumerated reference type(s). CCB-288 title: Change Internal Reference reference type to free form. requested change: Deprecate reference type under Internal Reference. Add new attribute internal reference type under Internal Reference. It has the same definition and (meta) attributes as the current reference type except that there is no enumerated list of values.

2. possible quick discussion on posting bug reports (see bottom if email, Appendix 0.2).
(Discussed)

I. Staging for a vote (?, still need TAs)

1. CCB-283 (link) Add reference type value document to data

2. CCB-286 (link) Deprecate reference type Enumerated Value document to associate

3. CCB-287 (link) Deprecate Four Enumerated Values of reference type Under Class Internal Reference **(Some Discussion, No Votes)**

II. Status check

--for discussion

1. CCB-273 (link) Remove permissible values from id reference type. Examples and TA added - ready for vote?

-- 2. CCB-284 (link) Streamlined process for adding or removing standard values. If this is approved, CCB-273 will probably be unnecessary.

3. CCB-281 (link) Make File Area Observational nillable in Product Observational. Examples added for our review.

--assumed quick check-in/discussion

4. CCB-209 (link) Correct tagged objects. waiting - status from Steve.

5. CCB-222 (link) Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

6. CCB-276 (link) Query Model – Phase 2. New SCR.

7. CCB-282 (link) Naming Rule Inconsistencies for Directories and Bundle and Collection Products (Joe to add software ticket)

8. CCB-285 - (link) GeoTIFF format as operational PDS4 image. Needs white paper update (or SR or DPH?).
(Limited Discussion)

III. Parked for next build cycle. Updates from SBN?

1. CCB-186 - ASCII/UTF8 String Definitions

2. CCB-260 - PDS4-specific file extension

3. CCB-275 - Make Ingest LDD Archivable. Anne, "substantial work"

4. CCB-255 - Namespace Dependencies

5. CCB-277 - Design and implement needed support for sky survey archiving.

6. CCB-205 - Additional constraints/best practices for LDD.
(No Discussion)

IV. Other topics?

1. time permitting - reviewing old/stalled tickets.
(No time)

V. Set next telecon date –Suggested date: May 7th.
(May 7)

DDWG Telecon

CCB-288 - Change Internal_Reference reference type to free form text See https://pds-jira.jpl.nasa.gov/browse/CCB-288

There were comments regarding the importance of this SCR and it's related counter parts. Jordan is here today, along with Steve, to make a case.
~ Jordan was briefed by Steve about the idea of removing reference type for internal reference. To jump to the bottom, it's possible, but we would need something in its place. Just removing internal reference will have an impact. The way it's created in the IM gives the relationship link. It says this is related to this. Without relationships it's hard to make sense of search or browsing or anything. If we remove it we would need many more classes that are uber descriptive and that let you know the relationships to it. Things like reference list are trash, useless. We can infer things from a LID, but that's only an identifier. The question is if it is possible. We could potentially infer relationships. It is not ideal. Unsure what it would look like. Not sure that we would accomplish what we want that way.
~ What we have been doing gives us more control over the name of the relationship. Without reference type we would be guessing. DDWG would lose control.

Question: We have no control over what goes in, so how can anything practical come out?
Answer: Frame ID was a PDS3 keyword. It was different across missions. It is useless without having relationships named in PDS4.
~ If the DDWG approves things, they go in, but it's not clear that what we have is working in any logical way. We need rules.

~ Someone agrees. In the early deliveries of the IM a lot fell through the cracks. We needed formation rules for reference types, but instead spent too much time on LIDVIDs. A rhyme or reason has developed over time. Just saying this to point out that doing away with enumerated list means that software will have to infer meaning.
~ EN has to take the lead on setting up the rules.
~ EN thought the nodes were using them. That's why all the new ones were put in.
~ There's a requirement to have them. When nodes requested new ones it was because there was nothing there that made sense. It's always been a mystery how they would actually be used.
~ So, if we are referencing a document from a product - if the LID didn't say what it was, we would have to infer something. Software can potentially figure it out. We do not want this pushed to EN. There would be a significant impact. EN would need to augment their schedule. It would be a huge deal.

The big uncertainty is how they are being used. Knowing would be greatly helpful. In the past, when Sean was leading the development effort, we got vague statements. I imagine the registry is evolving.
~ Sean was mapping three to one to sets he thought were useful. Don't think we have had a search platform that fully utilizes this yet. We need to think about this more.

AT PSA a subset of the reference types are being used. They are part of how the database is set up and how they understand relationships. They are a very valuable tool fr PSA.
~ ATMOS always fills them in. Hopes they are useful for a search tool, but it seems we could do a formation rule of X to Y and then we wouldn't be in the wild west.
List A to List B.
~ Someone agrees. Initially we had an X to Y. That has been followed. What started all this was someone saying that the reference to associate did not make sense.
~ Different people may have different ideas about how things are constructed. High level rules were never written down.
~ We take the lists, implement them, and we are done.
~ Currently, there are no constraints on what the associations are. We have several. Going to take some work. If EN says these are valuable we should nail it down.
The other option is to make inferences. We can use Sean's list or wing it.

Document to data and document to raw data both exist. The difference is that someone needed a reference to raw data. Could have instead used more class types.
To raw data provides a little more information. Makes it richer.
~ But if it's not in the class model then we need to define relationships.
~ Someone is hearing that EN and PSA use these, so thinks the question of using a list goes away. The question is if EN needs something better. DPs need guidance about how to use these so they are useful to EN. Need better descriptions too. The reason for to raw product is that it's used from calibrated product, but data to raw product gives less information. Concerned about EN saying what is and is not useful.
~ This is model driven architecture. Should say this is useful and we should search on it.
~ Yeah, the reason EN likes it is it enables relationships to be enhanced. Search will always change, not sure what adaptions we will need in the future. If specificity is better then the relationship can be more generic.
~ Most are A is associated to B. Doesn't tell us much.
~ Right.
~ If it's up to the user community, that's a lot of work. Not sure people will search on this.
~ This isn't to search on. It's to understand the relationships in the system. It helps with organizing. There's an impact. Someone has to do the work. Better if it is done as it comes in, IM driven, rather than software driven.

Question: If I put in a product this helps us understand the relationships?
Answer: Yes.

The context browser from PSI uses this field. The software does exist. The system uses references to show relationships. It's all being used by the context browser.

~ Someone can see how that would be useful. Not sure we have a good set of reference type values in the system. Not sure DPs are using or picking the best options.
Document to associate was a waste to me. We need to be careful about how we use this. This topic should definitely be on the discussion list for July.
~ Someone agrees. The second part of the relationship is the part we need to work on. Need a defined set of values.

Question: What is the action here? How do we make progress?
Answer: Scrub it and make a scrub list for the September build.
~ We will need to lean on PSA and PSI to see what has been useful to them.
~ Someone thinks more is better. We shouldn't get rid of things people thought would be useful. Documentation should be updated to let people know they don't have to pick something random. Don't like the idea of a big scrub. It's hard to understand good versus bad.
~ We would also need to add anything we might need in the future.
~ There are roughly three dozen As, a dozen relationships and 3 or 4 Bs. That's roughly 10,000 options.
~ Associate is the one that jars the most. We should see if there's a better word to use. Options.
~ That would need to be done at EN.
~ We could pull them out of the registry. Would like to pull out the relationships and see what they are and try to understand why we used an associate bucket.
~ Associate as B is a bucket and so is the relationship is associated to. We need a better B list.
~ A tangent - the Earth science side of things have developed a list of mission opts documents to archive. Turned them into standards. We might want to look at that.
~ Someone agrees.

At our potential virtual July F2F we will need time for this. Probably a day. Or even longer.
~ It might be easier since it's virtual, except for our European colleagues.
~ It's fine if we don't have to go beyond 9:00 or 10:00 in the evening.
~ Facilitating search is important. Unsure of next steps. Maybe organizing the session. It will be a learning experience for us. Not thrilled with the term scrubbing. Prefers adding.

Question: Any comments?
Answer: Someone doesn't mind scrubbing. We need to make this useful.
~ Someone else agrees. Associate should be replaced by something that makes more sense.
~ PSA doesn't use associate.
Another Question: Were there any examples of associate in the wild?
Answer: No idea.
Another Question: Shouldn't it be left for backwards compatibility?
Answer: It's vague.
~ Not to everyone. NAIF uses spice kernel to associate. It makes sense to us. I only want to infer.
~ NAIF can still use it in the older IMs. This is about the future. Might have to migrate. If EN will always support IM version 1.5, then I'll remove my comment.
~ With something like this, we would need to learn over time how the fields are being used. Not impossible for software to learn. One possibility is, since not all
products are registered yet, that we could start the scrub and get everything registered and see what is being used.
~ We could change the definition of to associate to be more NAIF specific.

Question: Not everything is in the registry? Thought everything was registered?
Answer: No. It's not installed at all of the nodes yet.
Another Question: So, we found an example of to associate. Are there any existing live examples?
Answer: Yes. Every spice bundle has data to associate in the labels. If we need to change it to data to associated kernel that doesn't gain anything.
~ We still need to learn how these are being used.
~ The data archived under the previous model is fine. We can restrict to associate for NAIF.

~ It is in all NAIF tables, XML spreadsheets. Never saw what reference is acceptable. Would like spice kernel to continue using it.
~ The heart of this is to make search possible. We will dig into this at the virtual meeting. Would like to consider use cases, who is using this.

_____

While Jordan is here we should touch base on where software tickets end up.

All software that goes out has support links in the documentation that will link you to where you can submit issues. There are different categories to pick from.
~ There's a learning curve to this. The question is that Dick issued a ticket and we want to make sure it is not lost.
~ Dick was able to find it, along with a lot of others.
~ Intimidating.
~ If you look at the issues, you can see what happened. Many were closed. Comments will say what happened to it. It's all in git-hub.
~ Yes, all in git-hub. All tickets were triaged and moved to git-hub.
~ There are additional examples for the validate issue.
~ Great. We want as much text data as possible. It has to be public, but the more the better.
~ Git-hub makes it easy to search across repositories. Having stuff in git-hub is very powerful. Big fan of git-hub. It's a great resource. All the code is here.
Everything. Very powerful.

Question: Any other comments?
Answer: (Silence)

_____

Back to the top of the agenda now, real quick.

CCB-283 - Add reference type value document to data, CCB-286 - Deprecate reference type Enumerated Value document to associate and CCB-287 - Deprecate Four Enumerated Values of reference type Under Class Internal Reference See https://pds-jira.jpl.nasa.gov/browse/CCB-283, https://pds-jira.jpl.nasa.gov/browse/CCB-286 and https://pds-jira.jpl.nasa.gov/browse/CCB-287

Question: Is everyone comfortable with these?
Answer: We should table them until we decide what we want to do with CCB-288 (see above).
~ Agreement.

Question: Any other comments?
Answer: (Silence)

CCB-273 - Remove permissible values from id reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-273

Examples and a TA have been added in jira.

This is dependent on CCB-284 (Streamlined process for adding or removing enumerated values, see https://pds-jira.jpl.nasa.gov/browse/CCB-284). Examples were added to that one.
~ More of a suggested process. Will try to answer any questions in jira over the weekend. It was to make the process easier. Should work for everything.

CCB-281 - Make File Area Observational nillable in Product Observational See https://pds-jira.jpl.nasa.gov/browse/CCB-281

This had examples added. Climbing the ladder a bit.

This will need a serious discussion at some point.

CCB-285 - GeoTIFF format as operational PDS4 image See https://pds-jira.jpl.nasa.gov/browse/CCB-285

Learned that CDF and TIFF are not well described in the DPH. Will focus on the white paper for now.

Someone added a comment in jira. Basically it's all arrays, the issue is headers.
~ Yes, that was a concern.

Question: Do people agree with only having the requirements in the white paper?
Answer: They need to be stated and then we can discuss them. Focusing on the white paper is a good first step.
~ There is a page of data type formats. It has the requirements to be PDS compliant.
~ The question is if we need links to that in the SR.
~ Maybe a pointer.
~ A lot of other standards are references.
~ We are talking about PDS restrictions on the standards. Those restrictions are requirements and need to be in the SR to make it clear they are standards.

Action Item - Trent - will finish the white paper.

Set next telecon date

Question: Any last issues to discuss?
Answer: (Silence)

Our next meeting will be in two weeks, on May 7.

Question: Do we know the cut off date for the next build yet?
Answer: It's typically mid August.
~ Someone thinks it is August 14, but will check.
~ It will be added to the agenda notes.

DDWG Notes 2020-05-07
title: DDWG Notes 2020-05-07
layout: default
date: 2020-05-07

May 7, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson
Known Observers: P. Lawton

DDWG Agenda

(Included in email sent May 5, from T. Hare, DDWG agenda for May 7, 2020)

Reminders: August 14 next build date. (full-day?) at next technical F2F (WashU or virtual, week of July 13th), focus will be to discuss goals for V2
and CCB-288.

I. Ready for a vote

II. Status check

--for discussion. BTW, I think Anne is back and plans to help pick up * tickets

1) CCB-273 Remove permissible values from id reference type. Examples and TA added - ready for vote?

-- 2) CCB-284 Streamlined process for adding or removing standard values. If this is approved, CCB-273 will probably be unnecessary.

3) CCB-281 Make File Area Observational nillable in Product Observational. Examples added for our review.

--assumed quick check-in/discussion

4) CCB-209 Correct tagged objects. waiting - status from Steve.

5) CCB-222 * Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

6) CCB-276 Query Model – Phase 2. New SCR.

7) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products (Joe to add software ticket)

8) CCB-285 GeoTIFF format as operational PDS4 image. Needs whitepaper update (or SR or DPH?).
(Discussed)

III. Parked for next build cycle.

1) CCB-186 * - ASCII/UTF8 String Definitions

2) CCB-260 * - PDS4-specific file extension

3) CCB-275 * - Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *

4) CCB-255 - Namespace Dependencies

5) CCB-277 - Design and implement needed support for sky survey archiving.

6) CCB-205 - Additional constraints/best practices for LDD.

7) CCB-283 - Add reference type value document to data

8) CCB-286 Deprecate reference type Enumerated Value document to associate

9) CCB-287 Deprecate Four Enumerated Values of reference type Under Class Internal Reference
(Brief Mention)

IV. Other topics?

1) time permitting - reviewing old/stalled tickets.
(Open Planetary)

V. Set next telecon date –Suggested date: May 21st.
(May 21)

DDWG Telecon

(Note-taker kept having the the speaker blank out - missed little bits here and there.)

There are some front matters to discuss and we will talk about the virtual Open Planetary meeting at the end of the telecon.

CCB-204 - Define and enforce best practices for discipline and project dictionaries
See https://pds-jira.jpl.nasa.gov/browse/CCB-204

Email was sent from John Hughes and Edward Guinness for this topic. Three emails follow the agenda: RE: DDWG Agenda for May 7, 2020. All were sent May 6, 2020.

There is a lot of history. Not sure how far back we want to go for this discussion. There were three SCRs - CCBs 203 (Define and enforce constraints on local
dictionaries to avoid confusion with key pds: namespace attributes.), 204 (this one) and 205 (Additional constraints/best practices for discipline and project
dictionaries). They were to do with software, but they never went to that queue. The changes were made, but not vetted. There hasn't been much negative feedback for
CCB-203, but there has for CCB-204. There were no changes to the schema and schemtron, but three different errors came up after 204 was implemented. It
might be better to have them as warnings, rather than errors. Bob Deen is concerned about null reason. We can go over his email.
~ This just hit someone last week when Jordan and Katherine were testing the IMG LDD and got a few errors. Not sure he understands all the intricacies, but...
~ Someone was trying to update the Geometry LDD and ran into issues with type and attribute vector units and also had an issue with low level classes being used in other LDDs -
That error came up. The current version of LDDtool generate a valid LDD, but the log mentions the errors. We need to

decide if things are errors or warnings. Concerned
about LDDs that have been out a long time being forced to change names or types.
~ IMG changed theirs from enumerated.
~ The type issue is less severe.
~ Jordan set things up so that each build the LDDs would be reprocessed. There was email sent that itemizes the five requests for checks. Tried to include current errors.
Not sure we want to discuss this now, but the DDWG might want to vet these.
~ It's a closed jira ticket, so this is a strange one. Hesitant to lose all this text.
~ The text can be added to jira as a comment.

Question: Jordan will run into these. The real issue is that there are some breaking issues. Do we allow them to be errors or warnings or do we roll back the checks?
Answer: We should walk through the emails.
~ Inserted text to jira in real time.
~ Not many people have chimed in yet, but this could impact people in the near future.
~ The issues should be linked on git-hub too.
~ Someone likes having these conversations there too. It's open to the public so people like Bob Deen can see.
~ Already entered as git-hub issues. CCB-204 is from 2017. All of Bob's comments are in git-hub.

Question: Does everyone understand the first one? Not sure we need to stress on that.
Answer: Someone doesn't understand any of this. Don't have any LDDs. Thought uthey nderstood CCB-204, but not so sure now.
~ Yeah, we're down in the weeds. Was afraid of that happening.
~ Don't remember all of this.
~ Some of this comes from discussion at the tech session.

Question: How far against changing the Geometry LDD for type are we?
Answer: Fine. But different things are happening. Getting an error for the mission.
~ When it's time to release it might not be released if there are errors. We might need to change to warnings.
~ Thought LDD errors meant you failed.
~ Trying to guess how an automated build would respond.
~ Fine with fixing the Geometry LDD. Think in this context things can be found and weeded out.
~ Think we're done for type.

The next problem is with units. Not quite sure how we ended up with this.
~ Someone is not sure why this would be a problem.
~ If only the Imaging and Geometry LDDs are having trouble, maybe we need to take all of this offline.
~ Not everyone has checked their LDDs yet.

Action Item - All LDD Stewards need to check with version 11 of LDDtool. (Steve can give people copies of version 11 to use).
~ Mitch would like a copy.

Units came from Anne's list in 2017. It was broken into CCBs that were slowly implemented. We need to ask Anne. This could be associated with units of measure.
Can understand why there is a question. Unsure if it should be an error.
~ In the Geometry LDD it's unit vector. Thought I could change the name, but it's parsing to find unit. Geometry has x unit, y unit, etc. The Geometry LDD has been
used.
~ Unit of x or unit of y would work. Seems like this could be reduced to a warning.
~ Someone thinks a warning is acceptable with a best practice to not use unit in your attribute name.
~**Action Item - Steve** will contact Anne.
~ Someone isn't sure we want that as a best practice. We need to be a lot more specific on the restriction.

~ Thought we wanted XML attributes.

~ But there's no other term for unit.

~ We will change to a warning.

Another Question: Unit vector doesn't violate this best practice?

Answer: Someone votes yes.

~ Yes, but there's a small class called unit vector that has attributes x unit, y unit and z unit. That's why it threw the error.

~ So the class name doesn't throw the error, but the attributes do. So it is okay to change to a warning.

~ Yes, and example will have unit part last.

~ This is a tangent, but seems common terms in the community like x unit and y unit could be exempt. We could put that in the code.

~ We want good XML. A warning is good.

~ Someone agrees.

Imaging did not run into the next one and is surprised that it is impacting the Geometry LDD.

~ We wanted LDDs to have one entry point, but then we allowed for multiple.

~ This issue could be discussed offline. It's about allowing LDDs to reference each other.

~ There's an issue for SPICE here.

~ Think we agreed to allow this on a case by case basis.

~ The solution might be to make this a warning.

~ Someone would be happy with this. Doesn't think entry point needs to be a hard and fast requirement. We will need to change the text to say
nested elements will get a warning. We don't want to expose every class. Don't think LDD stewards group needs to work on this.

Question: Is this a should or a desire?

Answer: Warning that there's usually one element, but can consider on a case by case basis.

** Action Item - Steve** will write something up for this and send it to **Mitch** to review.

Nillable. Imaging LDD ran into trouble with this. Geometry LDD did not.

~ Someone thinks it was an issue in Common too.

~ We made wavelength range nillable for PSA. They want to be able to be explicit. It's optional for PDS, but required for PSA.

~ Sounds like the solution is a warning again. Best practice would be to not use nillable if something is optional. Can see this going away.

~ Bob was for it.

~ It was from CCB-252 (Add "Not Applicable" to wavelength range in Science Facets, see https://pds-jira.jpl.nasa.gov/browse/CCB-252) and
the original request was to add not applicable to the enumerated values. We expressly passed an SCR that allowed a specific value to be nillable.

~ So this needs to go away.

Question: Remove the check or write a comment?

Answer: Someone sees no reason to even warn people.

~ Informational message doesn't hurt. Someone might think twice when they see it. In most cases optional things are optional, so they might not apply.

~ Okay, so the situation should be identified with an informational message.

Another Question: But how does PSA catch errors?

Answer: PSA data providers always use wavelength range. Nillable works for PSA. The check is that wavelength is always there.

~ One of Anne's comments was that there should be a schematron rule.

~ PSA is fine with that.

~ Without it will get an error.

The last one. Anne had ordered the best practices from very easy to very hard to see what LLDtool could do. This is saying that if we do a
local reference to an array 2D image that it's unclear how to validate and to really know what the reference is. The point was that it is
referential integrity checking. Not implemented. Not enough information in the model. Not being checked. Just an example of how better
reference types are good.
~ No one wants to discuss this.

Status Check

Back to the agenda. Anne is not here, but will start to focus on tickets with stars by them (see above). People can contact her to discuss them.

The stuff we discussed last time with Jordan here has been moved to the parking lot and will be discussed again at the next F2F along with Version 2.

CCB-273 - Remove permissible values from id reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-273

This one is dependent on CCB-284 (see next item). Waiting to see if CCB-284 passes. Might withdraw this one.

CCB-284 - Streamlined process for adding or removing enumerated values
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

No progress to report this week.

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

Reporter needs to provide better arguments to convince everybody. We have a few examples where the digital object doesn't exist. Reporter thinks it's
consistent with the IM. Bob Deen is defining an LDD for his cubes. He has requested this too.

Action Item - Everyone - needs to review the examples so we can vote on this one.
Action Item - Steve - will add Bob Deen's comments to jira.

Virtual label idea for a virtual product. We will have to have a vote in the future. Pull the trigger, see what happens. We all need to look at
the comments. Some people are familiar with virtual, but unsure how valuable it is for an archive.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

No progress to report this week.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

Several people are looking at the approach to solving this one. It will be written up. Once written, author will get some feedback and put it in jira.
Action Item - Joe

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

Steve and Jordan are working on this. No progress.

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

This is an update to the SR more than anything else.
Action Item - Joe will write something.

CCB-285 - GeoTIFF format as operational PDS4 image
See https://pds-jira.jpl.nasa.gov/browse/CCB-285

The white paper is in progress. Needs links for the SR.
~ Susie is the head of the document writing team.
~ This has to go through the SCR process, not straight to the document writing team yet.
~ We need a discussion at the F2F about external files and appendices.
~ In the SCR, in the Requested Changes section, put "add this to the SR" and put something the document team can cut and paste.

Other topics?

Open Planetary.

Question: Any volunteers? There will possibly be a SPICE workshop. Unclear what the agenda is - 15 minute talks or two hour talk. A GDAL talk was suggested.
Anyone have any ideas? Maybe something from EN on where we are heading with PDS4 and tools?
Answer: In the past, EN has presented a state of the model. It's good for people to see the growth.
~ That would be a good one.
Another Question: When does Chase want things?
Answer: The sooner the better. Chase is beginning to work on the agenda.
~ Rings will probably submit something for OPUS.

Question: Any PDS4 training?
Answer: Thought Anne might be interested.
~ There was a discussion at SBN of the a conference - maybe this one - Sheri was going to do something. Not sure if that will really be a training or showing
videos. Anne was volunteered, and she declined. Ben was volunteered after that. Not sure if it's even this conference.

There will be a combination conference in June next year - something (?) and Planetary Data Workshop (?)

If anyone has any feedback or wants to volunteer they should contact Tim, Tom or Chase. It's good for us to be represented. It's a completely virtual meeting.
Open Planetary has been doing talks on Tuesdays. This is an extension. Very informal.

Set next telecon date

May 21 - two weeks.

DDWG Notes 2020-06-04
title: DDWG Notes 2020-06-04
layout: default
date: 2020-06-04

June 4, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, S. Hughes, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin, B. Semenov and R. Simpson
Known Observers: P. Lawton and L. Neakrase (Alternate for L. Huber)

DDWG Agenda

(Included in email sent June 2, from T. Hare, DDWG agenda for June 4, 2020)

Reminders: August 14 next build date.

Virtual Technical F2F, July 14 - Tuesday, ~6 hour limit?: focus will be to discuss goals for V2 (dates), CCB-288 (link),CCB-264 (LF), LDD build system on GitHub tutorial, and virtual products (requested by JPL, IMG/Trent to help).

DDWG AGENDA

I. Ready for a vote!

1) CCB-281 Make File Area Observational nillable in Product Observational.

2) CCB-285 GeoTIFF format as operational PDS4 image.
(No Votes. Discussed)

II. Status check

--for discussion.

1) CCB-284 Streamlined process for adding or removing standard values. If this is approved, CCB-273 will probably be unnecessary. Mitch** will add some revisions. Ready for TA?

---- 2) CCB-273 Remove permissible values from id reference type. Examples and TA added

--assumed quick check-in/discussion

3) CCB-209 Correct tagged objects.waiting - status from Steve.

4) CCB-222 Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

5) CCB-276 Query Model – Phase 2. New SCR. Steve and Trent will try to rummage up more examples.

6) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products (Joe to add software ticket). Susie updated and awaiting reviews...
(Discussed)

III. Parked for next build cycle (or V2).

1) CCB-186 ASCII/UTF8 String Definitions

2) CCB-260 PDS4-specific file extension

3) CCB-275 Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *

4) CCB-255 Namespace Dependencies

5) CCB-277 Design and implement needed support for sky survey archiving.

6) CCB-205 Additional constraints/best practices for LDD.

7) CCB-283 Add reference type value document to data

8) CCB-286 Deprecate reference type Enumerated Value document to associate

9) CCB-287 Deprecate Four Enumerated Values of reference type Under Class Internal Reference

10) CCB-264 Line Feed (LF) character an allowed record delimiter - request user input for V2 (due Nov.), Lyle to ask Jordan on the ability to check impacted tools in the registry
(Brief Mention)

IV. Other topics?

1) time permitting - reviewing old/stalled tickets.
(New SCR - CCB 289)

V. Set next telecon date – Suggested date: June 18th.
(June 18)

DDWG Telecon

The list of topics for the virtual F2F is growing. It is assumed to be a six hour meeting on July 14. We will touch base on CCB-264 (Make the Line
 Feed (LF) character an allowed record delimiter, see https://pds-jira.jpl.nasa.gov/browse/CCB-264). Jordan mentioned a potential technical tutorial for
 LDDs. LDDs will be checked. He wants to demo the new system. Virtual product discussion has been requested by JPL. Trent may have to give the overview
 for Bob. It's probably too much, and there's likely to be more.

I. Ready for a vote!

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

This doesn't have a TA yet, so maybe it's not ready for a vote. There has been some discussion and a request for examples from SBN.

Someone is unsure of the need for this. Liked the example where someone did a poster for DPS - a Voyager/SL9 poster. It looked for data, but didn't find
any. Wouldn't have included it. The example has nil reason missing. If we are going to use it to show no results found, not having nil reason doesn't make

sense. Nothing in the example makes sense or says what happened.

~ Anne will be contacted on this soon. SBN representative can vote on her behalf.

~ Votes are off the table for now, but posting comments would be good.

Question: Do we need to add something to documents?

Answer: Point well taken. We need to provide some reasons, identify new null reason for no digital object. Assumed we would use what we have, but not applicable.

Another Question: Wouldn't the next step be to nil other places in the model? If not, why not?

Answer: Never liked using null results, but it's what we have. Yes, it could be used throughout the model. Think this should be very seldom, but if it's

going to exist we have to handle it in a systematic way.

~ Maybe we also need rules of use for this.

~ I see your point. Don't want to do this willy nilly. Don't want to open it to use anytime you want to.

Question: Where do we want to take this? We still need examples. Can check with everyone again next time.

Answer: **Action Item - Steve** will clean up the problem statement and add a straw man for how nil reason could be done.

Someone agrees that we should put some constraints on how it's used.

~ Null reason. If we define a set of standard null reasons and they don't apply to other cases, it can't be used.

~ This needs to be documented. It seems unusual.

~ Someone agrees.

~ If someone didn't have a data product they wouldn't try to archive a null result.

~ That's the crux of this.

CCB-285 - GeoTIFF format as observational PDS4 image
See https://pds-jira.jpl.nasa.gov/browse/CCB-285

There were some questions and a request to please clarify the enumerated values. Guess the question is that there's two of them. That has no impact. More

of a nicety for TIFF users. No impact on PDS4. It came out of implementation - difference between bigTIFF and GeoTiff. BigTiff is larger. Could go away.

~ Someone thought this was about enumerated values being added to the header, not other places. GeoTIFF is just a subset of TIFF.

~ Yes, GeoTiff lives under the umbrella of TIFF. All you have to do is call it a TIFF.

Question: Why not do that?

Answer: It's a nicety. It implies science rather than a graphical figure.

~ It's useful to have the differences. We use the same data structure for many things. No harm.

~ Could add two different header titles.

~ Two values with two value meanings.

Another Question: Does that help?

Answer: This version has a data object that's bigger than 4GB.

Question: Does the requested change need to state we are only adding these in the context of header places where parsing standard Id occurs in the model?

Answer: Not sure I follow.

~ It's in eight classes in the IM. Not clear.

~ Didn't realize.

~ The definition says header. Need to say where it's going.

~ Easy fix.

~ Just so there are no misunderstandings when it's implemented. The changes will be cut and pasted.

To the question of GeoTIFF data structure - it's an image array.
~ It's a figure. Unclear what the label will look like. Seems like it's observational data. I'm missing something here. Unclear about exactly what this
will look like.
~ GeoTIFF data is uncompressed 2D or 3D arrays. Can be described by 2D array image with header. PDS4 compliant.
~ Yes. Also can be 1D. Been in use for 25 years. Raw, uncompressed image format with header. Like an image.
~ Need to make the white paper and SCR more clear. **(Action Item- Trent)**
~ The SCR is the most important part.

Validation should be able to validate the images, so there's no reason for EN to have to do anything extra.
~ We need to validate to make sure it's uncompressed, not tiled.
~ EN should already be doing that.
~ GEO had an array 2D image. The label said it was 3D. No error from validation. Not sure what the validater does for images. Can't assume validater
does everything we want.
~ Should be on ENs radar that there are TIFFs that aren't PDS4 compliant.

Question: Does the DPH need updates?
Answer: No. The white paper says something about operational image format and gives a reference that wasn't helpful. Could just call them images.
~ If you just say it's an array that doesn't explain it to the user. Would call it operational.
~ We need to agree on a definition.
~ That's a typo. Not operational, should say observational.

Question: Is this on hold for updates or ready for a vote with liens?
Answer: Too many liens to vote.

Status Checks

CCB-284 - Streamlined process for adding or removing enumerated values.
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

There have been revisions sent out for comments. Updates need to get done. Hopefully this will be ready for a TA next time.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

No progress on this one to report.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

No update for this.

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

This is a good thing to discuss at the virtual F2F. Trent can help Steve with examples. **(Action Item)**

We need to bring Jordan in on this too. Already starting to work on the system side.
~ We need examples and to hear from Jordan.

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

Susie is waiting for reviews, but getting there.
~ She's making document changes, weird since we haven't voted. Unclear how we will handle that.

Action Item - Joe will look again. Believes that changes are resolving the issue, but will check for remaining issues. **Joe** will review the
document when it comes out. If it resolves issues, maybe the SCR can go away.

Question: Is there anyone we need to harass to help Susie?
Answer: **Action Item - Ed** will ask Susie at their next staff meeting to nudge people for responses.

III. Parked for next build cycle (or V2).

CCB-264 is still parked.

Question: Are there any SCRs people want to discuss?
Answer: There's a new SCR about audio files.

CCB-289 - Define new class Encoded Audio to describe supplementary audio data products
See https://pds-jira.jpl.nasa.gov/browse/CCB-289

We have the capability to do video and audio in browse. This will be for data. There will be data from Mars 2020 that will have FITS audio. They want
to extract that into wave files. Straight array. Uncompressed. Waves are big, so we might also want a browse image.

Question: Thoughts?
Answer: We need to invite Susie or someone to a meeting to discuss this. Also learned that the Mars 2020 decent team collects video data. We will need
another SCR for that. We want to archive that data too.
~ MP4 is not meant for observational, only supplemental. People have been told to produce frames. This will need a discussion.
~ Since it's produced in MP4 we could end up with a bunch of artifacts. Just a warning of another upcoming SCR. Mars 2020 archive planning has been very
 slow. Launch is supposed to be next month. Believe Susie is hoping to have this for the fall build.

Question: If Mars 2020 is moving slow, why should we move faster? What if they change their mind?
Answer: We don't want to be their stumbling block.
~ We started work on movies long ago.

Action Item - Trent should let the MC know this has come up.

We are talking about audio data stored in FITS table, but we want it played as sound. Want it uncompressed. Similar to the ways we have done other things.
Supplemental.
~ Data will be FITS. The problem is they will need one off code to make it work.
~ Someone suggests we should make this observational product supplemental.
~ Fair.
~ The MC will need a heads up about adding this new format.
~ So, we'll be working on this when they land.
~ There will be video for the decent on day one.
~ Someone believes that is allowed.

~ Think the video is documentation only.
~ Yes, video for documentation can have data too.
~ It's a kludge since this is the data.

This is coming up for OSIRIS-REx spice too. Allowing native format.

Question: Open Floor. Any other issues?
Answer: (Silence)

V. Set next telecon date

The next meeting will be June 18.
~ Ed will not be available - will send his votes to either Tom (as a stand in) or by email.

Maybe we can vote on CCBs 285, 284 and 281.

DDWG Notes 2020-06-18
title: DDWG Notes 2020-06-18
layout: default
date: 2020-06-18

June 18, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin
and R. Simpson
Known Observers: T. Stein (alternate for E.Guinness)

DDWG Agenda

(Included in email sent June 16, from T. Hare, DDWG agenda for June 18, 2020)

I. Ready for a vote

1) CCB-281 Make File Area Observational nillable in Product Observational. more examples provided (more discussion?).
Examples explained? Where to add "rules of
use".

2) CCB-285 GeoTIFF format as observational PDS4 image. Updated SCR per discussion and comments
(Voted No on CCB-281, passed CCB-285, without dissent)

II. Status check

-for discussion.

1) CCB-284 Streamlined process for adding or removing standard values. If this is approved, CCB-273 will probably be
unnecessary. Mitch will added revisions.
Should be ready for TA after meeting.

---- 2) CCB-273 Remove permissible values from id reference type. Examples and TA added

-assumed quick check-in/discussion

3) CCB-209 Correct tagged objects. waiting - status from Steve.
4) CCB-222 Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write
a proposal.
5) CCB-276 Query Model – Phase 2. New SCR. Steve and Trent will try to rummage up more examples
6) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products. Joe considering withdrawing
and listed as software issue.
7) CCB-289 Define new class Encoded Audio to describe supplementary audio data products - plan to invite Susie S. for
next meeting.
(Brief Discussion)

III. Parked for next build cycle (or V2).

1) CCB-186 ASCII/UTF8 String Definitions
2) CCB-260 PDS4-specific file extension
3) CCB-275 Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *
4) CCB-255 Namespace Dependencies

5) CCB-277 Design and implement needed support for sky survey archiving.
6) CCB-205 Additional constraints/best practices for LDD.
7) CCB-283 Add reference type value document to data
8) CCB-286 Deprecate reference_type Enumerated Value document to associate
9) CCB-287 Deprecate Four Enumerated Values of reference type Under Class Internal_Reference
10) CCB-264 Line Feed (LF) character an allowed record delimiter - request user input for V2 (due Nov.),
   --Lyle to ask Jordan on the ability to check impacted tools in the registry
(Very Brief Discussion)

IV. Other topics?

1) How to distribute large bundles (from Mitch). e.g., all of Cassini ISS at Saturn). Under PDS3, the volume structure provided natural subsets that could be
made available as tar or zipped files for download. There is no PDS4 equivalent. There are approaches we could take, but I am unaware of other nodes deal with
this. (Trent) - I often see SBN node supporting a zip or tgz for PDS4 directories.
e.g. https://sbnarchive.psi.edu/pds4/orex/
(Discussed)

V. Set next telecon date –Suggested date: July 2nd. Invite Susie S. for CCB-289.
(July 2)

DDWG Telecon

August 14 is the next build date.

I. Ready for a vote

CCB-281 - Make File Area Observational nillable in Product Observational
See https://pds-jira.jpl.nasa.gov/browse/CCB-281

Question: Are there any last comments? SBN put up some examples. Don't recall seeing any rules of use.
Answer: Came up with a few nil reasons, but didn't make a big effort. Thought that if this passes then nodes and scientists would come up with some.
Another Question: Where do best practices go?
Answer: In the DPH.
~ The issue with best practices and recommendations is that people ignore them.
~ We planned a wiki for that. Beyond the one at SBN.
~ The SBN wiki is priceless.

Question: Where are we on this?
Answer: Ready to vote today. The virtual products will be discussed at the F2F.
~ There was a comment yesterday.
~ Yes. Unless there are better reasons for doing this, should reserve product observational and file area. We are in the business of archiving data, not
archiving no data.

Question: Can this be nil even if there is a data product?
Answer: No, but we need to write a policy to enforce that. Awkward.
~ If there's nothing there, don't understand why we are putting something there to point to nothing.
~ It's to indicate no digital object was captured. Can say nil object or create a text file that says nothing was captured.
~ Exactly, but that's not nothing. If you have a text file, people can read it and learn that there's no digital object.
~ Regarding the other examples, when a team looked and a feature wasn't detected - I don't like this. Don't want us to

say we looked but aren't showing
 you.
~ Issue could be that there is a digital object, but we will never get it.
~ My recollection is that this was Voyager and SL9. There were a few attempts - teams tried. Said there was nothing there. No budget to create archive
products that didn't see anything.

Someone is concerned with what exactly we are voting on. The problem case has two parts - no digital object and no results.
~ We are voting on the SCR as it is written. Could do part based on updates, but as it stands we are voting on both options.
~ We need nil reason to include both options.
~ Could even be more.

Question: Voting on the SCR as written, are we still willing to move forward?
Answer: Yes. Maybe with a lien to include 2 options.
~ No, those are already in the statement. Could be more options to use nil reason.
~ This is a tough one.
~ It's time to vote.

**The Vote for CCB-281 - as written, no liens:
ATMOS - No
IMG - No
EN - Yes
GEO - No
IPDA - No
NAIF - Not Here
PPI - No
RMS - No
RS - No
SBN - No**

That didn't pass. Will call it closed.

Question: What happens now? Can someone bring this up again?
Answer: People can bring it up again.
~ Someone would still prefer the dummy file. Don't like nil reason.
~ It would be interesting to see what other archives do. This is closed.

CCB-285 - GeoTIFF format as observational PDS4 image
See https://pds-jira.jpl.nasa.gov/browse/CCB-285

Thanks go to Dick for helping to clarify this SCR.

Question: Any discussion? Ready to vote?

**The Vote for CCB-285:
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here

PPI - Yes
RMS - Yes
RS - Yes
SBN - Yes**

That passed.

Status Checks

CCB-284 - Streamlined process for adding or removing enumerated values
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

The proposal is cleaned up and clear. Two attachments have been added. Any questions will be answered. Would like to have a TA and vote next time.

There's an issue. The amount of time people have to devote to these issues. I'm going to abstain. Think this isn't an efficient way to address this.
Worried people don't really have the time to do things right. A reasonable SCR, I just don't think it will solve the problem.

Question: Anyone have a good example of having to get this through?
Answer: Example would be getting enumerated value added along with a product native for track 2-34 data.
~ Someone would fight that very hard.
~ The last enumerated value PPI tried to get in was for internal reference - data to browse or collection to browse. Wasn't an issue - just needed to be
done.
~ Someone agrees.
~ Enumerated values can require a lot of discussion.
~ Due diligence should be all we need.
~ Product native can't be fast tracked. LF maybe because we already have had MC discussions.
~ Most enumerated values are trivial changes.

Would like a vote next time.
Action Item - Steve do a TA.

Dropping the CCB shouldn't be done to save time.
~ Dropping the CCB would be up to the MC.
~ The CCB doesn't always want to see everything. Example is bug fixes. The idea is to see if they want to see these.

We will look at CCB-273 (Remove permissible values from id reference type. See https://pds-jira.jpl.nasa.gov/browse/CCB-273) again after this.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

No progress yet.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

No progress yet.

CCB-276 - Implement Query Models – Phase 2

See https://pds-jira.jpl.nasa.gov/browse/CCB-276

This is in discussion. Might be a topic at the F2F. Maybe ripe for the parking lot.
~ Jordan should be involved in this.
~ It will help with data search and discoverability.

At the MC, they were questioning data discoverability.
~ EN is doing a lot. There's push back for their interview process. They hired an expert to see what's lacking in PDS.
~ Someone said it reminded them of the discussions of Dublin Core. Been going over that for ten years. Wasn't sure if this is new.
~ Yes, new. Jordan did shift away from wanting to contact node user community. Maybe too much, too fast.
~ Hard to build discoverability when the data isn't there yet. Been a slow and frustrating process. We need examples. The reason we have nodes is
to be the domain experts for our users.

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

Question: Has this been withdrawn?
Answer: Joe still needs to verify that it can be. Said he will have it ready for next time.
** (Action Item - Joe)**

CCB-289 - Define new class Encoded_Audio to describe supplementary audio data products
See https://pds-jira.jpl.nasa.gov/browse/CCB-289

Hopefully this SCR won't take a long time. Mars 2020 is going to land soon. They will need this.

Question: Any thoughts before we have Susie here to do an intro?
Answer: (Silence)

There could be an issue with video, but don't see a problem with pushing it out frame by frame. Unclear why it's such a big issue, unless it has to do
with compression.
~ Someone agrees. We should be able to get something that can go in PDS.
~ No degradation. Assuming there will be another SCR.
~ We are closer to a solution then people might think.

III. Parked for next build cycle (or V2)

Things can be brought up at the F2F meeting. The LF SCR will be discussed, but the goal is to be ready by the November MC. We need to bug EN about tools.

Question: Anything to discus?
Answer: Still unsure what older tickets we might be able to withdraw.

IV. Other topics?

Rings node wants a conversation on how nodes distribute large bundles. Rings takes their data and puts it in tar.gz files. There's no subsetting like that
for PDS4. Hard for people to download unless an a hock collection is made. Not sure mechanically how to do this. Interested in what other nodes are doing.
~ For MAVEN IUVS bundles, ATMOS has been putting together bundles for each mode, processing level, year. Make a tar.gz that is available on their landing page. Not

in the registry. A collection product is included in the tar.gz, along with bundle file, document collection and context collection. They don't take up much
space and users probably need it.
~ It could be a separate bundle.
~ PSA lets people download on the fly. They separate collections by processing level. A person could go through and select what they want and then zip
it up as a bundle.
~ Shopping cart.

Question: Is this a registered bundle? Is it preserved?
Answer: No, just for that delivery.

It would be great if we had consistency across the nodes. Some bundles are extremely large to download. The cloud won't really help with that, just lets you
process near the data.
~ Some users want all the data on their laptop.
~ Some of these are getting very large - like LROC ad High Rise.
~ Some are too big to provide individually.
~ Not sue we can be consistent before we have a cohesive system. Likes how SBN has grown and is handling it. The option of a single download is nice.

If browsing at PPI there is a download all that zips in real time. It can do it where ever in the structure the user is. Built into the website.
Question: What happens when it hits something as big as High Rise?
Answer: PPI's biggest bundle is an approximately 1TB MAVEN bundle.

GEO uses a shopping cart for PDS3 data. Could do a bundle. They create a super label for the files. From Notebook they build Quick-looks and zip.They had a
user who requested massive amounts of data. They used their Aspera tool for that. It's a tool from IBM - a multi pipe transfer tool. It uses a web plug in.
No cost to users. They also use it for data providers. That's a little more complicated. One value of the tool is that they don't have to zip files into a
container. The user points to the files and a manifest is built. User downloads at their pace.
Good for ODE - between High Rise and LROC and a few other big ones, we use Aspera to get data from place to place.
Question: Does it compress on the fly?
Answer: I see a zip as a convenience. Wget can be very slow.
~ Wget can be clumsy, but it's a good alternative to the shopping cart.

Hearing there are issues for packaging for transfer. There are lots of solutions out there. Jordan should be brought in on this. Also, for PDS4 there are
collections, subsets of collections, bundles, virtual bundles or collections for grouping for a particular process. It might be useful to include all this in the
IM.
~ That's probably what Rings is really after. The question is if all metadata needs to be included to make a valid package.
~ Maybe we could work to make sure that what is produced is consistent, but there probably isn't a one size fits all solution. There might be two or three
solutions.
~ Someone sees this as a "wouldn't it be great if..." kind of thing.
~ What PSA is doing sounds pretty straight forward. A delivery product that has everything in a bundle, but is not registered.
~ PSA doesn't save them. Maybe in future.
~ Aspera is very expensive. Sees the value in creating mini archive bundles.

We are over an hour. This is an important topic, not sure how to take it forward. Maybe we should talk to the MC or Jordan. It would be nice if the node
tools worked the same.

V. Set next telecon date –Suggested date: July 2nd.

Our next meeting will be July 2. We will invite Susie to talk about CCB-289 and maybe the movie idea.

DDWG Notes 2020-07-02

July 2, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E.Guinness, T. Hare, L. Huber, S. Hughes, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson
Known Observers and Guests: P. Lawton and S. Slavney

DDWG Agenda

(Included in email sent June 30, from T. Hare, DDWG agenda for July 2, 2020)

I. Ready for a vote

1) CCB-284 Streamlined process for adding or removing standard values.
(Voted to pass)

II. Status check

-for discussion.

1) new CCB-290 Add value 'Field Campaign' to Investigation Area type enumerated value list (Lynn N.)

2) CCB-289 Define new class Encoded Audio to describe supplementary audio data products - plan to invite Susie S.
keeping around based on CCB-284:
---- (x) CCB-273 Remove permissible values from id reference type.

-assumed quick check-in/discussion

3) CCB-209 Correct tagged objects. waiting - status from Steve.

4) CCB-222 Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

5) CCB-276 Query Model – Phase 2. New SCR. Steve and Trent will present more during DDWG "F2F".

6) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products. Joe considering withdrawing and listed as software issue.
(Discussed)

III. Parked for next build cycle (or V2).

1) CCB-186 ASCII/UTF8 String Definitions
2) CCB-260 PDS4-specific file extension
3) CCB-275 Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *
4) CCB-255 Namespace Dependencies
5) CCB-277 Design and implement needed support for sky survey archiving.
6) CCB-205 Additional constraints/best practices for LDD.
7) CCB-283 Add reference type value document to data
8) CCB-286 Deprecate reference type Enumerated Value document to associate
9) CCB-287 Deprecate Four Enumerated Values of reference type Under Class Internal Reference

10) CCB-264 Line Feed (LF) character an allowed record delimiter - request user input for V2 (due Nov.),
    --Lyle to ask Jordan on the ability to check impacted tools in the registry
(Brief Mention)

IV. Other topics?
(F2F discussed at start of meeting)

V. Set next telecon date –Suggested date: July 23rd.
(July 23. Ed will lead. Trent will be on vacation.)

DDWG Telecon

F2F tentative schedule is getting set. Not one hundred percent sure what the context product guide discussion is.
~ The goal is to make sure that all of the nodes are in agreement about what goes in a context product so we can use a tool and be consistent going forward. Forty minutes should be plenty of time. Lynn will lead the discussion.

Question: Anyone want to help lead the reference type discussion? Steve? Mitch? Trent can try to help with back up.
Answer: Hoping to vote on CCB-284 (Streamlined process for adding or removing enumerated values, see https://pds-jira.jpl.nasa.gov/browse/CCB-284) today to get that out of the way.
~ Trent will have talking points ready for CCB-288 (Change Internal Reference reference type to free form text, see https://pds-jira.jpl.nasa.gov/browse/CCB-288).

We need a lead for the discussion of version 2. That has lots of time. We will probably need to come up with specific topics.
~ Someone suggests that Steve should lead the discussion since he sets the criteria for going to version 2.
~ There are steps and goals we need to complete first. That should be considered before the meeting.
~ There is the beginning of a list, but as people get more experience we need to look at specifics. There might be things we want to deprecate.
~ We need a list of criteria for going to version 2. That probably goes beyond the DDWG. We will also want Anne's feedback too. Assuming that she will be at the virtual F2F. Worried that without her input we will forget something.

Action Item - Pat will let Anne know we want her input.

There are several tickets to deal with before we go to version 2 too.

Question: Is the August 14 date the last day to get things passed?
Answer: Yes. SCRs have to be approved.
~ SBN is working on one from the parked list that is related to surveys. Hopes to get that in.
Another Question: So there needs to be CCB action by August 14 for anything in the next build?
Answer: Yes, CCB approval by that time, or at least in their queue so they know they are supposed to look at it.
Action Item - Trent will do a call for version 2 topics from the community.

There was a comment from across the pond about GeoTIFF. They wanted to know why approval was necessary since it's already PDS4 compliant. Tanya and Mark will be attending the F2F and would like an answer.
~ The question is if someone has a completely valid format why they would need PDS approval when there's no issue with it. PDS needs to take a stance.
~ The issue is metadata. The label type, structure.
~ The question was phrased well. Hopefully this will only be a 15 minute topic.

Jordan asked for about 45 minutes to talk about LDD - git-hub, continuous integration. Also been in touch with Bob Deen on virtual products. That was split off the nillable topic. People need to understand it and it's use cases.
~ Bob's endeavor is pretty interesting.
~ Someone is sharing a policy on the screen now on data formats for science data from March 2006.

~ Good. It's amazing to see when PDS2010 started.

There will also be discussion on TBD items. Can continue or finish up as needed.

Susie Slavney is here now.

CCB-289 - Define new class Encoded Audio to describe supplementary audio data products
See https://pds-jira.jpl.nasa.gov/browse/CCB-289

The Mars 2020 supercam instrument has a microphone to record audio at the surface of Mars. We want to be able to archive that as ancillary. It's CSV. But also want to have encoded audio class to hear it. Very like the encoded image class. The point of discussion might be formats. Wave is the favorite, big, uncompressed. There might be others. This is urgent because Mars 2020 schedule is a mess. Need to be peer reviewed by the end of this calendar year.
~ This is a real deadline.The SCR has to be approved by August deadline.
~ Yes, it has to be to the CCB by August 14.
~ There has been a bit of concern about compressed versions. This is a broadly used format. It was on CD-ROMs. It should have wide support. The part to worry about is trying to have code to extract FITs table to make audio. Worried about it being around in 20 years.
~ The team is doing the code.
~ Wave as a supplement to FITs table should be pretty straight forward.

Question: Any objections to the SCR?
Answer: Just make sure it's uncompressed.
~ It's uncompressed.
Another Question: Heard there is also a video camera?
Answer: Yes, but wasn't going to discuss that today.
~ We have a video format, but it's not compliant or good enough.
~ There is video. MP4 straight out of the camera. There possibly will be another SCR.
~ Trent will be helping with that. Individual frames for all of the video.

If this could be product ancillary, that would be fine, but wonder if product observational would be controversial.
~ Someone thought that was the proposal.
~ The proposal is to make waves acceptable for product ancillary and product browse. The FITs file will be the PDS4 compliant product observational.
~ It might take some time, unless there's an ISO standard we can point to.
~ There is.

We can move forward as is for now. We can do product observational later. Not enough time for that right now.
~ Another audio product on Mars 2020 is the primary product. Bob Deen says it's a primary product. Wants product observational. Told Bob she would ask. Glad to hear the issue is time. Not sure why there's a need for caution.
~ There is an MC policy on what constitutes a product observational. We are constrained by them. Says they have to be tables and arrays.
~ We need to keep it pretty straight forward so it can be pulled apart and read in the future. Not sure waves fits that.
~ Someday there will be audio or video as the primary product.
~ Especially for manned missions.
~ We will get through this and then worry about getting approval for product observational. Like how TIFF came in.

Question: Is compression something we need to address in the SCR? Especially since it's for browse or ancillary for now?
Answer: The goal is to introduce wave so it should say uncompressed.
~ Likes not saying that. Not sure why we should restrict at this level. We already have compression here. Can say that at the product observational level when we move forward.
~ The default is uncompressed for waves. They are very heavy. That's why CDs are only 45 minutes. The goal is to use

what comes off the spacecraft. There is a frequency that is time dependent. We don't need to go into the details here. Agree that we don't need to restrict it at this level.
~ Sounds like there's not much for Susie to do now.
~ We can push this forward.

Question: Is it reasonable to expect this in the next build?
Answer: If there are no road blocks.
~ We haven't even talked about this yet.

Action Item - Everyone - review the SCR and be ready to discuss it.
~ We can discuss this quickly at the F2F too. Then we will have a TA and will be able to vote.
~ Put it on the agenda for the F2F.

Question: We are at the one month cut off for the build. Is it time to move to weekly DDWG meetings? We could discuss this next week and get comments into jira.
Answer: Not sure what exactly requires a telecon at this point. There's a lot on hold.
~ Someone agrees. Unless there is another high priority one that comes along.
~ Discussing this on the 14th is good.

Thanks to Susie for coming.
~ Susie appreciates the time.

Action Items - Everyone will review this for a discussion on July 14, and **Trent** will add it to the F2F agenda.

CCB-284 - Streamlined process for adding or removing enumerated values
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

Question: Anymore discussions? There is a TA.
Answer: Nothing more to say.
~ We can try this and see if it works. if not, we can roll it back.

**The Vote for CCB-284
ATMOS - Yes
IMG - Abstain
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
RMS - Abstain
SBN - Yes**

That passes with seven votes. It will be pushed to Ron.

Now we have to figure out how that impacts other SCRs.

CCB-290 - Add value 'Field Campaign' to Investigation Area type enumerated value list
See https://pds-jira.jpl.nasa.gov/browse/CCB-290

New SCR. This falls under CCB-284. We put in CCB-242 (Add 'Field Campaign' to Investigation Type to accommodate planetary analog field studies, see https://pds-jira.jpl.nasa.gov/browse/CCB-242), but missed a piece. This is a bug fix. We missed an enumerated value we need for PDART.

Question: Are there any comments?
Answer: The SCR is too brief. No definitions in the proposed solution.
~ That will be added.
~ And copy to the Requested Changes.
~ This will go away when we get the new tab set up.

Question: Any more discussion?
Answer: Yes. A question. The problem says when investigation type is updated in context product. We forgot a value in context type?
Answer: Yes.
~ Maybe we can get this on the same time frame as encoded audio.
~ We can edit jira, get a TA and move on quicker.
~ Really, this is just a bug fix.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

No progress to report.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

No progress to report.

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

No real time spent on this yet. Just beginning to touch base with Jordan.

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

We need to understand if this is going to be withdrawn.
~ No progress yet. Simple check to make. Hasn't been time.

Action Item - Joe figure out if this can be withdrawn and let Trent know.

Parked for next build cycle (or V2).

There are still a lot of tickets in jira. Would like to make sure people really think about what has priority. We will discuss CCB-286 (Deprecate reference type Enumerated Value document to associate, see https://pds-jira.jpl.nasa.gov/browse/CCB-286) and CCB-287 (Deprecate Four Enumerated Values of reference type Under Class Internal Reference, see https://pds-jira.jpl.nasa.gov/browse/CCB-287). We need to fold or start working on these.
~ SBN is working on them.

CCB-277 (Design and implement needed support for sky survey archiving, see https://pds-jira.jpl.nasa.gov/browse/CCB-277) is beginning to be important. need to start focusing on that.

CCB-273 (Remove permissible values from id reference type , see https://pds-jira.jpl.nasa.gov/browse/CCB-273) was started, but then there were more SCRs. Seems we can address this with the passage of CCB-284 (see above).
~ Maybe it should be withdrawn. We need to understand.

Question: Any discussion?

Answer: Two are to deprecate values.

~ We need to deal with CCB-288 (Change Internal Reference reference type to free form text, see https://pds-jira.jpl.nasa.gov/browse/CCB-288) first.

Question: Why discuss CCB-288 when we just passed CCB-284?

Answer: Legitimate request.

~ This is for the F2F. CCB-288 is why we are talking.

~ Someone doesn't understand.

~ We need discussion. There are a number of issues.

~ A lot of talking points.

Another one. I need a reference type document to document. There are hundreds of possible reference types that just aren't approved yet. used document to associate.

~ We need to discuss this with Jordan.

~ We need to understand what he is doing.

~ Need to know what we are trying to support for him.

~ Jordan is making sure PDS becomes a schematic application with named relationships so we can do search. That's what it boils down to. Text values fail. The issue is useless if not schematic search. New, current technology.

~ Maybe we need to give Jordan six hours.

~ Maybe he can prepare concrete examples.

Action Item - Trent will make sure Jordan gets the word that we would like concrete examples.

Sites like Google use schematic search, not text search. The linked relationships help the engine provide answers. Makes search more intelligent.

~ We just want more information about the registry. It's always been a black box to us. Just want an introductory discussion with Jordan.

~ It can be discussed in a short period of time.

~ We need to understand.

~ Hopefully he can have something ready.

Set next telecon date

Trent will be at the Grand Canyon in two weeks. If we want to have our meeting in two weeks, on July 23, we will need someone to stand in for him.

~ Ed can lead the discussion.

~ There will be an alternate IMG person for Trent.

title: DDWG Notes 2020-07-23

July 23, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson
Known Observers: M. AcAuley, P. Lawton and S. Slavney

DDWG Agenda

(Included in email sent July 17, forwarded to DDWG from E. Guinness, original author T. Hare, Agenda, DDWG)

DDWG Agenda, July 23

I. Ready for a vote

1) new CCB-290 Add value 'Field Campaign' to Investigation Area type enumerated value list (Lynn N.)

2) CCB-289 Define new class Encoded Audio to describe supplementary audio data products.
(Voted to Pass both to the CCB)

II.. Discussion (optional)

1) Impact for pushing IM v2 out 2 to 3 years as discussed quickly at the ddwg session on July 14.

2) CCB response back DDWG, new enumeration jira page.
(Discussed)

Next meeting, August 6.

DDWG Telecon

Trent is on vacation - Ed is filling in for him.

I. Ready for a vote

CCB-290 - Add value 'Field Campaign' to Investigation Area type enumerated value list
See https://pds-jira.jpl.nasa.gov/browse/CCB-290

This one is pretty straight forward. Has a TA.

Question: Any last comments? Major issues?
Answer: (Silence)
Another Question: Anyone object to voting on this?
Answer:(Silence)

**The Vote for CCB-290
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes

IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

Nine to zero. This will be passed to the CCB.
Action Item - Ed will send Ron and Trent email after today's meeting.

CCB-289 - Define new class Encoded Audio to describe supplementary audio data products
See https://pds-jira.jpl.nasa.gov/browse/CCB-289

Susie presented this to us. The TA is done. There are no liens in the TA.

Question: Discussion? Last comments? Concerns?
Answer: The requested changes section was one of the best done in a long time.
~ Whoo-whoo!

Someone is still concerned about the use of product ancillary. That should be a product of last resort. Will abstain from voting.
~ There will be a product observational too.
~ Concerns are noted in jira. Would prefer the use of product browse.

Question: Anyone not ready to vote?
Answer: (Silence)

**The Vote for CCB-289
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
SBN - Yes
RS - Abstain**

That's 8 yes, zero no, 1 abstain and 1 not here. This will go to the CCB.

II. Discussion

Version 2

Question: Any version 2 follow up form the tech session?
Answer: Some one is concerned about saying version 2 is two or three years away. If we say that the delay will be even longer. Prefer a one year delay.

We need an Action Item List for things we want in version 2.

It was pointed out that some of the stuff we are holding for version 2, like line feed, should be approved and in the IM before version 2. We need a targeted time line with a date for each thing we want in before version 2.

~ We need the time line in place so if there really will be a two or three year delay we can start now.
~ We need to know what we want in version 2 and have a time line to get there.

CCB-284 - Streamlined process for adding or removing enumerated values
See https://pds-jira.jpl.nasa.gov/browse/CCB-284

DDWG voted to pass this to the CCB. The CCB agreed that this is a process issue for the DDWG.
~ They don't need to vote on everything, but will look.

CCB-291 - Review 'Recommended' Practices in the Standards Reference
See https://pds-jira.jpl.nasa.gov/browse/CCB-291

This SCR was promised at the tech session. It's about the language in the SR being ambiguous and recommending things that are not required. Some of these recommendations have been coded into validate. In a quick scan of the SR, did not see a lot of recommendation language, but did see a lot of "shoulds".

Action Item -Everyone look at the SR and help compile the list of recommendations or shoulds. Target due date is the end of August.
~ Would really like someone from SBN to do this.

This can be done with a search, but we also need someone to read the SR. It could take six months.

We will check on this (comments) at the end of August.

CCB-292 - New enumerated values for reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-292

This SCR adds a few enumerated values for reference type.

Mitch is sharing his screen and showing what putting a new enumerated value request in the system looks like. There is a lot less to fill in now. More compact. The process is that this new SCR was put in ten days ago. It was pre-reviewed by two people. Now everyone needs to be ready to vote of discuss it next time. If anyone has concerns, they need to be put in jira before the next meeting. This SCR adds the value ancillary to browse.

Question: How was this done?
Answer: Create it at the top (on jira page) with the field tab. Enter title, click enumerated values. Text blocks for things like problem statement. Need to at least put in TBD for blocks to show up. Have to put title in on field tab first.

Question: Was this used for CCB-294 (see below)?
Answer: Used the enumerated value tab. Had to go back to the field tab to add the title.
~ Should do that first, but if you have to go back, it remembers. Doesn't take long to fill in. Trivial requests shouldn't take long.
Another Question: The definition goes in the problem statement and requested changes?
Answer: There are two blocks, or boxes. Problem statement and Requested Changes. Additional boxes available for reviewers, additional information, descriptions. Everyone needs to look at this and review it. Then the SCR can go to a vote after it's certified that it is sufficient.
~ Someone has already added some comments.
~ Can list that the status is under pre-peer-review - under labels field, open, ready, closed, etc.
~ Can edit to say if it's been pre-reviewed. Then people will know not to comment yet.
~ People probably won't look to see if things are in pre-peer-review.
~ We are trying to reduce the load.

This has been pre-reviewed. Comments are in jira. It's ready for everyone to look at and make comments. If no issues are reported we will be ready to vote next meeting.
(Action Item - Everyone)

This still needs a TA before we can vote.
~ This will be considered the official ask.
Action Item - Steve do a TA on CCB-292.

CCB-293 - Specific values used to support search have been deprecated from the type field of Observing System Component
See https://pds-jira.jpl.nasa.gov/browse/CCB-293

This one is troubling to some. It's to put back stuff we took out. That is troubling.
~ We took out stuff when we were doing clean up for CCB-138 (Mismatch between context object types and values of type in Observing System Component class, see https://pds-jira.jpl.nasa.gov/browse/CCB-138). Things that were taken out were needed by SBN for search. It was a mistake to take these things out. They were not removed from the context guide - just got lost.
~ That's not quite correct. Part of the problem is that these are facets. Most of them. The context guide is classifying things as sub-types or type host. If we really need these facets for the context guide we need to get them correct.
~ This isn't going to affect context guide. This is for observing system components.
~ But these are at the same level as host. A mix of specificity. Not good.

Someone suggests that Lyle or Lynn is a reviewer here and puts comments in.

One problem has to do with balloon.
~ Understands the desire, but it's really a sub-type of host, not a host.

From a technical perspective - this is right on. Host has been tightly defined in the context guide. That's the right way to do that. Disagree that the observing system component has always been a mixed bag. Defining it is difficult. Don't think sub-typing needs to carry to here. It's a list of elements to describe observing system. System developers are using context products, not observing system components. Supports what has been done to define sub-types.
~ With CCB-138, we tried to get things down to host and sub-types.

This is pre-peer-review. Steve and Lyle should be reviewers before it comes back to the DDWG. Put comments into jira to document the discussions.
~ Mike from SBN will talk to Anne about what she's trying to do with search. **(Action Item - Mike D.)**

There is some work to do.
~ This isn't trivial.
~ We can figure it out before the build deadline.

CCB-294 - Add enumerated value to Units of Pixel Resolution Angular
See https://pds-jira.jpl.nasa.gov/browse/CCB-294

There has already been some email on this one and comments already added in jira.

Some derived Cassini CIRS products have been delivered - not consistent with what the local community did. Polar projections used hour angles and local solar time. Would need several changes for PDS4 products. Need to be reformatted - geometry needs to be recalculated. The request is for hour angle. This does have potential use beyond CIRS.
~ Makes sense, but need to be clear we are talking about hour angle.

Question: Who will be the reviewers?

Answer: Ed, Mitch and Steve. Maybe Dick as this moves forward.

Geometry LDD Discussion

The Geometry LDD is becoming a beast. SBN wants to add a new section for ground observations. Idea is that maybe the LDD could be broken into multiple geometry LDDs with an individual steward for different sections - landed rovers, orbital observations, ground based and high or low level - with classes that cut across all the types. Not sure how to do this or where it should be discussed.
~ Maybe landed rover can have camera models broken out.

Someone suggests we have a work group to figure this out. We need multiple stewards. Easier to break this up.
~ Someone worries inconsistencies will creep in as we add stuff because it's so complex now. Plus, as is it assumes that one person is an expert in all things.
~ It's a beast that goes across disciplines. At 10,000 foot level, we can see there is a common level and we can pull out the sub-parts.

Question: Will there be multiple namespaces or one with multiple stewards? Is either okay?
Answer: We need to work that out.
~ Someone thinks multiple namespaces that all begin with geometry and than the qualifier.
~ The tiger team can sort that out.

Action Item - Ed will email the DDWG and Jordan to see who is interested in being in the work group for this.
~ At a minimum we should have Ed, Mitch, someone from SBN and someone from IMG.
~ We also need someone who understands data modeling. This is normalization. A formal way to do grouping.
~ So, Steve is in too. Maybe someone from IPDA too.
~ Yes from IPDA - they want in too.

Question: Is this devolving into a new geometry LDD for every mission? Or maybe a new supplements for each new mission?
Answer: That's for the work group to decide.
~ We will probably have common, discipline and extensions for missions.

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Question: Any last comments?
Answer: Dick has a topic that he would like on the next agenda. He will email Trent.

Next meeting is August 6.

August 6, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson
Known Observers: M. McAuley and P. Lawton

DDWG Agenda

(Included in email sent Aug 4, from T. Hare, DDWG agenda for August 6, 2020)

0) Front-matter
•Reminders: August 14 next build date deadline for passing SCR (sooo - this is it for next build...(?)).
•There a lots of requested additions to the discussion portion for this week (see section "III" below)
•Note: CCB group passed the two tickets from last DDWG meeting:
◦CCB-290 Add value 'Field Campaign' to Investigation Area type enumerated value list (Lynn N.)
◦CCB-289 Define new class Encoded Audio to describe supplementary audio data products.
(Briefly Discussed)

I. Ready for a vote (?)

Note: multiple "Enumerated Values" have been submitted. Two or three might be eligible for voting this week (if TA is added and discussion allows).

1) CCB-294 Add enumerated value to Units of Pixel Resolution Angular

2) CCB-308 Add enumerated value to Units of Frequency

3) CCB-293 critical Specific values used to support search have been deprecated from the type field of Observing System Component (Anne R/)
(Voted to Pass CCB-294)

II.Updated and New SCRs.

1) CCB-288 Change Internal Reference reference type to free form text.
-- Dick S. will give a intro to added presentation and docs. Please review new files on Jira.

New:

1) CCB-309 Add is computer as enumerated value for reference type in Observing System Component (Michael McAuley)

2) CCB-316 Add Composite Structure as an optional child of Product Observational (Michael McAuley)

Note:back to more "regular" SCR Status Checks next meeting.
(Some Discussion)

III.Discussions

1) (Ed G.) Data provider that plans to deliver data in FITS 4.0 format. Are there any significant differences from version 3.0 that we should look out for? Do we need to submit a SCR to add FITS 4.0 as a standard value for parsing standard id in the Header class?

2) (Mike D.) Can we quickly re-instating Line-Feed SCR. Data is coming in only using "LF". (Trent comment - with V2 far out in the future, this doesn't need wait until IM V2).

3) (Dick S.) Automatic generation of values for Internal Reference.reference type. With such a procedure we could generate many of the values needed for Product X.Reference List.Internal Reference without having to go through the add-enumerated-value process for each separately. One open issue is whether "-to-" is the only relationship we want to support, and we need EN input on that.

4) (Ed G.) Splitting up GEOM.

5) IM V2 discussion - (Dick S.) a 'reset' of how we approach labeling of calibration and other files that are not derived from spacecraft/mission data.
   --- example: "The DSN collects weather data at its three complexes. These are ASCII files containing measurements of temperature, barometric pressure, relative humidity, etc. The water content along the radio path from a ground antenna to a spacecraft affects the timing of a round-trip radio signal (and therefore the apparent distance to the spacecraft). Weather data are an important calibration for spacecraft navigation and radio science (at least). Anyone who wants to use these data gets the same file(s); they are mission independent."

Just heads-up:

6) OBJ format white paper requested (already being used in archives)

7) Audio as observational SCR coming (from audio/video tiger team)
(Some Discussion)

Next meeting, August 20 (unless discussion moves this up to Aug. 13)
(We will be meeting August 13)

DDWG Telecon

Front-matter
This might be our last meeting before the next build. We have lots of requests for discussions.

The CCB passed both CCB-290 and CCB-289.

Clarification for the new acceleration process needs to be discussed in a DDWG meeting. Discussion and vote will not be in the same meeting.

#I. Ready for a vote (?)

We might be able to vote on CCB-294 today. It has a TA. CCB's 308 and 293 are not ready to be voted on. No TAs yet.
~ It's unclear that CCB-308 would need a TA - it's a bug fix.
~ It will probably be withdrawn.
~ CCB-293 is critical and needs more discussion.
~ We can vote on CCB-294.

Question: Why is CCB-308 being withdrawn?
Answer: It's unnecessary. Jordan wanted to make sure we are all on the same page.

CCB-293 - Specific values used to support search have been deprecated from the type field of Observing System Component
See https://pds-jira.jpl.nasa.gov/browse/CCB-293

Would like to hear what people think of this. There is no TA yet.
~ This is more complicated than it looks. Talking about drilling down through types to sub-types. Inclined to go with a simpler solution. Our list of types may need additions, but not sure we need all the sub-types.

Question: Does everyone understand this?
Answer: The sub-types they are asking for are types within instrument host.
~ Right. The context product is where you get the titles, names etc, but SBN duplicated that into observing system component. They were using that for their system and then we removed it. That broke their system. It's duplicated data basically, makes harvest for their search easier.
~ Someone tried to discuss this with Anne. As described in the SCR ticket it doesn't fully describe the issue. As written, not ready for a complete scope decision.
~ Off the table. Needs more discussion and clarification.

Action Item - Mike will try to get more clarification from Anne on this. Have her help flesh this out.
~ Then we need a TA.
~ This will also impact CCB-309. Need to figure this out.

Question: Any more comments?
Answer: (Silence)

CCB- 294 - Add enumerated value to Units of Pixel Resolution Angular
See https://pds-jira.jpl.nasa.gov/browse/CCB-294

Question: Are we ready to vote on this? Anyone not want to vote?
Answer: (Silence)

**The Vote on CCB-294
ATMOS- Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

Passed.
~ **Action Item - Trent** will get this to Ron.

CCB-308 - Add enumerated value to Units of Frequency
See https://pds-jira.jpl.nasa.gov/browse/CCB-308

There's a user who needs more than just hertz for units of frequency, which is already allowed in the SR, but values need to be enumerated for validation tool. We need to add prefixes to include things like megahertz. Needs to be listed as a software fix.
~ Other SI units also need to be specifically listed.
~ Hopefully, this can just be added.
~ Prefix plus base - should be an easy solution.
~ Each one needs to be uniquely specified.

Question: They have to be specifically listed in the IM or can they be in schematron?

Answer: Schematron is generated from the IM. Tedious, but it's an easy fix. We often have ivory tower discussions, but we are limited to adding just the set specified in the Requested Changes.
~ The user wants to know if they can ignore the validation errors because all the possible values will eventually be added.
~ No. Only going to add what's in the Requested Changes.
~ But it's in the SR.
~ This is a software issue for validate. If the base units are in the SR than this should be in validate.
~ A limitation of schematron.
~ Yeah.

Question: So if I make a list of every possible prefix can they be put in?
Answer: If they are in the Requested Changes.
Another Question: Do we have to do them all now?
Answer: That's where we were at the beginning of all this - we said we would add values as we needed them.
~ Someone wants millihertz.
~ That can be added.

We have a way forward. We will add what's in the current SCR to the IM. We don't need to vote on this.
~ We might ask Ron to do do something in two years. We'll need a record of why we only did these few. Should add a comment in jira and keep it for the historical record. **(Action Item - Steve**)
~ Milli will be added to the list. **(Action Item - Myche)**

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A question came up from the O-Rex review this week. The label had units - two units with "or" in the value. Said that wasn't legal, but they said it came from NAIF and they won't change it. It didn't seem right, but it didn't produce errors. It was meters or meters per second. Not sure how a user would know what it is.
~ This makes someone very nervous.
~ It should have been a flag.

Question: Did something else in the label tell you what was going on with that?
Answer: We should get the example to Boris and ask him. It sounds like an odd break of physics.

Question: Was it in the field description?
Answer: Yes.
~ Not sure those are validated.
~ Maybe a neighboring field is a flag - says if/then.
~ XML doesn't like if/then.

Good topic.

CCB-288 - Change Internal Reference reference type to free form text
See https://pds-jira.jpl.nasa.gov/browse/CCB-288

There are slides on jira for this topic.

During the tech session we tried to come up with auto-generated ways to make reference type. Table generated values for internal reference reference type. In 1.14, there are 127 enumerated values for internal reference. There could potentially be many more. Things like data to document. The from relationship equals to. Like from browse to data. Sometimes the relationship equals is. For browse to something - we have browse to data, thumbnail, browse or document. Richard at EN is not super happy with browse to browse. This came up when RS wanted a telescope to telescope value.

Wait - browse to browse is also used by Rings. They also want browse relationships to ancillary products.

~ That's CCB-292 (New enumerated values for reference type, see https://pds-jira.jpl.nasa.gov/browse/CCB-292).

Hoping to use a table - where we pick one from each column and not list all thousand. The relationships would be "to" or "is". Would ignore ops stuff where the relationship is "has." That would leave us 110 cases to think about. It can all be boiled down to the F-R-T table.

Context cases - 1 of 2 - see slides - special consideration of product context - context to data. Approved product context values all drill into product to find what it is - types and sub-types. Things like instrument to document, telescope to observatory or telescope to facility. For product X context area - there are a few cases, usually has investigation or target - sometimes both. This becomes the "T", like ancillary to target type.

Product observational is data to something usually. Don't see data in from often. Data to browse or browse to data. We have data to several "T"s. This is what's in the system now.

Observing system component relationship is "is". Always refers to another context product. "F" is always null. "T" is always "is". So we have blank is instrument or instrument host or facility of telescope. Could fill in the blank, could change the relationship to "to".

~ That relationship is very different. Someone would be against that.

~ EN will have a say in this.

~ There are many sub-types for instrument - aircraft, balloon, lander, rover, spacecraft, etc. Not happy drilling down. EN will need to tell us the preferred method.

For product context the F-R-T - from product context to approximately ten possibilities. To target - could be any product type. Agency to instrument. Maybe not all practical, but would all be legal if we set this table up.

For Observation area, the table - "T" column could only be investigation or target now.

Summary slide - relationships now are limited to "to" or "is", except for ops classes. There are lots of ways to develop the relationship, example - data described by document, but things could get way out of hand. EN will need to decide what they want.

See the attachments in jira to see all of the reference types. Several could be deprecated if the value is not useful - things like node to personnel.

Not sure more can be done - suggest we refer this to EN. It will be a lot of work, but it's a way forward. An alternative to free form text. Guided free form text might be better.

Question: Any comments?
Answer: This was overwhelming. Not sure I understand it all. Like if I want to add the value is computer?
~ That would be another type of instrument. We already have 35.

Question: Are there any cases where the "F" column isn't obvious?
Answer: Anne suggested dropping the "F" column. We could drop that and "R". We just want to know where we are going.
~ Someone would just drop the "F" column. Working on the context browser, could really blow up the "R" column too, or a sub-type of internal reference.
~ We need some guidance from EN. Was hoping to hear from Jordan at the tech session, but mostly he talked about keeping for search.
~ People are happy to be involved in the conversation.

Back at the start, regarding the "F" - we used reference list and reference type gave the to/from information. Don't know if there's any case where we need the from to understand the relationship.
~ Nothing jumps out.

End of our hour. We will keep going.

Question: Would this break validation in Oxygen or tools that don't use this table?
Answer: No idea, but you would have to tell Oxygen.
~ It would have to be free form text for Oxygen.
~ Don't know.

This is excellent work, but the question is still the practical approach. Using a formation rule to add what we need. The table tells us what's allowed. We're debating rules that have been made over a simple rule.
~ Really hard to access with out implementing it.
~ We shouldn't implement it unless we want to go this way.
~ We can either live with what we have or go to this. Pain either way.

Question: Process for validating enumerated values without schematron or enumerated list?
Answer: Maybe a schematron rule where there are three lists for F-R-T defined in the IM.
~ We also need to decide if we need the "F" column. If no, that simplifies everything. If we keep F-R-T, several possibilities. Could have less without "F" and then figure out how it goes in the IM.
~ Right, but we need to look at who's implementing software using that and how it will impact them.
~ We would need to give them time to implement changes.
~ There is a computational issue if we drop the "F".
~ Registry already drops "F".
~ More results when you search with out the from part.
~ True. Depends on how you implement search.

Not sure how we move this forward or what we should recommend.
~ Give it to EN and let them tell us how to proceed.
~ Someone is happy to be involved.
~ EN can give us a recommendation, but the key concept is how we want our data to be found. Need to know what's really wanted.

Question: Do you see this as a Version 2 thing? Does it need to be implemented earlier?
Answer: We could implement it earlier. It would be nice to have it in place before Version 2.
~ Someone agrees. Might just be a whole lot more values for reference type.
~ The table would be the source for the values.

Question: Looking at CCB-309 (Add is-computer as enumerated value for reference type in Observing System Component, see https://pds-jira.jpl.nasa.gov/browse/CCB-309), what's our feeling on this?
Answer: Is a type of instrument.
Another Question: Understood, but what do we tell a user who wants to say it's from computer B?
Answer: Need a context product that says what computer B is. Like any other instrument context product.
~ So, is other is off the table.
~ Doesn't meet the spirit of what reference type is about.
~ Thought context products weren't supposed to be for users - just to make the connections.
~ Yes, but include external and internal references.
~ That circles back to CCB-293 (Specific values used to support search have been deprecated from the type field of Observing System Component, seehttps://pds-jira.jpl.nasa.gov/browse/CCB-293) that there is information only in the context products that is relevant. Might put more weight behind having that.
~ If the only place necessary information is found is in the context product would be happy if it could be found with search.
~ But it's unavailable to the user. It's only for the system. This is an archive.
~ The "necessary for search" argument doesn't hold water. Context products provide the associations.

Question: Are we saying context products aren't part of the archive?
Answer: They are, but not part of the bundle.
~ Yes they are. As secondary members.
~ Users don't need to see them.
~ Yes, but they are still part of the bundle.
~ Secondary, but context products are in the archive and system and users should be able to get to them. Back to Computer A or Computer B - they could have context products with relationship is A - that would be computer.

We need to get to the next topic.

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Action Item - Everyone review CCB-316 (Add Composite Structure as an optional child of Product Observational, see https://pds-jira.jpl.nasa.gov/browse/CCB-316) and CCB-293 (Specific values used to support search have been deprecated from the type field of Observing System Component, see https://pds-jira.jpl.nasa.gov/browse/CCB-293)

____

GEO has a data provider doing FITS 4.0.
~ It's Mars 2020. Trying to help them with their archive design. Susie wants to submit an SCR to allow FITS 4.0 for header type.
~ that is the correct way to go.
~ We need it in this build.

CCB-264 - Make the Line Feed (LF) character an allowed record delimiter
See https://pds-jira.jpl.nasa.gov/browse/CCB-264

There is also a pressing need for LF.
~ O-Rex. We have approval to release the data, but would like to get this approved so we can archive the data this year.
~ The end of the year for us is this build.

What they agreed to has been documented in the SCR. SBN said they would convert to CRLF if need be.

This is a tricky one. The DDWG already passed this. Was sent back by the CCB.
~ We all agreed to check with our user groups about software and report back by the end of the year. Then the CCB would act on that.
~ Most software providers will be fine with this. Thought this would be Version 2 until I heard that it would be so far in the future.
~ People need a chance to implement software changes with enough lead time.
~ Recommend that this SCR is reinstated in November time frame so nodes can discuss it with users.
~ It's in the queue.

_____

Everything else will need to wait until next time.

There are lots of new SCRs. Not all are on our agenda. At least one bug fix. CCB-296 (Duplicated value in enumerated value list of Product Context/Internal Reference/reference type, see https://pds-jira.jpl.nasa.gov/browse/CCB-296), CCB-297 (Inappropriate values in permissible values list for Product Observational/Observation Area/Target Identification/Internal Reference/reference type, see https://pds-jira.jpl.nasa.gov/browse/CCB-297) and CCB-292 (New enumerated values for reference type, see https://pds-jira.jpl.nasa.gov/browse/CCB-292) look very easy.

We will get them on the agenda to review. There's a lot more to discuss, like the Version 2 time line and plan, but we need to close this.

Question: Are there any quick critical ones to focus on?
Another Question: Meet next week?
Answer: Yes, August 13. We can email a list of ones for people to review. Maybe we can discuss them and vote.

Question: If we vote Thursday can they go to the CCB in time?

Answer: If they are simple enough.

~ We can do e-votes too.

August 13, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, S. McLaughlin
and R. Simpson
Known Observers: M. Bentley (alternate for T. Lim), P. Lawton and M. McAuley

DDWG Agenda

(Included in email sent Aug 11, from T. Hare, DDWG agenda for August 13, 2020)

0) Front-matter

Reminder: last DDWG for next build.The CCB has been warned also.

•There are a lot of new SCRs for this week (see section "II." below). Not sure we will have time to get to them all so
please review.
•CCB group passed CCB-294 - Add enumerated value to Units of Pixel Resolution Angular
•CCB-308 - Units of Frequency will be essentially withdrawn for vote and simply implemented.

I. Ready for a vote (?)

Note: multiple "Enumerated Values" have been submitted. Two or three might be eligible for voting this week (if TA is
added and discussion allows).

1) CCB-317 urgent, has a TA, Add FITS 4.0 to parsing standard id enumerated values for Header object (Susie S.)

maybe:

2) CCB-297, getting TA, Inappropriate values in permissible values list for Product Observational/Observation
Area/Target Identification/Internal Reference/reference type (Anne R.)

3) CCB-296, getting TA, Duplicated value in enumerated value list of Product Context/Internal Reference/reference type
(Anne R.)

4) CCB-292 urgent, getting TA, New enumerated values for reference type (ancillary to browse, browse to ancillary),
(Mitch G.)
(Voted to pass them all)

II.Status and New SCRs.

Status:

1) CCB-293 critical, Specific values used to support search have been deprecated from the type field of Observing System
Component (Anne R.)

2) CCB-309 urgent, Add is-computer as enumerated value for reference type in Observing System Component (Michael
McAuley)

3) CCB-316 urgent, Add Composite Structure as an optional child of Product Observational (Michael McAuley)

4) CCB-288 urgent, (and related 287,286) Change Internal Reference reference type to free form text.
     -- Dick S. gave presentation -- review files on Jira.

(Some Discussion)

New (many bugs):

1) CCB-315 "PDS3" is an allowed parsing standard for Bundle documentation file. (Anne R.)

2) CCB-314 Bundle type of "Supplemental" seems oddly defined (Anne R.)

3) CCB-313 Definition of external source product identifier refers to non-existent documentation. (Anne R.)

4) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Anne R.)

5) CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0 (Anne R.)

6) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0 (Anne R.)

7) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined (Anne R.)

8) CCB-306 identifier reference in DD Association is not constrained (Anne R.)

9) CCB-305 Missing validation constraint on specified unit id. (Anne R.)

10) CCB-304 Cleanup unused Vector classes in IM before 2.0.0.0 (Anne R.)

11) CCB-303 The definition for skos relation name is not sufficient. (Anne R.)

12) CCB-302 No reference type values defined in DD Attribute or DD Class contexts (Anne R.)

13) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Anne R.)

14) CCB-300 Apparently deprecated units of measure are not actually deprecated. (Anne R.)

15) CCB-299 Mismatch between context and label type lists for Investigation (Anne R.)

16) CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection (Anne R.)

17) CCB-295 Product SPICE Kernel missing reference type values. (Anne R.)
(Brief Discussion)

previous - Reminder tickets:

1) CCB-291 Review 'Recommended' Practices in the Standards Reference (Dick S.)

2) CCB-209 Correct tagged objects. waiting - status from Steve.

3) CCB-222 Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

4) CCB-276 Query Model – Phase 2. New SCR. Steve and Trent will present more during DDWG "F2F".

5) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products. Joe considering withdrawing and listed as software issue.
(Brief Discussion)

previous - Parked for next build cycle (or V2):

1) CCB-186 ASCII/UTF8 String Definitions

2) CCB-260 PDS4-specific file extension

3) CCB-275 Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *

4) CCB-255 Namespace version dependencies are not documented in the Information Model.

5) CCB-277 Design and implement needed support for sky survey archiving.

6) CCB-205 Additional constraints/best practices for LDD.
(Not Discussed)

III. Discussions

1) (Ed G.) Splitting up GEOM.

2) IM V2 discussion - (Dick S.) a 'reset' of how we approach labeling of calibration and other files that are not derived from spacecraft/mission data.
   --- example: "The DSN collects weather data at its three complexes. These are ASCII files containing measurements of temperature, barometric pressure, relative humidity, etc. The water content along the radio path from a ground antenna to a spacecraft affects the timing of a round-trip radio signal (and therefore the apparent distance to the spacecraft). Weather data are an important calibration for spacecraft navigation and radio science (at least). Anyone who wants to use these data gets the same file(s); they are mission independent."
(Brief Discussion)

Just heads-up:

1) OBJ format white paper requested (already being used in archives)

2) Audio as observational SCR coming (from audio/video tiger team)

Next meeting, August 27

DDWG Telecon

Front Matter

We have a busy day today. Would appreciate any help with the agenda. This is the last meeting before the next build. The CCB has been warned.

There are lots of new SCRs. Will introduce as many as possible.

The CCB passed CCB-294. CCB-308 was withdrawn for vote and will be implemented.

I. Ready for a vote (?)

Several of these have TAs. We can vote if everyone agrees. Several enumerations. The only one we really discussed was FITS 4.0.

CCB-317 - Add FITS 4.0 to parsing standard id enumerated values for Header object
See https://pds-jira.jpl.nasa.gov/browse/CCB-317

Question: Any discussion on 317?
Answer: Someone had trouble telling the difference between FITS 3.0 and 4.0, but is fine adding 4.0.
~ Someone else doesn't believe this impacts the PDS4 label at all. Follows all the rules - raw, uncompressed. Doesn't see any issue.

Question: Comments?
Answer: (Silence)

**The Vote for CCB-317
ATMOS - Yes
IMG- Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

_____
Question: There are several simple ones. Okay to vote?
Answer: Go for it.
~ Simple enumerations.

CCB-297 - Inappropriate values in permissible values list for Product Observational/Observation Area/Target Identification/Internal Reference/reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-297

Someone isn't seeing the Requested Changes.
~ Pretty clear from the Problem Statement. We can vote with liens to add the Requested Changes.

**The Vote for 297 - with lien to add Requested Changes
ATMOS - Yes
IMG - Yes
EN - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

CCB-296 - Duplicated value in enumerated value list of Product Context/Internal Reference/reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-296

This has a TA.
~ Needs the same lien - needs Requested Changes. We can vote.

**The Vote for CCB-296 - with lien to add Requested Changes
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

(NAIF is not here.)

CCB-292 - New enumerated values for reference type
See https://pds-jira.jpl.nasa.gov/browse/CCB-292

This is also urgent. It does have Requested Changes.
~ In Jira all that was required was a title.
~ No lien.

Question: Any comments?
Answer: Someone doesn't want to encourage the use of product ancillary.

**The Vote for CCB-292
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
PPI - Yes
Rings - Yes
RS - Yes
SBN- Yes**

(NAIF is not here.)

Someone needs to do the liens today. The CCB has been sent a heads up.

Question: Who can take care of the liens? Does it have to be Anne?
Another Question: Who has access?
Answer: Mike can try to get access.
~ Ron can change the reporter.
~ Trent will help.
(Action Item- Mike, Trent, Ron)

II.Status and New SCRs

It's unclear how to present the next section. So many additions and a fairly large backlog. We will do status updates first.
A lot will need discussion.

CCB-293 - Specific values used to support search have been deprecated from the type field of Observing System Component
See https://pds-jira.jpl.nasa.gov/browse/CCB-293

Question: Any questions or comments?
Answer: We can drop the critical tag. It's not necessary for this build. Updated the ticket in jira with concerns about mixed specificity.
~ Suggest the Context Guide is read. This all shouldn't be an issue. Sounds like you want to go backwards. We solved this with CCB-138 (Mismatch between context object types and values of type in Observing System Component class, see https://pds-jira.jpl.nasa.gov/browse/CCB-138).
~ Will read the guide. This was driven by Anne.
~ We shouldn't have identical enumerated lists in two places.
~ The context information is not available to end user. We want that information available for the user.
~That's fair, but there are better ways of doing it. You suggest having host and types of host - mixes specificity.
~ Want to drop host.
~ That's not what we did with CCB-138.

Someone is troubled by this yo-yo approach. We have several versions out there being used. Not sure how this will affect a system level search. We need the system people to weigh in. No strong opinion, but I want to hear from them before I would vote.
~ Someone agrees, but doesn't feel represented by CCB-138.
~ As far as how the system would work - Jordan will always assume context products are master copies to be used in harvest. In labels, need some validation, but as far as what's in the label, it's a duplication of metadata. Not a mortal sin. Issue was being consistent with the context product. Need an exact duplicate. Issue when new context products added. Might be where keywords attribute can be added to include values from the context products.
~ Keywords need to be changed between versions.
~ Suggests they aren't in IM. Enumerated values.
~ But they might need updates too. Don't want conflicts. Leaning towards duplicating what we need and having a rule about how to deal with conflicts at the implementation level, but I'm not a system guy.
~ If add a keyword attribute to label, I'm not suggesting an enumerated list.

We need to keep this discussion limited.

CCB-309 - Add is computer as enumerated value for reference type in Observing System Component
See https://pds-jira.jpl.nasa.gov/browse/CCB-309

Maybe is instrument might be good enough.
~ Is host would be better. Don't understand what this is buying for the system, the benefit to the system.
~ This would have been nice, but there are other ways we can handle it. It was a way to differentiate which computer.

Someone added a bunch of questions in jira, like why it's not enough to call this out as a mission LDD attribute.
~ Could remove urgent, but we still want to expose the elements...

It would be nice to know how this will affect things like how the data is processed down the line. If we have computer A, computer B - not sure how that affects processing of data downstream.
~ Someone is willing to be convinced this is necessary, rather than calling it out as an attribute.

Question: Confused. Is the issue the addition of the new context product or the reference type?
Answer: That's a single issue really. If we make the reference type is computer then we made the context product.
Question is if this is necessary or if it's sufficient to include this in the mission LDD.
~ Got it.
~ Those are two ways to do it. The CCB-309 way is much harder.

~ The Mars 2020 LDD.
~ Yes.
~ Someone likes that idea - can help.

Type keeps coming up. It's part of the thread for CCB-288 (Change Internal Reference reference type to guided text, see https://pds-jira.jpl.nasa.gov/browse/CCB-288) that we had a presentation on.
~ CCB-309 is more of a question - need a context product if it can be in a mission LDD.
~ Someone agrees. Reference type is the red herring in this.
~ Let's take this off the table for now.

Question: But for CCB-293 and 288, how do we proceed?
Answer: We need a clear answer from EN. Happy going either way, but it's the system that will be affected by our choice.
~ Jordan prefers named relationships. The issue is how specific the name of the relationship is. We want relationship to be a member of the IM. Experts at the nodes came up with a list of possible reference types. They say the from is useful. It's about deciding what relationships are useful and we want in the system. It's a modeling issue. Tool for node staff to use.
Another Question: So, happy as long as they are all listed somewhere?
Answer: Yes.
~ Don't like this, but if you think the experts should set the list then let's get on with it.
~ Jordan will support the list.
~ It will be in the thousands.
~ The question is if duplication will be a problem for the system and the level of specificity necessary for system level search.
~ Specificity of the relationships. Think of relationships as a product - a from and a to and a way to search the system. Jordan can provide the harvesting.
~ Talking about types of relationships. We need to get too deep in the weeds.
~ Compressed. System took a lot of relationships and compressed them for search. Not sure that's the correct way to go now. Need to hear from Jordan if he's going to compress anything.

Question: We're signing up for EN to solve this for us. Are we okay with that?
Answer: Not so much us signing off. We would need to make the list of reference types.
~ Need to let Jordan know if list or named relationships.
~ Someone thinks guided text is best.
~ We need to update the jira ticket for Jordan to see.
Action Item - Dick will update the ticket.

Someone thinks what was worked out was very good, but we don't have to add everything all at once. No need to add 100,000 in one swoop.
~ The only other thing is if we don't need the from part - and Jordan deletes that...
~ Need to check with Jordan on that.

Action Items - Trent will follow up with Jordan and Steve, **Dick** will update the ticket.

Question: Is CCB-293 in this conversation - do we need balloon and everything in the queue?
Answer: Has a dependency on CCB-288. Not critical.
~ Could be a fairly quick turnaround.

Introducing the New SCRs

None of these are urgent. Most are bug fixes. Which brings up the process. It seems like they should all just be done. Would be good if we could speed them up and just vote once.
~ CCB-299 (Mismatch between context and label type lists for Investigation, see https://pds-

jira.jpl.nasa.gov/browse/CCB-299) is a repeat of CCB-290.
~ Yes.

Re the process - there used to be controversy with the CCB about the DDWG not sending bug fixes to them. Settled on us voting and alerting them we think it's a bug fix. We could vote on them in blocks, but not today - not ready.
~ No, not today, but they do just need to be fixed. We can list them as bug fixes in the future. Can set up a page for electronic votes - unless we need discussion. A lot of them should be easy to get through.

Question: Any red flags in the list?
Answer: Someone understands that Anne has been updating the SBN wiki. Reminds them of CCBs 203 and 204. Agrees with the grouping. A lot of these are trivial and do fill in holes, but like that these are called out as separate SCRs. Agrees with grouping.
~ They will be sorted better for next time. We will move forward with the bugs.

Updates

Wanted to bring up some of the other SCRs - reminders. See if there are any updates.

CCB-291 - Review 'Recommended' Practices in the Standards Reference
See https://pds-jira.jpl.nasa.gov/browse/CCB-291

Not a lot of activity. It's a bulletin board for the SR and recommendations versus best practices and requirements and validation. We should keep this open.

We should have a due date.
~ End of September. Gives us a milestone.
~ Good. We can extend it if necessary.
~ Someone likes that.

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

Question: Should this be moved to the parking lot?
Answer: Yes. Haven't gotten to it. Hopefully for next build.

Question: Is there a date for the next build yet?
Answer: Someone thinks it's in March.
~ That would be a good thing to include in Front Matter on the agenda.
~ Six months from now.

CCB-222 - Add citation text to Citation Information
See https://pds-jira.jpl.nasa.gov/browse/CCB-222

Joe is not here. No update today.

CCB-276 - Implement Query Models – Phase 2
See https://pds-jira.jpl.nasa.gov/browse/CCB-276

This is TBD still. Trent and Steve need to discuss it with Jordan. **(Action Item)**

CCB-282 - Naming Rule Inconsistencies for Directories and Bundle and Collection Products
See https://pds-jira.jpl.nasa.gov/browse/CCB-282

Need Joe to comment. Running out of time.

III. Discussions

Splitting up GEOM.

This is an important topic and there is a related issue for after.

Ed is spending a lot of time on change requests for the Geometry LDD. SBN wants to add a section for ground based. Would like to discuss plans to break up the LDD and have several stewards. A few others have already volunteered. We need a better approach for this LDD.

Velocity is a pain too. One of the ways Imaging has gotten out of hand too. Looking at taking out parts and allowing them to inherit from Imaging LDD. Breaking out like things. One reason bringing this up is to get permission to go forward with this. Using XML inheritance. One way IMG has decided to deal with the LDD, which is just getting too big.

Ed is getting an alarming number of requests. Need to do this on a case by case basis.
~ Had to do something like this for the Juno LDD. It inherited from the Geometry LDD.

We can discuss this again.
~ It's one approach, even with the technical concerns. This will be on the agenda for next time.

SBN is awaiting getting geometry for several surveys they are trying to archive. That adds some urgency. Need the ground based section.
~ SBN will be on call next time. Has lots of ideas on how to re-factor the Geometry LDD.

IM V2 discussion

We need to push off this discussion for now.

Question: Is it okay to discuss in the future?
Answer: Yes. Version 2 is 2024.

_____
Next meeting August 27.

Title: DDWG Notes 2020-08-27

August 27, 2020
Notes by Debra Kazden

**Version 2 - September 1, 2020
~ These Version 2 notes include the official list of names for the geometry dictionary discussion tiger team.**

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson Known Observers: P. Lawton and M. McAuley

DDWG Agenda

(Included in email sent Aug 25, from T. Hare, DDWG agenda for August 27, 2020)

Front-matter

•This week will be mostly talking to ideas for splitting up GEOM (and "strict" scheduled dictionary builds on GitHub, related to CCB-275) •CCB group passed:
1) CCB-317 urgent,Add FITS 4.0 to parsing standard id enumerated values for Header object
2) CCB-297, Inappropriate values in permissible values list for Product Observational/Observation Area/Target Identification/Internal Reference/reference type
3) CCB-296, Duplicated value in enumerated value list of Product Context/Internal Reference/reference type
4) CCB-292 urgent, New enumerated values for reference type (ancillary to browse, browse to ancillary) •Next build freeze in March 2021

I. Ready for a vote.
none

II.Status.

1) CCB-316 urgent, Add Composite Structure as an optional child of Product Observational (Michael McAuley)
2) CCB-293 Specific values used to support search have been deprecated from the type field of Observing System Component (Anne R.)

3) (withdrawn?) CCB-309 Add is computer as enumerated value for reference type in Observing System Component (Michael McAuley) **(Brief Discussion)**

"bugs" - thoughts on lining-up "e-votes".

1) CCB-315 PDS3 is an allowed parsing standard for Bundle documentation file. (Anne R.)

2) CCB-314 Bundle type of Supplemental seems oddly defined (Anne R.)

3) CCB-313 Definition of external source product identifier refers to non-existent documentation. (Anne R.)

4) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Anne R.)

5) CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0 (Anne R.)

6) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0 (Anne R.)

7) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined (Anne R.)

8) CCB-306 identifier reference in DD Association is not constrained (Anne R.)

9) CCB-305 Missing validation constraint on specified unit id. (Anne R.)

10) CCB-304 Cleanup unused Vector classes in IM before 2.0.0.0 (Anne R.)

11) CCB-303 The definition for skos relation name is not sufficient. (Anne R.)

12) CCB-302 No reference type values defined in DD Attribute or DD Class contexts (Anne R.)

13) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Anne R.)

14) CCB-300 Apparently deprecated units of measure are not actually deprecated. (Anne R.)

15) CCB-299 Mismatch between context and label type lists for Investigation (Anne R.)

16) CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection (Anne R.)

17) CCB-295 Product SPICE Kernel missing reference type values. (Anne R.) **(Discussed - will be voting on CCB's 315, 314 and 313 next time)**

Parked for next build cycle (or V2):

(heading to EN) CCB-288 (and related 287,286) Change Internal Reference reference type to 'guided' text. review presentation files on Jira.

1) CCB-291 Review 'Recommended' Practices in the Standards Reference (Dick S., due date: Sept. 2020)

2) CCB-264 Make the Line Feed (LF) character an allowed record delimiter (due date: Nov. 2020)

3) CCB-209 Correct tagged objects. waiting - status from Steve.

4) CCB-222 Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

5) CCB-276 Query Model – Phase 2. New SCR.

6) CCB-186 ASCII/UTF8 String Definitions

7) CCB-260 PDS4-specific file extension

8) CCB-275 Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *

9) CCB-255 Namespace version dependencies are not documented in the Information Model.

10) CCB-277 Design and implement needed support for sky survey archiving.

11) CCB-205 Additional constraints/best practices for LDD.

12) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products. Joe considering withdrawing and listed as software issue.
(Not Discussed)

III. Discussions (not for this week)

1) Splitting up Geom (Ed G.)
(Discussed)

2) IM V2 discussion - (Dick S.) a 'reset' of how we approach labeling of calibration and other files that are not derived from spacecraft/mission data.

   --- example: "The DSN collects weather data at its three complexes. These are ASCII files containing measurements of temperature, barometric pressure, relative humidity, etc. The water content along the radio path from a ground antenna to a spacecraft affects the timing of a round-trip radio signal (and therefore the apparent distance to the spacecraft). Weather data are an important calibration for spacecraft navigation and radio science (at least). Anyone who wants to use these data gets the same file(s); they are mission independent."

heads-up:
•OBJ format white paper requested (already being used in archives) •Audio as observational SCR coming
(from audio/video tiger team)

Next meeting, Sept. 10

#DDWG Telecon

Steve H. won't be on the call today.

We will be using most of our time today to discuss breaking up the Geometry LDD and ideas that Jordan and EN have for LDDs.

The CCB passed all of the SCRs we sent them last time. The next freeze is probably March 2021.

We will not be voting on anything today.

Status

CCB-316 - Add Composite Structure as an optional child of Product Observational See https://pds-jira.jpl.nasa.gov/browse/CCB-316

This is for Mars 2020. Seems complicated. Will need tiger team.

Question: Are people desperate for this?
Answer: Need it.
~ This is not trivial. Will need a tiger team. It can be made of of people from the nodes. This is a fairly significant change in the IM. It's important to look at the implications. Not sure calling this urgent is correct.
~ It's wanted for the next build.

We need to find people for the tiger team. Hopefully Bob will be included.

CCB-293 - Specific values used to support search have been deprecated from the type field of Observing System Component See https://pds-jira.jpl.nasa.gov/browse/CCB-293

People are confused about this one. Think it will take a lot of work.
~ A comment was added in jira.
~ This connects to several issues. Needs a work group.
~ We'll push this to the whole reference type list of issues for EN to help with.
~ Yes, we will need help from EN.
~ Jordan has been warned.
~ Maybe we can bundle the whole thing up and send all our questions to Jordan.
~ Steve knows this is coming too, but he has been very busy on the build. It's a complicated issue. Covers a lot of tickets.

CCB-309 - Add is computer as enumerated value for reference type in Observing System Component See https://pds-jira.jpl.nasa.gov/browse/CCB-309

Calling this withdrawn. It's being pushed to a local data dictionary. Will have the SCR officially withdrawn.
~ Agreement.

"bugs" - thoughts on lining-up "e-votes"

Someone is wondering if we could do batch e-votes in the future, like maybe for three at a time. Wonders if that would work and if okay for the trivial SCRs.
~ Someone else thinks it's a good idea.
~ Doesn't hurt to try.

We will try with three of them. CCBs 315, 314 and 313 are assigned as homework to everyone. **(Action Item for All)**

We will have an e-vote.
~ We could just vote next time. We don't need to e-vote. That involves more discussion.

The **Action Item for Everyone** is to read and comment on the 3 SCRs. If there are no issues we can vote next time.

CCB-299 is a repeat of CCB-290. We need to have that one withdrawn.

Discussion - splitting up GEOM and "strict" scheduled dictionary builds on GitHub, related to CCB-275

For reference: CCB-275 - Make Ingest LDD file archivable, see https://pds-jira.jpl.nasa.gov/browse/CCB-275

Ed received email with ideas on how to break up the GEOM LDD. It's gotten very big. Covers orbiters and landers and now SBN needs ground based. There are already close to 10,000 lines. It's huge. Has grown over time. It's a lot for one person to update and maintain. Plus, one person may not have the expertise. Believes there are different approaches that we could take. For example, we could break it into more than one LDD. SBN could develop an LDD for ground based, separate, with them as the steward. We need to review the idea and the whole GEOM LDD going forward. Discussed this with Jordan. We are going to need some level of review and control to make sure LDDs stay on track and are useful to the community.
~ People from SBN have gone through the GEOM LDD to try to figure out ways to re-factor it, make it smaller. There are a lot of attributes that are only different by context. They put samples into GitHub to show how we could pair it down. Working it GitHub is a good change, sees it as a perfect tool for tracking changes. There are upsides and downsides to splitting GEOM up. We want to preserve future searchability. Worried if things are in multiple LDDs it might be harder to search in the future, users would have to know about all the dictionaries to search.
~ There were a lot of requests for additions for the GEOM LDD for future missions. Not real familiar with GitHub, but it sounds reasonable. Okay with that. Understands the argument to keep the GEOM LDD together, but needs more than one person to maintain it.
~ SBN's ground based LDD will be it's own thing.

Question: How would that work? Inheritance?
Answer: Not sure, not a dictionary guy, but do have opinions about cross referencing. This is a good opportunity to use classes and subclasses. Time to figure out how to do cross referencing.
~ Steve had ideas about this. Maybe some of the core classes that would crosscut the GEOM LDDs would be part of streamlining.
~ We can come up with something clean and compartmentalized with different people in change of the different sections.
~ Steve might have ideas from the modeling perspective.

Ed would be fine no longer being the steward of the GEOM LDD if someone wants to take the responsibility or to share it.
~ From a management perspective, getting people co-trained is important for the dictionaries. It's good to pass the torch on once in a while. It's scary when you think about it all, but it's hard to sustain as it is.

Question: Will a typical data provider use several geometry LDDs? Or can things only be configured to have one?
Answer: Haven't seen any where people used two or more sections, but that might be different for ground based or radio science.
~ There will be missions that will need ground based and orbit.
It's mind bending to try to understand all the pieces for GitHub. Scary, but do think it's it's the right thing to do. Jordan's auto-build system is coming along. Understanding the lingo is hard at first, but we can write tutorials and people can ask for help.
~ Probably a good place for tracking requests. Better than email. Definitely the future, but there's a learning curve.
~ Using GitHub to search can be magical. It's a pretty amazing tool. Think we're heading in the right direction. The Imaging LDD is getting bigger too. It has been split, but it's frustrating. We are doing some inheritance across discipline LDDs. Everyone needs to know we are heading down that road.
~ Probably the best way to handle and manage it all. The DDWG may need to rethink some LDDTool rules if more discipline LDD inheritance is happening.
~ Cartography LDD inherits for the GEOM LDD, so they have to be built together. Still have some LDDTool quirks, but the end result is that we might do the imaging surface from imaging and the mission surface from mission. There are growing pains. LDDTool is good, but have to do both LDDs at the same time. It doesn't always handle inheritance well, but it's a known problem with an easy manual fix. Jordan is aware of the issue. Auto-build will force us to be more rigorous with maintenance and testing. GitHub will have regression testing, and during a build there need to be a lock down on all dictionaries. We will need a lot more organization, but inheritance issues will go away when everything is at the same version.

Question: Any comments?
Answer: Someone is in favor of trying to make this work. Been thinking when updates are required that there should be a review process. Maybe a lite CCB review. Better than just having one person implement changes. Maybe not all discipline LDDs will need all this, things like the Rings LDD will have their own community who uses it, rather than something in wider use, like GEOM.
~ Again, a reason to have it in GitHub is so changes are reviewed before changes are made. Easy to put in comments and liens too. Easy to push in a new pull request too. A learning process. The number one dictionary in PDS isn't there - the master IM. Need to get that in there too. No concerns about splitting up GEOM, but it will be hard to find a new person to take it on.
~ Anne says SBN can handle ground based and image display geometry.
~ Image display geometry has overlap with display.

Over the next months, suggest that we do what we need to do for GEOM and then put it on hold to sort out. We need a tiger team to figure this out. The tiger team will need several people, including SBN, IMG, Ed, Mitch, Steve, a radio science person, Trent, Mychee... In the next few months people are very focused on getting the Mars 2020 archive reviewed. People are busy on that.
~ Yes, people are very busy on that. Have to get past Mars 2020.

~ Mitch is willing to take the lead.
~ Mike D and Jessie will help. They come from the modeling perspective. Either Jessie or Anne will be the steward for ground based.
~ We need to look at having a stewards group. Would like to see some new blood, where the newer staff is available.
~ Yes, would be nice to have some new hires.
~ Hopefully we can find people who understand geometry.
~ Finding geometry expertise is hard.
~ Tanya/IPDA will participate because they have a lot of missions that use the GEOM LDD.
~ Maybe a new IPDA person can come along too - to help them learn.
~ That would be PI teams - not long term. Maybe not good for programming.

Action Item - Mitch will send out an email with a doodle poll to find a time to meet. People can forward ideas of who to include in the doodle poll to Mitch.

Thanks to Mitch for stepping up.

The members for the geometry dictionary discussion tiger team are Mitch Gordon (lead), Ed Guinness, Steve Hughes, Mike Drum, Trent Hare, Tanya Lim, Jesse Stone, Myche McAuley (observing).

Regarding the dictionary stewards, wondering if that group should be reconstituted.
~ The stewards group is an email list. Emily maintains it.
~ As we move towards an auto-build system we need to bring them along.
~ We may need to have a virtual meeting on stewards and the build process. They can serve on the review boards.
~ We can do quick and easy fixes if things are on GitHub. Good way to get help.
~ Auto-build looks promising. Helpful for changes.
~ Just getting organized and having a process will be very helpful.
~ By abiding by the build rules, we may have to tell missions to wait and use branch versions sometimes.

Question: Will there be a new version of the mission surface LDD?
Answer: Yes. It's ready. Will be pushed out soon.

Good Discussion.

_____

Notes and reminders about voting next time will be sent out.

Next meeting September 10.

Title: DDWG Notes 2020-09-10
September 10, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, R. Joyner, D. Kazden, T. Lim, J. Mafi, B. Semenov and R. Simpson Known Observers: P. Lawton

DDWG Agenda

(Included in email sent Sept. 8, from T. Hare, DDWG agenda for Sept. 10, 2020)

0) Front-matter

• Next build freeze in March 2021

• Quick update on GEOM split from Mitch(?)

• Quick update on CCB-308 Add enumerated value to Units of Frequency

•CCB-309 officially withdrawn, Add is computer as enumerated ...

•Mars 2020 in review! (required lots of data dictionary updates). Lessons learned...?
(Discussed)

I. Ready for a vote.

Recall we are pulling 3/4 bug tickets per week to vote on, Please review this set. If they need more discussion we will not vote on them.

1) CCB-290 (repeated in CCB-299) Add value Field Campaign to Investigation Area type enumerated value list
2) CCB-300 Apparently deprecated units of measure are not actually deprecated

3) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Anne R.) **(Did Not Vote)**

II.Status.

"bugs" - lining-up "e-votes".

1) CCB-303 The definition for skos relation name is not sufficient. (Anne R.)

2) CCB-304 Clean up unused Vector classes in IM before 2.0.0.0 (Anne R.)

3) CCB-305 Missing validation constraint on specified unit id. (Anne R.)

4) CCB-306 identifier reference in DD Association is not constrained (Anne R.)

5) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined (Anne R.)

6) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0 (Anne R.)

7) CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0 (Anne R.)

8) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Anne R.)

9) CCB-313 Definition of external source product identifier refers to non-existent documentation.(Anne R.)
10) CCB-314 Bundle type of "Supplemental" seems oddly defined (Anne R.)

11) CCB-315 "PDS3" is an allowed parsing standard for Bundle documentation file. (Anne R.)

12) CCB-295 Product SPICE Kernel missing reference type values. (Anne R.)

13) CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection (Anne R.)
(Discussed)

Parked for next build cycle (or V2):

1) CCB-316 Add Composite Structure as an optional child of Product Observational (Michael McAuley) -- need tiger team (Bob, Trent, ?)

2) CCB-293 Specific values used to support search have been deprecated from the type field of Observing System Component (Anne R.)

3) CCB-291 Review Recommended Practices in the Standards Reference (Dick S., due date: Sept. 2020)

4) CCB-264 Make the Line Feed (LF) character an allowed record delimiter (due date: Nov. 2020)

5) CCB-209 Correct tagged objects. waiting - status from Steve.

6) CCB-222 Add citation text to Citation Information. Solution may be more complex but Joe has the action item to write a proposal.

7) CCB-276 Query Model – Phase 2. New SCR.

8) CCB-186 ASCII/UTF8 String Definitions

9) CCB-260 PDS4-specific file extension

10) CCB-275 Make Ingest LDD Archivable. Anne, "substantial work" (and CCB-256) *

11) CCB-255 Namespace version dependencies are not documented in the Information Model.

12) CCB-277 Design and implement needed support for sky survey archiving.

13) CCB-205 Additional constraints/best practices for LDD.

14) CCB-282 Naming Rule Inconsistencies for Directories and Bundle and Collection Products. Joe considering withdrawing and listed as software issue.

(to EN) 13) CCB-288 (and related 287,286) Change Internal Reference reference type to guided text. review presentation files on Jira.
(Brief Mention)

III. Discussions (not for this week)

1) IM V2 discussion - (Dick S.) a 'reset' of how we approach labeling of calibration and other files that are not derived from spacecraft/mission data.
   --- example: "The DSN collects weather data at its three complexes. These are ASCII files containing measurements of temperature, barometric pressure, relative humidity, etc. The water content along the radio path from a ground antenna to a spacecraft affects the timing of a round-trip radio signal (and therefore the apparent distance to the spacecraft). Weather data are an important calibration for spacecraft navigation and radio science (at least). Anyone who wants to use these data gets the same file(s); they are mission independent."
   (Not Discussed)

Next meeting, Sept. 24

DDWG Telecon

Trent begins by thanking everyone for their help and feedback. Now that Mars 2020 is in the rear view mirror he plans to have more time to keep and get things organized.

The next build will be in March.

Quick update on GEOM split

The team had a telecon last week. Six people attended. Not everyone who the team thought would be involved was there for the first meeting. Hoping Steve H. will join. Mike D. from PSI was on the call. The team discussed long and short term goals and action items. Long term goals are to split the dictionary based on mission and context and to re-factor how it's designed. Still discussing philosophy, but will get in the nitty gritty of short term goals soon. Expecting to make progress.
   ~ An updated diagram was made.
   ~ The scope is too broad. So many people need changes. It will be easier to manage in the long run.

Email was received from someone doing migration who needs geometry help.
   ~ The team will watch for that.

The team will be meeting Thursdays in the DDWG time slot, opposite weeks.

Question: Does anyone have any questions?
Answer: (Silence)

Quick update on CCB-308 Add enumerated value to Units of Frequency Ron has been cranking through a lot of tickets. Came across CCB-308 and asked why we didn't vote on it. He pushed it through, but we need to vote.

Question: Comments?
Another Question: What did we decide about where the SR says you can use any SI unit?
Answer: Not sure. Let it through because it's an enumeration...
   ~ Will need a unit of nanoseconds for Mars 2020. Will need to put in an SCR.
   ~ Steve said he wanted a specific list of values. He was threatened with one.
   ~ Yes.

Even the reporter said what he wanted was allowed so we didn't need to vote, but Ron needs us to vote.
   ~ If we don't do the massive list a new SCR will be put in for nanoseconds. Will use the new enumeration tab.

CCB-309 officially withdrawn

Ron was asked to officially withdraw the SCR.

Mars 2020 in review!

Someone wonders if Mars 2020 is unique or if we should expect those issues again.
~ Not everyone is sure what the problem was.
~ There was a huge amount of work at the end - lots of necessary mission updates at the end.
~ Part of the problem was that they were a year late in getting things out. That won't happen again.
~ Europa Clipper is more typical. Lots of problems for Mars 2020 - lateness, update requests. Not typical or normal.
~ Unsure if there's anything we can do to prevent this form happening again.
~ Fever charts are yellow and red. Definitely raised a warning flag to prevent this from happening again in the future.
~ Maybe we should write up a paper for HQ.
~ Otherwise it will happen again.

We always say we have to start early. They kept saying they weren't funded to do the PDS work. So they started very late.
~ Maybe we need to push to get the PDS part funded earlier. Just wanted to see if there is anything we need to do.
~ Still going. Imaging reviews and non-imaging instruments too.
~ Might want to include this in the Planetary Ecosystem Review.
~ Someone feels like that has different goals.
~ This is part of the ecosystem. Hopefully, some of this will come up to the board.

Someone has been looking at a lot of decadal papers - there are several hundred - and now the ecosystem papers are coming in. Hard to review them all.
~ People certainly don't need another task.

Back in 2008 we formed a mission interface work group. Susie was involved. One thing that came out of that was the pirate's code. Wonder if we need to resurrect that - to prevent things like missions starting late.

Question: Pirate's code?
Answer: If you saw the Pirates of the Caribbean, it was guidelines. Mission lead guidelines. It was for PDS3. There were a lot of inputs to it. One complaint about PDS had been that the mission experience was different with different nodes. We wanted to establish how our interactions with missions should go. Also established having a lead node. It helped us get our act together.
~ GEO still pretty much following that model. Might be worth looking at it to see if it needs updates.

Question: Do you think Susie might be interested?
Answer: Maybe at the beginning of the year.

Action Item- Mitch will send the pirate's code to Trent.

Of all the papers, one is from PDS. Sebastian is a co-author. Wonders if Tanya has signed on.
~ Tanya said she hasn't heard of it.
Action Item - Mitch will send a copy of the PDS paper to Tanya and she can see if she can find additional co-signers. Hard to make changes.
~ PPI sent the PDS paper to their advisory group for co-signers. That included Baptiste Cecconi and and some others from PSI.
~ Rings also sent it out.

Question: That's for the decadal. Is there going to be a PDS paper for the ecosystem review too?
Answer: The boards may come to PDS for information when they are put together.

Ready for a vote.

CCB-299 - Mismatch between context and label type lists for Investigation, see https://pds-jira.jpl.nasa.gov/browse/CCB-299
CCB-290 - Add value Field Campaign to Investigation Area type enumerated value list, see https://pds-jira.jpl.nasa.gov/browse/CCB-290
CCB-300 - Apparently deprecated units of measure are not actually deprecated, see https://pds-jira.jpl.nasa.gov/browse/CCB-300
CCB-301 - The attribute name in the DD Attribute and DD Class classes is not properly constrained, see https://pds-jira.jpl.nasa.gov/browse/CCB-301

We will withdraw CCB-299 because we voted on CCB-290. It's queued for implementation.

Question: Is there anything we need in CCB-299?
Answer: Didn't look at that one. Thought we were working on others.
~ Trent reversed the order. Pulled the voting for this time. No TAs yet. We will get back to this.

Question: Any issues with looking at CCB-300 and CCB-301 for voting next time?
Answer: Hard to see if these are ready for a vote. No requested changes - just a proposed solution.
Another Question: Who do we need to work on this?
Answer: Typically, we don't require the reporter to put a solution. They might not know what the solution should be. Anne might know what she wants.
~ Anne is on vacation and not available to help before the end of the year.
~ These need to be better documented and TAed.
~ Steve's input would be useful.
~ But he doesn't write the requested changes. We could ask Ron to do it.
~ CCB-300 is kind of schematron rules. Ron might be good for that.

Answer from Ron: For CCB-300, there's warning about deprecated, but can still use.
~ The rule is not written. And we need to vote still.
Ron: Fine, will write the requested changes.
~ Ron volunteered to do this. **(Action Item - Ron)** ~ Schematron rules don't go to the CCB - they consider this software.
~ Yes, it's a bug fix, but we still need to have TA and vote.

We need to talk about CCB-301. A comment was put in about conflicts with the SR.
~ We certainly can't have white space in class names.
~ Or attributes. Not sure if the suggestions for using local identifier tag is okay. Not sure of the implications. Need someone who understands XML to look at this.
~ It's not as simple as someone first thought.
~ The SR implies you can't use UTF-8.

Someone is looking at a current XSD. Reporter says it's a PDS name, but I don't think it should be a UTF-8 string. Would be problematic.
~ Reporter says it's white space normalized. That's why SR was checked.
~ Someone is looking for where PDS name is defined.
~ The bottom line is that we need someone to figure out what to do. Hashing it out in the DDWG won't work, and that goes for the next four SCRs.
~ Agreement. These aren't easy, even though they are bugs.

bugs - lining-up e-votes.

CCB-303 - The definition for skos relation name is not sufficient.
See https://pds-jira.jpl.nasa.gov/browse/CCB-303

Someone is trying to remember where skos came in. Might have been from Steve and others.
~ Instrument types, but it was in terminological entry before the instrument type discussion. Steve knows more about this. It has to do with relationships between attributes.

Seems like we need an EN tiger team for this.

CCB-304 - Cleanup unused Vector classes in IM before 2.0.0.0 See https://pds-jira.jpl.nasa.gov/browse/CCB-304

Those vector things were early attempts of geometry. Think they should be taken out if they have not been used. Willing to take a look and write the Requested Changes section. Needs to be allowed to edit the SCR. **(Action Item - Ed)**

(Ron fixed that in real time so Ed can edit this in jira.)

A lot of these SCRs will need another look. That changes a lot, so let's not go through any more of these now.

We need to assign the action to everyone to read through these.
~ Numbers 12 and 13 in the list didn't really fit the bug list. CCBs 295 and 298 are troublesome, and it's unclear how to do the product SPICE one.
~ NAIF can't really help with that one. They looked. When we made schematron rules it was valid, then it became non-backwards compatible when changes came along, and it's not valid. NAIF is going to stick with IM version 1.5 until 2.0, so they have no opinion, but they like things that have been required in the past to continue being required.
~ That helps.

Parked

Question: Anything in parked that needs to be pulled from there? We might need to pull CCB-316 (Add Composite Structure as an optional child of Product Observational, see https://pds-jira.jpl.nasa.gov/browse/CCB-316). Thought it would be easy, but nothing is easy.
Answer: It would be nice not to do CCB-316 until we do CCB-209 (Correct Definitions of Tagged-*-Object, see https://pds-jira.jpl.nasa.gov/browse/CCB-209), but we need Steve for that.

PSI is discussing CCB-288 (Change Internal Reference reference type to guided text, see https://pds-jira.jpl.nasa.gov/browse/CCB-288) with EN. No action items yet, but hope to wrap up for this build. CCB-293 (Specific values used to support search have been deprecated from the type field of Observing System Component, see https://pds-jira.jpl.nasa.gov/browse/CCB-293) might come with it.

There's a lot on the EN task list for reference types.

Those SCRs will be floated to the top.

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We want to spend next time going through the bugs to see what needs to be done.
~ We can do it if everyone looks at them.
~ We will try to get them all assigned.

Action Item - Everyone look at CCBs 300-315.

Fine to still push off the V2 discussion.

There will not be any votes next time, which will be September 24.

~ Ed will be on vacation. Will try to work on CCB-304 ahead of time and try to put comments in jira. October 8 he will need to have an alternate attend for him.

~ Steve should be back and have internet for next time.

Question: Open floor?
Answer: Just want to encourage everyone to put comments in jira. It will be very helpful.

Only other thing is that it will be interesting to see what Louise does with mission suggestions in the decadal paper.

Someone is looking forward to seeing the pirate's code.

Title: DDWG Notes 2020-10-08

October 8, 2020
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi and R. Simpson
Known Observers: M. Evans, P. Lawton, M. Le, M. McAuley and S. Slavney

DDWG Agenda
(Included in email sent Oct. 6, from T. Hare, DDWG agenda for Oct. 8, 2020)

0) Front-matter
•Last week most issues below were assigned names, if you are there please add comments to ticket.
•Welcome Minh (JPL, IMG Node)
•Quick - Geom update (Mitch)
•Quick - LF/CR PEN feedback? (also posted to OpenPlanetary Slack and forum)
•Next build freeze is January 21, 2021
(Discussed)

I.Maybe ready for a vote (requested TAs)

1) CCB-304 Clean up unused Vector classes in IM before 2.0.0.0.

2) CCB-315 PDS3 is an allowed parsing standard for Bundle documentation file.
(Voted to pass 304 and 313, not 315)

II.Status and New SCRs.These all have new Jira tag "Queued for Next Build"
Goal: Assigned leads to comment and discuss these bugs. Check if you have an assignment below

1) CCB-299 - requested permission from Anne to withdraw

2) CCB-300 Apparently deprecated units of measure are not actually deprecated. (Ron)

3) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Trent)
4) CCB-302 No reference type values defined in DD Attribute or DD Class contexts. (Mike D.)

5) CCB-303 The definition for skos relation name is not sufficient. (Lyle, help from Dick?)

6) CCB-304 Clean up unused Vector classes in IM before 2.0.0.0.

7) CCB-305 Missing validation constraint on specified unit id. (Ron, schematron rule, can we see rule before voting?)

8) CCB-306 identifier reference in DD Association is not constrained. (Steve, Trent, others)

9) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined. (Steve, Trent, others)

closed - CCB-308

withdrawn - CCB-309

10) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0. (Steve, Trent, others)

11) not a bug CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0. (Ron, Steve, Trent)

12) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Mitch, help from Ed?)

13) CCB-313 Definition of external source product identifier refers to non-existent documentation. (crickets and then Steve)

14) CCB-314 Bundle type of "Supplemental" seems oddly defined. (probably not ready for tiger team, need comments.)
15) CCB-315 "PDS3"is an allowed parsing standard for Bundle documentation file. (Trent)

16) not a bug CCB-295 Product SPICE Kernel missing reference type values. (moving to parking lot)

17) not a bug CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection. (need to assign, EN?)
Discussed)

III. Discussions
None

Next meeting, Oct. 22nd

#DDWG Telecon

Ed will only be here a short time today.

Most issues were assigned last time. Will try to discuss them.

Welcome to Minh from JPL. Trent is training her. Will be doing dictionary work.

Geometry Update - the team met and will continue having discussions. Will let Trent know when they are ready to be included on the DDWG agenda to report progress.

CR/LF Feedback Update - There have been four emails so far. Mostly affirmative. One was asking for a head's up before changes are implemented.

The next DDWG freeze date is January 21.

A new jira tag has been added - "Queued for next build"

CCB-304 - Cleanup unused Vector classes in IM before 2.0.0.0
See https://pds-jira.jpl.nasa.gov/browse/CCB-304

Question: Are there any last comments before we vote?
Answer: There is a lien if we vote. Vector component is left out.
~ Basically a simplification of unused classes.

Question: Are we ready to vote?
Answer: Trent will edit the SCR to have the lien. **(Action Item)**
Another Question: Any dissent? Are we ready to vote?
Answer: (Silence)

**The Vote for CCB-304
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

Passed.

CCB-313 - Definition of external source product identifier refers to non-existent documentation
See https://pds-jira.jpl.nasa.gov/browse/CCB-313

This has a TA, is backwards compatible and fixes a simple typo.

Question: Any comments?
Answer: (Silence)

**The Vote for CCB-313
ATMOS - Yes
IMG - Yes
EN - Yes
GEO - Abstain
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Yes
SBN - Yes**

Passed.

CCB-315 - PDS3 is an allowed parsing standard for Bundle documentation file
See https://pds-jira.jpl.nasa.gov/browse/CCB-315

The overview is that this was added with CCB-215 (Allow "PDS3" as a parsing standard id for Stream Text, see https://pds-jira.jpl.nasa.gov/browse/CCB-215), from Susie. Wanted to be able to refer to PDS3 from a PDS4 label. Wanted to call something a PDS3 label. This is used in migrated labels from GEO. Anne didn't think it belonged in bundle. Agrees, but this is overkill.
~ The Requested Changes is overkill.
~ Seems too harsh. There was a suggestion to add a schematron rule, wonder if that makes it harder.
~ People are unsure.
~ A simple fix is preferred, but there is a mismatch of different types of things. A mix of concepts. Might be useful to break out for version 2. Surprised this has been unnoticed. Maybe it's not really an issue.
~ It's been unnoticed because Anne is finding extremely difficult loopholes. We probably shouldn't care too much.
~ We could fix it for version 2.
~ Not sure that's even necessary. Most migrations will be done by version 2.

We could vote no.
~ Or change Requested Changes to make a schematron rule.
~ That would work. We could restrict how stream text is used.

Question: If people try to use it will validation fail?
Answer: It should fail. PDS3 shouldn't show up in bundle Readmes.
~ It will show up in the IM - allowed values for parsing standards in bundle. PDS3 wouldn't be in the enumerated value list. That varies according to context.
~ If the solution is a schematron rule, we won't see it in the specification.
~ Someone is unsure how we restrict the list of valid values.
~ Would use schematron, but it won't show up in the IM.
~ This needs to go in the SR. We need to say the only place to have PDS3 is in file area supplemental.
~ Actually, maybe we would see it in the specification.

So, the Requested Changes would say add schematron rule to not allow PDS3 in product bundle.
~ No, it's not allowed anywhere except file area supplemental. Will work on the wording. It's only allowed in file area supplemental. **(Action Item - Dick)**

Someone isn't sure that is the only reasonable place. Maybe it should also be an option for document.
~ Stream text isn't used for document.
~ It still might be bad to say the only place you might find PDS3 labels is in file area supplemental. Could be in a document collection or other places.
~ Catalog files from PDS3 might be an example.

We are trying to solve a problem that really isn't a problem. The only people using this should be us - doing migrations.
~ We could address Anne's basic concern about bundle Readme and not set ourselves up for unintended consequences.
~ A schematron rule just for bundle. We will vote on it as such next time.

Question: Is that reasonable?
Answer: Yes.

Status and New SCRs

New Jira Tag "Queued for Next Build"

Ron and Jordan have been trying to make jira better. Trying to help us understand what is queued for builds or see what's happening in jira. They came up with a flag 'Queued for next build'. Next build is in January.

Question: What's happening to the previous priority categories? Are urgent things included in the next build?
Answer: They have been misused. We will bring back the old lists. We want to make progress, but we need help knowing what should be queued for the next build.
Another Question: What's the tag for things not queued for the next build?
Answer: Good Question.
~ Meaning things that would be worked on and included in a later build.
~ Yes, because now we can sort on things that are queued, but unsure how to sort on the others.
~ Seems like the only real tag for that is open. Still working on this.
~ Someone sees the use for this. All the open ones need to say something that can be searched on.
~ Open and not queued.
~ We just need a value.
~ Someone thinks queued for the next build is a waste of time. Anything else isn't queued.
~ Can't sort to search on the ones that aren't queued for the next build. Would like a way to get a list of what's not queued.

~ There's a query to use in jira.
~ There are advanced ways to search.

Action Item - Ron will send the query to Mitch.

We've been focused on new ones, ripping out bugs and low hanging fruit. People should bring up ones they want us to look at.
~ Someone would like to flag CCB-209 (Correct Definitions of Tagged-*-Object, see https://pds-jira.jpl.nasa.gov/browse/CCB-209) and CCB-288 (Change Internal Reference reference type to 'guided' text, see https://pds-jira.jpl.nasa.gov/browse/CCB-288)
~ Yes. Some are in the parking lot because people are working on other things. CCB-288 is one of those. We need EN for it when they have time.

Question: How do we find things that are in the parking lot?
Answer: Trent will bring the list back **(Action Item)**. Some are ancient, they go way back. Some are so stale they should be withdrawn. Part of this is that a lot of work is going into github for LDDs. That will pay off for this too. It will be easier to find bugs across dictionaries. We will start seeing a lot of dictionaries pushed into github. It's another resource for us.

Someone would like to look at the old priority categories one more time. Unsure why the urgency category can't be changed to normal, just because someone put an SCR in as urgent.
~ Yeah, when submitting it might seem urgent. We might need to look at priority.
~ Someone always marks them urgent so people will pay attention.
~ Trent will put this on the to-do list. **(Action Item)**

CCB-299 - Mismatch between context and label type lists for Investigation
See https://pds-jira.jpl.nasa.gov/browse/CCB-299

We haven't heard from Anne if this one can be withdrawn. There's no answer yet.

CCB-300 - Apparently deprecated units of measure are not actually deprecated
See https://pds-jira.jpl.nasa.gov/browse/CCB-300

Updates were made. Everyone needs to review the updated schematron rule.
Action Item - Everyone

CCB-301 - The attribute name in the DD Attribute and DD Class classes is not properly constrained
See https://pds-jira.jpl.nasa.gov/browse/CCB-301

No updates yet.

CCB-302 - No reference type values defined in DD Attribute or DD Class contexts
See https://pds-jira.jpl.nasa.gov/browse/CCB-302

No updates yet.

CCB-303 - The definition for skos relation name is not sufficient
See https://pds-jira.jpl.nasa.gov/browse/CCB-303

A comment has been added in jira.
~ The definitions come from the skos system.
~ Yes, from W3C standard.
~ Wouldn't want to reword another organization's definitions.

~ We can clarify.
~ Like say "In other words.."
~ For non-experts.

Will see what can be done. Maybe examples.
~ Two of the definitions are exactly the same.
~ Maybe the skos page will have some changes. Will check on that. **(Action Item- Steve)**

Question: If the definitions are updated would that be okay?
Answer: The first part of the definition is the standard. Could add the PDS part and examples.
~ Someone agrees. PDS needs to make things clear to our community - if it's practical to do so.

CCB-305 - Missing validation constraint on specified unit id
See https://pds-jira.jpl.nasa.gov/browse/CCB-305

There was a comment added in jira.
~ This will be easy.
~ Someone else thought it would be hard.

Assignee thought they put changes in yesterday... oops - the changes are in CCB-300. Need to add a note to reference the schema changes in CCB-300.
~ Something that says see the schematron in CCB-300.
(Action Item - Ron)

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Several SCRs will be worked on by a single tiger team. They haven't started yet. SCRs include CCB-306 (identifier reference in DD Association is not constrained), CCB-307 (DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined), CCB-310 (Remove Unusable Elements in DD Rule by IM 2.0.0.0) and CCB-311(Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0).

CCB-312 - ldd version id does not appear to be constrained the way LDDTool expects
See https://pds-jira.jpl.nasa.gov/browse/CCB-312

Mitch said he would help with this one, but Steve needs to be included too. It's about LDDTool and what it expects.
~ Steve remembers there was an issue in the last test run. It might have been fixed. The LDDTool configuration file and ingest LDD had problems with the wrong version ID coming up in the schema. That's been resolved.

Question: The SCR lists lots of odd versions. What happens if I set the version to puppy dogs?
Answer: We are trying to limit it to three digits.
~ Should say that's wrong, but we need some checking.
~ That's not an LDDTool problem. We are looking at this wrong. This is a constraining issue.
~ So we need to validate for version ID not in LDDTool.
~ A question of where this gets captured.
~ If it's not validated than LDDTool shouldn't run on it and give errors. Needs to be changed in the IM schema rules.

Action Item - Steve will figure it out.

CCB-314 - Bundle type of "Supplemental" seems oddly defined
See https://pds-jira.jpl.nasa.gov/browse/CCB-314

This got us in a long discussion last time.

Question: Any thoughts on this?
Answer: Someone added a comment in jira. We need to figure out what we want. Need to define.
Another Question: Do you see a way forward?
Answer: Yes. In the comment, said that we could remove supplemental as an option or we could generate supplemental ephemeral bundles that are not for archive. Maybe archive them once a year. Need to distinguish between archive bundles and ephemeral. Not sure short term ephemeral should have LIDS. Not sure. But now we have two bundle types - one without a data collection. We could just change the definitions to distinguish long term preservation. Could fix them with definitions.

Question: Someone didn't know there were ephemeral LIDS...?
Answer: There aren't - just wouldn't preserve them all forever. Just the final version. Supplemental is temporary.
~ Someone agrees the definition isn't right. GEO has bundles that only include documents.
~ We need a way to say that some bundles won't be preserved long term.
~ Superseded.
~ Prefers temporary or intermediary.
~ HQ gave us permission to supersede PDS3 when better versions become available.
~ Would need an intended to be superseded category. Semantics. We need to make sure people know it's temporary.
~ Nomenclature. We need better definitions.
~ All missions could be seen as temporary because they often re-calibrate their data at the end. Wouldn't want to call everything temporary.
~ Of course not, but things like LROC come to mind. Many versions. Superseded and gets replaced.

We need to think about this more.

CCB-295 - Product SPICE Kernel missing reference type values
See https://pds-jira.jpl.nasa.gov/browse/CCB-295

NAIF will never need this. Plan is to move this to the parking lot.

CCB-298 - Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection
See https://pds-jira.jpl.nasa.gov/browse/CCB-298

This still needs to be assigned for someone to work on. Maybe EN. Seems related to CCB-288.
~ Someone agrees.

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Hopefully, we will have a vote next time.

We don't want to lose anything.

Next meeting October 22.

Title: DDWG Notes 2020-10-22
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin and R. Simpson Known Observers: M. Le

DDWG Agenda
(Included in email sent Oct. 20, from T. Hare, DDWG agenda for Oct 22, 2020)

0) Front-matter
- CCB-304 and CCB-313 passed DDWG
- Next build freeze is January 21, 2021

I.Maybe ready for a vote (requested TA)
1) CCB-315 "PDS3"is an allowed parsing standard for Bundle documentation file.
(Voted to pass)

II.Status and New SCRs.
Goal: Assigned leads to comment and discuss these bugs. Check if you have an assignment below

0) CCB-299 - Anne agree to withdraw

1) new bug CCB-318 Fix error in schematron formation rule for lidvid reference

2) CCB-300 Apparently deprecated units of measure are not actually deprecated. (Ron)

3) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Trent)

4) CCB-302 No reference type values defined in DD Attribute or DD Class contexts. (Mike D.)

5) CCB-303 The definition for skos relation name is not sufficient. (Lyle, help from Dick?)

6) CCB-305 Missing validation constraint on specified unit id. (Ron, schematron rule, can we see rule before voting?)

7) CCB-306 identifier reference in DD Association is not constrained. (Steve, Trent, others)

8) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined. (Steve, Trent, others)

9) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0. (Steve, Trent, others)

10) not a bug CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0. (Ron, Steve, Trent)

11) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Mitch, help from Ed?)

12) CCB-314 Bundle type of "Supplemental" seems oddly defined. (probably not ready for tiger team, need comments.)

13) not a bug CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection. (need to assign, EN?)

14) not a bug CCB-288 Change Internal Reference reference type to 'guided' text

15) not a bug CCB-209 Correct Definitions of Tagged-*-Object
(Discussed)

III. Discussions
parking lot
(Not Discussed)

Next meeting, Nov. 5th

DDWG

The SCRs we voted on went to the CCB.

Geometry LDD tiger team update - The team met last week. They are exploring ways to divide the dictionary into separate files - include files that could be merged back together. There would be different sections for attributes, orbital, lander, etc, with stewards for each section who have expertise for that section. Maybe one overall steward when merged back together. Not sure if changes will be needed for LDDTool.
~ Can probably use x-include to merge back together. LDDTool might need updates.
~ The Geometry namespace stays the same this way.
~ Only one schema out the back. Sounds like a win.

I.Maybe ready for a vote

CCB-315 - PDS3 is an allowed parsing standard for Bundle documentation file See https://pds-jira.jpl.nasa.gov/browse/CCB-315

This has a TA. It has been frustrating people.
~ Someone put a suggestion in jira - not sure it's a hard schematron rule. Could vote.
~ The conflict last time was about how to find schematron rules or know to use them without validation. Think we have to validate.
~ Schematron is often hidden. Have to run the validator.
~ There are lots of example with variations.
~ Some are documented in the IM specification.

Question: More to discuss? Do we agree to vote?
Answer: (Silence)

**The Vote -
ATMOS - No** ("This is a solution in search of a problem.") **CIS - No EN - Yes GEO - Yes IPDA - yes NAIF - Not Here PPI - Yes Rings - Yes RS - Yes SBN - Yes**

Passed.

Someone thinks they heard something about documenting in the IM specification. Think we should pull them out. Schematron is self documenting.
~ Someone else was going to try to figure out why some are documented in the IM. Has no position on it.

II.Status and New SCRs

CCB-299 - Mismatch between context and label type lists for Investigation See https://pds-jira.jpl.nasa.gov/browse/CCB-299

It was agreed to withdraw this.

CCB-318 - Fix error in schematron formation rule for lidvid reference See https://pds-jira.jpl.nasa.gov/browse/CCB-318

This is a new one. Straight forward.

Question: Has anyone looked this over? Looks like a schematron rule. Has Recommended Changes.
Answer: NSSDCA found this on their end. Got help with the schematron rule. Found this with the SIP.
~ The change to two rules is subtle.
~ Yes. That's why experts were consulted. Will test when it's in the testing environment.
~ Someone disagrees. There's nothing simple with LIDVIDs.
~ Someone agrees about LIDVIDs, but doesn't see much difference.
~ There's a plus at the end.
~ Fine if that fixes it.

Question: Two plus signs are being removed. What do they do?
Answer: They say one or more.
~ Good question.
Another Question: If the version ID is 12.0, do I need a plus in the first one?
Answer: Just the version is 12 point zero. Doesn't work because the minimum is three.
~ The stuff after the two colons without plus looks like single digit - single digit.
~ Need double digit - double digit.
~ It will be tested again.

Jordan is working on LIDVID builds. There are unit tests now for the master IM, LDDs. Not many there. A good thing for us to work on.

Question: Need to test this rule before voting. Can we vote next time?
Answer: **Action Items - Ron** will look at it and report back so **Steve** can do the TA.
~ Think this is straight forward.

CCB-300 - Apparently deprecated units of measure are not actually deprecated See https://pds-jira.jpl.nasa.gov/browse/CCB-300

Ron is on the hook for this one.
~ Steve thought it was him.
~ The issue is that the list of units provided early on from Elizabeth almost immediately changed. Not ordinary standard values. Were never used. Would suggest just getting rid of them in the IM, rather than trying to get the schema to work.

Question: What's the issue with deprecating these?
Answer: Units are a special case. Big block.
~ To deprecate them have to write schematron rules. Could just remove them because they were never used.
Another Question: Is there a way to test that no one has used them?
Answer: PDS4 was supposed to have every product in a registry that could be tested, but that isn't available yet.
~ Someone had to do something like that recently on local files. A known requirement for the registry.
~ Should be part of the next registry, but leery of assuming something has never been used.
~ There's a list at the end of schema of everything that has been deprecated. Elizabeth had these to be changed a long time ago.

Will try to clarify this one, at least for documentation sake. Plus the Problem Statement and Proposed Solution should be changed to say remove instead of deprecate.

~ That would have been helpful before the team wrote schematron rules.
~ If the rules are available and written it is fine to deprecate.
~ Without a way to test if it's been used it is better to deprecate.

Someone is surprised to see units of wave number deprecated.
~ Units of wave number with cm**, now the value is one over cm. The style of the value.
~ Relieved, but they should be listed in the SCR.
~ Since the work has been done deprecating is better than just removing them.
~ Full circle. The IM does list them as deprecated in the standard value listings.

Question: Okay. Let's kill that one. With the schematron rules in place, any issues with putting this to a vote next time?
Answer: No problem voting next time if this is cleared up.

CCB-301 - The attribute name in the DD Attribute and DD Class classes is not properly constrained See https://pds-jira.jpl.nasa.gov/browse/CCB-301

No update.

CCB-302 - No reference type values defined in DD Attribute or DD Class contexts See https://pds-jira.jpl.nasa.gov/browse/CCB-302

No update. Will be a couple of weeks.

CCB-303 - The definition for skos relation name is not sufficient See https://pds-jira.jpl.nasa.gov/browse/CCB-303

Comments were added to jira. Should provide the information that is wanted. Not sure what the solution should be.
~ The comment put in definitions that were already there. Difficult jargon. Need plain English.
~ Someone agrees. Makes sense to people who work in that area. Could add an example section. People will need to understand exactly what it means.
~ Thought there were examples because of work with instruments.
Action Item - Lyle will add that for next time.

It's hard to know where all the information goes.

CCB-305 - Missing validation constraint on specified unit id See https://pds-jira.jpl.nasa.gov/browse/CCB-305

For this one the schematron rules are in jira under CCB-300.

Question: If we are voting on CCB-300, should we vote on this one too? Any concerns?
Answer: Someone is not sure.
~ The schematron is under CCB-300. It's fine to push this forward if people are comfortable with the rule.

Think this is asking in LDD if specified unit of measure. Think it's saying if some attribute has units give the minimum and maximum and have to say what the unit is.
~ It should set a default unit for numbers that appear elsewhere.
~ Schematron has been updated. Has note.
~ In the same enclosure for CCB-300. Has a rule that fixes this as well. In the zip file in CCB-300.
~ Okay. has more than just deprecated ones in there. Should look at that.
~ The change for CCB-318 is in there too. In CCB-300. Changed the pattern. Tested it.
Question: So that's the product multiple digital objects?
Answer: Yes.
~ **Action Item - Trent** will update CCB-318 to say the schema is in CCB-300.

Someone was assuming rules for CCB-300 would apply here.
~ If we are voting on CCB-300, we should vote for this (305) and CCB-318 too. We will need to let the CCB know where to look too.

CCB-306 - identifier reference in DD Association is not constrained and CCB-307 - DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined See https://pds-jira.jpl.nasa.gov/browse/CCB-306 and https://pds-jira.jpl.nasa.gov/browse/CCB-307

We are getting into the SCRs for EN here. Maybe there can be a powwow soon. There are several SCRs to look at.
~ Someone looked at these two. Initially in ingest LDD when defining a class or attribute. Had idea to use schema to specify unique ID and able to validate. Worked well until tried to reference from a local schema. Used to work, breaks now. To fix this, we're half way there, but to complete - it won't be backwards compatible. In CCB-307 we have a way to reference external. This should be a 2.0 fix. It's not a problem at this time. LDDTool will tell you if the references are valid.
~ We're allowed to make non-backward compatible changes now. Not sure why we don't fix it and make sure it works.
~ The fix will change how things are referenced in ingest LDD. It's a structural change. Not worth it at this time.
~ As someone who does a lot of LDD work, haven't found this to be an issue. Just running LDDTool will flag the error. Don't want to restructure all LDDs now.
~ Someone agrees with that. LDDTool does a good job of catching these.
~ Someone else is on the fence. Frustrating to have label that works in Oxygen and breaks in validation. Agrees that they don't want to push to version 2.0, but it makes sense.
~ When we changed to identifier reference that was very painful. Lots of errors in ingest files. Took lots of editing time.

Oxygen versus validator. Some test cases where we didn't write a schematron rule - too complicated. Those were shoved to validation. So yes, there is a mismatch between what Oxygen and validator catch.
~ Someone understands that.

Question: What if we kick this down the road - just flag it?
Answer: **Action Item - Steve** will add a comment so it can be flagged for version 2.0.
~ The comment should clarify the changes.
~ New development should be done with this in mind.

The list of version 2.0 changes is becoming an obstacle. It will push version 2.0 further out.
~ Some of us will be retired by then.
~ It will be a painful time when we have to support both.
~ We will have to support 1.X anyway. Missions have and will continue to archive in that.
~ Jordan is working on getting ingest and LDDs in control. Maybe will be able to fix in some sort of big batch job.
~ Can build across version 1 and 2. Git-hub will be very helpful here.

So, CCB-306 and 307 are going to the parking lot. Steve will put comments in jira on the impact to ingest. **(Action Item - Steve)**

CCB-310 - Remove Unusable Elements in DD Rule by IM 2.0.0.0 See https://pds-jira.jpl.nasa.gov/browse/CCB-310

This is related to CCBs 306 and 307. Steve will look at this and report back next time. This talks about terms we would use to reference classes and attributes outside local. Steve will make comments in jira. **(Action Item - Steve)**

CCB-311 - Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0 See https://pds-jira.jpl.nasa.gov/browse/CCB-311

This probably doesn't need to wait for version 2.0.
~ Someone agrees. Ron can probably help with this. Lots of types of rules, but only really using one or two. Can clean it up.

CCB-312 - ldd version id does not appear to be constrained the way LDDTool expects See https://pds-jira.jpl.nasa.gov/browse/CCB-312

Mitch is working on this, but can't lead. Needs Steve on this. No progress. Probably not until after the Geometry LDD is worked out.

CCB-314 - Bundle type of Supplemental seems oddly defined See https://pds-jira.jpl.nasa.gov/browse/CCB-314

This was discussed a lot last time. Supplemental bundle type definitely needs to be clarified.
~ Someone put comments into jira.
~ Someone else doesn't like the term ephemeral for supplemental.
~ We need better definitions and maybe types archive and temporary. Both definitions are flawed.

At Rings, for outer planets the geometric metadata gets updated several times a year. Not necessary for every version to go in the deep archive, but needs to have LIDs for those temporary products. Need to be able to say interim solution. Maybe could handle High Rise this way too - where the data is redelivered every few months.
~ IMG updates SPICE and pointing, but yeah, I don't know. We have a need for this too, but not sure it's an archive.
~ No, but needs to be registered to make associations, but it doesn't all go in the deep archive. Supplemental is the wrong name. Temporary or Interim would be better. And need better definitions.
~ Superseded. Every product in PDS can be updated.
~ We don't peer review every time, but people can download.
~ Missions don't review every small change. Not sure I agree with what Rings is doing. Maybe this needs to go to the MC.
~ This goes to the whole question of having to be able to replicate the results. Can't if the old files are gone.
~ Should archive a few times a year. Can have version 200.
~ We need more voices on this. Shutting this down. It's a good topic that needs to be reviewed.

There are two issues here. The values are oddly defined. Archived - some archive bundles don't have any data, but need to be archived.
~ Long term preservation and temporary would be better than supplemental for the other. Metadata will need LIDs, but not to be preserved long term. Need a way to identify the stuff that will ultimately be superseded.
~ Still, these two definitions need to be fixed.
~ People will try to suggest some.

CCB-298 - Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection, CCB-288 - Change Internal Reference reference type to 'guided' text and CCB-209 - Correct Definitions of Tagged-*-Object See https://pds-jira.jpl.nasa.gov/browse/CCB-298, https://pds-jira.jpl.nasa.gov/browse/CCB-288 and https://pds-jira.jpl.nasa.gov/browse/CCB-209

These last three are not bug fixes.

It is requested that Dick does a little refresher on CCB-209 on our next telecon.
~ Dick said he would and that it is pretty straightforward.

_____

Next meeting November 5, 2020.

Title: DDWG Notes 2020-11-05
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi and S. McLaughlin
Known Observers: M. Le and P. Lawton

DDWG Agenda
(Included in email sent Nov 3, from T. Hare, DDWG agenda for Nov 5, 2020)

0) Front-matter
- Next build freeze is January 21, 2021

I.Maybe ready for a vote (requested TA)

1) CCB-300 Apparently deprecated units of measure are not actually deprecated. **

2) CCB-305 Missing validation constraint on specified unit id. **

3) CCB-318 Fix error in schematron formation rule for lidvid reference. **
** ALL schema updates/examples for these 3 tickets are
under https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fprojects%2FCCB%2Fissues%2FCCB-300&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316891404%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=EGy54QIREgip8tvYs8N5LNdeDKuOAUrmCdHzyx6UR0c%3D&reserved=0
(Voted to pass 300 and 305)

II.Status and New SCRs.
Goal: Assigned leads to comment and discuss these bugs. Check if you have an assignment below

1) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Trent)

2) CCB-302 No reference type values defined in DD Attribute or DD Class contexts. (Mike D.)

3) CCB-303 The definition for skos relation name is not sufficient. (Lyle, help from Dick?)

4) CCB-306 identifier reference in DD Association is not constrained. (Steve, Trent, others)

5) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined. (Steve, Trent, others)

6) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0. (Steve, Trent, others)

7) not a bug CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0. (Ron, Steve, Trent)

8) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Mitch, help from Ed?)

9) CCB-314 Bundle type of "Supplemental" seems oddly defined. (probably not ready for tiger team, need comments.)

10) not a bug CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle

and Collection. (need to assign, EN?)

11) not a bug CCB-288 Change Internal Reference reference type to 'guided' text

12) not a bug CCB-209 Correct Definitions of Tagged-*-Object
(Discussed)

III. Discussions
parking lot
(Not Discussed)

DDWG

(Note taker did not have audio for the first few minutes. Came in during a discussion of possible topics for the tech session.)

The data format NetCDF, which is used by modelers, hasn't been considered for PDS, but is used in many other NASA archives. We should see if we can do something with it and product native and can use it.

Question: Is there a version of NetCDF that isn't compressed?
Answer: It's always variable length, I think.
~ Since its supports arrays, maybe some non-variable.
~ Someone would like to think so.

It has pretty good support in the mapping world.
~ Modeling and data storage. LASP people are fairly heavy users. Expects that the Ecosystem Review will tell us to archive this.
~ Someone can see that.
~ It will be controversial. Will need product native and be able to go back and forth.
~ May need for HDF as well.
~ Thought both from the same base - uni data.
~ This would be proactive. We should at least research it and be ready.

Question: Are there any other possible topics? We could maybe get EN to do a git-hub thing, otherwise, not sure.
Answer: NetCDF made me think of movie formats as product observational. Maybe we could look at that at the tech session. Think about what we would need to do to accept it.
~ We have movie as a document, but as a science product would be good. Audio too.
~ It will come up for Mars 2020.
~ Maybe we could have an hour discussion.

Question: Who is handling the LDD discussion? Assuming that we'll talk about ingest, regression testing and stewards activities.
Answer: Trent will touch base with David on that **(Action Item)**
~ We need to discuss mechanics. Need to discuss stewards activities and have people who can review. We need consistency between the stewards. Would like to see an early agenda for the meeting.
~ Working on it.

I.Maybe ready for a vote

CCB-300 - Apparently deprecated units of measure are not actually deprecated
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-300&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316891404%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV

2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=0%2FEylr3doPDkeLzvCtQya4GZBoJDuoUqeV1Z4o9ggf0%3D&reserved=0

All the schemas for the three SCRs to vote on today are here.

Question: Any qualms about this as a bug? It seems pretty straight forward. Are we ready to vote? Any thoughts? Issues?
Answer: There's a lien.
~ Not on this one.
~ Yes. There's a lien.
~ The lien is that the Requested Changes needs to be filled out and it is.
~ The statement says the changes. Tried to put enough for the vote.

Question: Any last concerns?
Answer: (Silence)

**The Vote for CCB-300
ATMOS - Yes
CIS - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here
PPI - Yes
Rings - Yes
RS - Not Here
SBN - Yes**

Passed.

CCB-305 - Missing validation constraint on specified unit id
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-305&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=ikA15TiR8CnPI5uf2Ey9u%2BouvJWoD6behQcjuOZyeKw%3D&reserved=0

This also had a lien and was updated to have the Requested Changes. Schema changes.

Question: Any Questions? Concerns?
Answer: (Silence)

**The Vote for CCB-305
ATMOS - Yes
CIS - Yes
EN - Yes
GEO - Yes
IPDA - Yes
PPI- Yes
Rings - Yes
SBN - Yes**

CCB-318 - Fix error in schema formation rule for lidvid reference

See [https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-318&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=4LhDt2R9N4xRdCnD0ZqRS2KDioXtP25TSWmf7WJpMy0%3D&reserved=0](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-318)

There might be an issue. Not sure we have corrected the schema rule to allow greater than nine.
~ The rule requires VID, which was the goal, but problems were discovered in testing. Propose we don't vote today and have the experts look.
~ We can put a lien on it to have it fixed before it really passes.

Question: Do we have strong feelings about this?
Answer: It would be worth testing first.
Another Question: What's the issue?
Answer: Invalid. The rule only accepts integer less than ten. Rule needs checking again.
~ It's tricky to get all the strings correct.

We will hold off on this.

Question: Other concerns?
Answer: (Silence)

II.Status and New SCRs

CCB-319 - Add 'ns' – The abbreviated unit for 'Units Time' (1/10^9 s)
See [https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-319&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=A0MomgQ90WcMjes9R20sCkm9esDVXRHybPbM4bQeZTM%3D&reserved=0](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-319)

This is a new one.
~ Similar to the hertz units of frequency issue. Missing valid value for units of time. Need nanoseconds for RIMAX data for Mars 2020. Tried to use the new enumerated value fast track. The value has been reviewed. Would like people to look it over. Hopefully we can vote next time.
~ A streamlined enumerated value ticket.
~ We need to have everyone review it and put comments in jira, discuss it next time and then have a TA and vote after that.
~ Need it by the end of January for the next build.

Action Item - Mitch will send step by step procedure to Debra to capture in the minutes.
(The following is what Mitch sent)

Steps to prepare an Enumerated Value SCR in JIRA

1.Hit "Create"
2.Set Issue type to "Enumerated Value(s)"
3.Fill in the "Summary*" block (Title of the SCR)
4.Click on the tab for "Enumerated Values"
5.Fill in each block – designate at least one reviewer (polite to ask them first)
6.Hit "Create" at the bottom of the page.

We will discuss this next time.

CCB-301 - The attribute name in the DD Attribute and DD Class classes is not properly constrained
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-301&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=6cmLihMhw7rv2q0J8JvGZEpBzuf1vRi0uI49wEIaY%2BM%3D&reserved=0

No progress to report.

CCB-302 - No reference type values defined in DD Attribute or DD Class contexts
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-302&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=5Z8kZQksmJfu%2Btjcsgj2lDQH2ACYnVL7BexfjSyT3QA%3D&reserved=0

Someone looked into this - went through existing LDDs and didn't fine it used. Unclear it's needed.

Question: Could we knock it back to Anne as reporter if we don't have enough information?
Answer: Can ask her. Think her concern is the integrity of the model.
~ This appears to be a heavier job than it first appeared.
~ It required more than someone thought. Not much to research. Will check with Anne about how impactful this is.
(Action Item - Mike)

Maybe it just needs more description.
~ It was put there originally to reference document that provides source material for the definition. The data dictionary was patterned after ISO 11179. The idea was to link source materials.
~ Someone is reluctant to remove it. We could propose some reference types, like dictionary to document or dictionary to image.
~ Someone would agree. Seed it.

Question: What document is that?
Answer: Steve has it on his computer. Will email it out. **(Action Item - Steve)**
Another Question: Are we good? As a sidebar - some definitions from Bob Deen are very terse because we could point to the documents. We could point to them with LIDs.
Answer and Another Question: Might be in early SIS. Can they be external?
Answer: SISs don't get LIDs.
~ They do if they are in a document collection.
~ External reference - terminological entry.

Question: Examples?
Answer: Yes. Will run them by Anne. **(Action Item - Mike)**
~ Someone thinks reporter can add these values for jira. It would clean up the SCR and give us hooks to begin with.
Should include external reference with terminological entry. DD class has external reference. Requires a type.
~ Someone is not seeing external reference in terminological entry.
~ Not seeing reference type for attribute and class.
~ DD class full.
~ Both DD class full and DD attribute full.
~ So, external reference associated with terminological entry, but external reference doesn't have reference type associated with it.
~ Right.

Question: Should we fix that?

Answer: Yes.

~ Think reference type is to build search. External reference won't be in our search. Probably adequate to describe it with a description.

~ Cogent argument, but not sure it hurts to have a reference type.

~ Spoiler - working on CCB-288 (Change Internal Reference reference type to 'guided' text, see https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-288&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=6IGWVuZH6wlTu%2Fbs7JeCNF%2BHIq2xd%2BgFuANme2OHT6c%3D&reserved=0). Looking from search perspective. Could expand to external reference.

~ Idea should be considered. For this SCR just need to define some reference types.

~ For class attributes and permissible values.

~ Someone is glad to hear someone is working on CCB-288. It's a tricky one.

~ Will try to have something for the next meeting.

CCB-303 - The definition for skos relation name is not sufficient

See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-303&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=uwZ96H9WKXAQzLWYfSTiVhZDkAyNllWq92XxdcqMxB8%3D&reserved=0

No updates to report.

CCB-306 - identifier reference in DD Association is not constrained, CCB-307 - DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined, and CCB-310 - Remove Unusable Elements in DD Rule by IM 2.0.0.0

See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-306&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316901362%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=TniYCao6CJ%2F7H5MPLS6SwO82ZEpSdIHTD5S3CjqW%2F9Q%3D&reserved=0,https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-307&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316911317%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=7W6IZGujg2wkLKA2eK65CwJpuL3uWKapP3v1USLdtSk%3D&reserved=0and https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-310&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316911317%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=5xyxYGxN2X3sWwPZquplHkXV5FmawALzQ4lbu%2FWA0Eo%3D&reserved=0

These were briefly discussed last time. Proposal to wait for version 2.0 to fix it right. Put comments in jira. That's where we stand.

Question: How much do these need to be grouped together?

Answer: CCBs 306 and 307 are tightly coupled. Need to decide if we will continue with the current short cut or more formal class to specify namespace pair. That was Anne's question - why these are here. She wanted to move from the short cut. Will be a major impact.

~ But beneficial.

~ Yes, long term. Current approach is a kludge. The point is to let schema validate the reference.

Question: Is CCB-310 related? Might be. It's also postponed for version 2.0.
Answer: It is related where external attributes and classes first appeared. Why they are there is the question.
~ We don't want to lose this, so maybe we should move it to the version 2 parking lot. Scary.
~ Yes. And yes it's scary.
~ We won't lose them. Maybe we can take quick votes for some of the old ones. It's unclear how to go through the entire backlog.

CCB-311 - Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-311&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316911317%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=BGdiojz19cpciMlw9YQT8ExNtqYA1BaU2ggvydLEpG0%3D&reserved=0

This seems simple. Believes what is currently listed is all search statements allowed. We only use two. Not sure why this is an issue.
~ Doesn't matter if we don't use them. Trent will email Anne on this. **(Action Item - Trent)**

The ones we don't use aren't ISO standards, so maybe we don't want them. Two types that are part of the ISO standard and two that aren't.
~ We don't always follow ISO standards for all types. We created PDS4 types. They are derived from ISO, but not strict. Can't remember the overlap or which is which.
~ Someone is not sure. Has no strong opinion if they are not ISO matters.
~ Someone else is not sure we care that they are there. It will be posed to Anne.
~ Doesn't seem people have a strong opinion on that.

CCB-312 - ldd version id does not appear to be constrained the way LDDTool expects
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-312&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316911317%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=NtNhycZR%2Bi%2B%2BumKJo6f%2BrKXFZkiwfJEIPLZ99Xf7T8M%3D&reserved=0

Question: Is this going to be taken care of with CCB-318? This is a version ID, so really just needs a schema rule.
Answer: Not everyone has looked at this.
Another Question: Is the issue that it's not constrained?
Answer: Yes.
~ We need a schematron expert to write a rule.

Question: Ron?
Answer: (Silence)

CCB-209 - Correct Definitions of Tagged-*-Object
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-209&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316911317%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=1TBbftjfmO9k%2Bm3F98xiFCO6J751Od86bGupUEkYKno%3D&reserved=0

Dick uploaded stuff for this to jira. He's not here today. We will discuss this next time. It's one of the ones we've had awhile.

CCB-314 - Bundle type of "Supplemental" seems oddly defined
See https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpds-jira.jpl.nasa.gov%2Fbrowse%2FCCB-314&data=04%7C01%7Cthare%40usgs.gov%7Cc9404ec5ed1a478ef4ee08d8873a6e6b%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637408032316911317%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=aacyjZ68VQaN6p0Yy6ERR5Uk0VcZMzH%2F6u8c0ApMAPw%3D&reserved=0

Comments have been added in jira, including a proposed new enumerated value and updated definitions. Unsure why we need supplemental if no one used it.
~ No problem deprecating it. Likes suggestion of interim. The difference is that archive goes in the deep archive and interim would provide LIDs but not go in the deep archive. Think we need two types of bundles.
~ Someone took it to mean, in PDS4, development system. Might have LIDs to have system run, but not permanent. Not for deep archive.
~ Yes.

Question: Can anyone remember what we used supplemental for in PDS3?
Answer: (Silence)
~ Someone feels this may need to go higher if we approve interim.
~ It would go to the CCB and they would push it up if they felt it was necessary. It's adding a new value.

Someone thinks the idea of ephemeral should be presented to the MC. Requested that Mitch present it at the F2F. To make sure no flags are raised. Trent will give Mitch a slide or two during DDWG report. **(Action Item - Mitch)**

_____

November 19 is the next date for us, but that's the MC. Then there's Thanksgiving. Our next meeting will be December 3. Should still be okay to meet the January schedule.

Title: DDWG Notes 2020-12-03
Notes by Debra Kazden

Known Attendees: M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin and R. Simpson
Known Observers: R. Alanis, M. Bentley (alternate for T. Lim) and J. Padams

DDWG Agenda
(Updated version in email sent Dec 3, from T. Hare, DDWG agenda for Dec 3, 2020)

0) Front-matter
•Next build freeze is January 21, 2021
•reminder data dictionary update deadline this Friday(!)
•last meeting passed CCB-300 and CCB-305
•"quick" discussion on LCCB
•presentation from Dick S. (perhaps save until last 10-15 minutes)
(Discussed)

I.Ready for a vote (requested TA)

1) CCB-318 Fix error in schematron formation rule for lidvid reference. **
**schema update for this ticket is under https://pds-jira.jpl.nasa.gov/projects/CCB/issues/CCB-300
(Voted to pass with liens)

II.Status and New SCRs.
new:
1) CCB-319: https://pds-jira.jpl.nasa.gov/projects/CCB/issues/CCB-319 (ready for vote next)

2) CCB-320: https://pds-jira.jpl.nasa.gov/projects/CCB/issues/CCB-320 (need more info)
(Discussed)

Goal: These feel somewhat stalled - can we try to prioritize.

1) CCB-301 The attribute name in the DD Attribute and DD Class classes are not properly constrained. (Trent)

2) CCB-302 No reference type values defined in DD Attribute or DD Class contexts. (Mike D.)

3) CCB-303 The definition for skos relation name is not sufficient. (Lyle)

4) CCB-306 identifier reference in DD Association is not constrained. (Steve, Trent, others)

5) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined. (Steve, Trent, others)

6) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0. (Steve, Trent, others)

7) not a bug CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0. (Ron, Steve, Trent)

8) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Steve)

9) CCB-314 Bundle type of "Supplemental" seems oddly defined. (Mitch, move this forward, still need comments.)

10) not a bug CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection. (need to assign, EN?)

11) not a bug CCB-288 Change Internal Reference reference type to 'guided' text

12) not a bug CCB-209 Correct Definitions of Tagged-*-Object
(Brief Discussion)

III. Discussions
parking lot

Next meeting, Dec. 17th (?)
(Yes)

DDWG Telecon

The agenda sent in email December 1 has been updated. See Trent's screen during the meeting.

Our next meeting will be December 17.

There are two new ones to go through today - enumerated values. Jira's been down. EN got it back up yesterday. We might vote on CCB-318 today.

The next freeze data is January 21. The LDD update deadline is Friday, but there may be some leniency on that.

LCCB Discussion

It was noted in emails that no one has time for another thing. We will discuss this now for five minutes. Jordan is here for this discussion.
~ Jordan understands the concerns about people being overworked, but we have to do something to have some sort of understanding of what's going on with LDDs. We need someone to look at what's being done, look at the LDDs. EN is willing to do it - to manage it. Ron volunteered to manage and be the point of contact. He does it anyway. We can take this solution to the MC.

Question: Has anyone else volunteered? How does Ron feel about this?
Answer from Ron: Fine. All good. Done.
~ Someone would like to consider the model that was used for the instrument type LDD where there are a few reviewers. Not sure Ron has all the required expertise necessary. Might be better to have a small group with knowledge of the subject. Ron could make sure the rules are followed, but people who understand the dictionaries should be involved. Node LDDs could be handled by the nodes.
~ Someone agrees with that. We had been talking about three teams, but we could get rid of the CCB and just have an LDD czar. We need someone to watch for similar concepts, etc, so there's no overlap across dictionaries. We need someone to watch for high level concerns and modeling.
~ Someone agrees there should be stewards teams. Also agrees with a high level view. Some knowledgeable person should consider that. Was able to pull 17 ingest files and found seven that included wavelength. Might need a tool or software to make sure what we are trying to define isn't somewhere already.
~ Yes. A tool is being worked on going forward, but still think we want an eyeball on it and to help with git-hub.

Question: To evaluate new LDDs, do we form a new work group with all the LDD stewards or should it be the DDWG?
Answer: The new LDD CCB could fall to the DDWG, but it's all the other things that worry me.
~ It depends on what needs to be done. If a small project needs a mission LDD, worried about what the process would be for that and if the CCB has to be involved.
~ It would be a new DDWG hat. The DDWG would be the LCCB.

~ Someone would rather see a small panel of stewards - might be a union of members, but don't want to dilute the DDWG. For specific proposals would have people in the stewards group look at new LDDs.
~ Will propose that to the MC - that there's an LDD super stewards group with Ron and others to be responsible for high level knowledge and the stewards group will evaluate proposals for new discipline dictionaries.
~ Unsure about Ron, but we might need his programming skills.

Question: How will this work?
Answer: Git-hub reviews. Will create git-hub teams.
Another Question: If I update to cart will Ron be assigned as a reviewer?
Answer: He would automatically be assigned as reviewer. Could add anyone else you want too. People should try it out.

Richard was reviewing a bundle that included an un-reviewed LDD. It would be better to have them reviewed before getting them in a bundle.
~ Yeah.

Cutting off this discussion now.

I.Ready for a vote

CCB-318 - Fix error in schema formation rule for lidvid reference
See https://pds-jira.jpl.nasa.gov/browse/CCB-318

Question: Any last comments before we vote?
Answer: Someone added a comment in jira - says that the Proposed Solution and Requested Changes don't make any sense. There are issues with to and from.
~ Thank you.
~ At one point the text had the proper incorrect pattern - it was confirmed the from text is correct. We did test this. Think something got mucked up. Ron will have to check on the to pattern.
~ This is a bug fix with a side design issue. Don't think the SCR was very useful.
~ Someone is very confident the to pattern is correct. Could remove the from.
~ I think that's a lien, but this is still a bug fix.
~ Someone knew this was different from the last time they reviewed it.
~ Yes, the patterns have changed.
~ Very confident about the to pattern. Think the error is a cut/paste error with the from pattern. Proposes the solution is to get rid of the front pattern.

Okay. We will move forward with a lien. Been enough time testing this.
~ The lien is to remove from in the Proposed Solution. Still need to fix the Requested Changes.
~ From in the Requested Changes should be to.
~ No changes to this in the Requested Changes.
~ It has the correct pattern, but two mistakes that can be fixed.
~ It's okay to vote with liens.

Question: Last comments?
Answer: (Silence)

**The Vote for 318 -
ATMOS - Yes
CIS - Yes
EN - Yes
GEO - Yes
IPDA - Yes
NAIF - Not Here

PPI - Yes
RMS - Yes
RS - Yes
SBN - Yes**

Passed with liens.
~ Comment added at the bottom in jira.

New SCRs

CCB-319 - Add 'ns' – The abbreviated unit for 'Units Time' (1/10^9 s).
See https://pds-jira.jpl.nasa.gov/browse/CCB-319

This was introduced last time. It's to add nanoseconds to units time. The team was supposed to look and bring up issues today, then we would vote next meeting.
~ Yes, that is the correct procedure.
~ Nanoseconds is a valid SI unit for time. Needed for RIMAX instrument on Mars 2020.

Question: Any comments?
Answer: (Silence)

CCB-320 - Add 'W/m**2/sr/nm/(DN/sec)' under Units of Misc
See https://pds-jira.jpl.nasa.gov/browse/CCB-320

This is not as straight forward. Not an SI unit. Also for Mars 2020. Spectral responsivity. In git-hub request, hopefully updated, not sure where this goes besides new units.
~ Someone is not sure what responsivity means. Seems like it has to do with time constant, so maybe a time unit.
~ No. It's the instrument's response. Will be used for calibrating DNs exposure - like a gain.

Someone needs to read jira.
~ Info in git-hub. Bob is helping with this.
~ Don't think we should be inventing new units.
~ This is spectral radiance - power of radiance at a specific frequency. Basically an instrument response of spectral radiance. Could put it under units of miscellaneous permitted values.
~ Not sure this could be captured in a more specific unit.

Question: Is anyone else going to use this? Could it go in the Mars 2020 LDD?
Answer: It's units, so it has to be in the IM.
~ Someone is not sure. All instruments will have some responsivity. Maybe a new class of units.
~ Units of DN per time, but then when one is not based on time... We need to think about this.
~ Fine. Will ask Bob for more clarification. Shocked this is the first time running across this.

This was probably used in PDS3.
~ No units with DN per second in the IM.
~ Responsivity is a concept that probably a lot of instruments would use.
~ Trent will get more information from Bob. This is a must have for Mars 2020 and we will probably need it for migration too.

There's a small typo to fix - units of misc.

Action Item - Trent will get more info from Bob and fix the typo in the SCR.

Status

We will skip this unless there are updates people want to report.

Question: Any updates for any?
Answer: Yes.

CCB-302 - No reference type values defined in DD Attribute or DD Class contexts
See https://pds-jira.jpl.nasa.gov/browse/CCB-302

The Requested Changes have been filled out. Not sure of the next step - used the enumerated values tab.
~ Can push it forward now.
~ Still working on a larger stab at reference type in general. Larger project.

CCB-314 - Bundle type of "Supplemental" seems oddly defined
See https://pds-jira.jpl.nasa.gov/browse/CCB-314

The presentation to the MC didn't go off the rails.
~ Someone was hoping they would discuss it in executive session, but they didn't. Seems safe to move forward.
~ The only response seemed to be from Jordan. Seems okay to push forward and just keep him in the loop.

Someone did discuss this with Jordan. He is okay with that. Explained that we need the capability to register products that are not for the long term archive.

Back to CCB-302 - Some of the work is in terms of semantic search. The current set of types are working very well. Need to make sure everyone is aware. Working reasonably well, but both sides should discuss.
~ Has met with Jordan and Tomas to make sure anything done supports search. Working on things like sub-types within specific references necessary for the context browser. Recognizes that things need to be programmatic.
~ Glad all sides are talking.
~ Surprised the proposal doesn't include proposed reference types.
~ For CCB-302, one solution was dictionary to document.
~ People need to look at CCB-302. **(Action Item - Everyone)**

Question: Is there any more to discuss? If not, would like to spend the last ten minutes on a presentation from Dick on CCB-209.
Answer: (Silence)

CCB-209 - Correct Definitions of Tagged-*-Object
See https://pds-jira.jpl.nasa.gov/browse/CCB-209

Dick made slides for the presentation.

CCB-209 simplified.
~ We have tagged digital and non-digital objects. The issue is that in the IM specification there are no associated objects. Seems like a real problem. We should have something to say there are associated objects. The Proposed Solution is to add the associated data objects - there should be associated objects for both.

Question: Any comments?
Answer: Absolutely right. Literally need to see this in the model. Need to make sure every class where there are digital or non-digital objects that there's a data object whether physical or conceptual. We spent more time dealing with the metadata, but we do need to go back and make literal the theoretical principals. Getting started.
~ This came up when we were discussing compound structures. Don't remember the details.

Dick will be working less hours now. Will be focused on restorations. Less time for the DDWG.

Someone would like to hear the impact. Not sure they understand.
~ There is agreement on what needs to be done. The impact on operations is nil. We just need to be consistent with the theory we started with.

Question: How should the DDWG manage this?
Answer: Steve can manage it. Can be asked about it, but there are higher priorities.
~ Someone isn't convinced it doesn't impact operations because of compound structures.
~ If there's an issue it should be brought forward.

Question: Have compound structures been removed?
Answer: No SCRs about it, just don't think they work.
~ As originally intended they would have covered everything, but constraints in the file area make it limited to digital objects.
~ But digital objects have to be in a single file.
~ That's when it gets interesting. DDWG will define some rules and we'll go with them.

Discussions

Our next meeting will be December 17.

Question: Is it okay to vote on CCB-319 next time?
Answer: It needs a TA. Need it in the next build.

We will need more info for CCB-320.
~ Someone recommends that we don't use the term spectral responsivity and just have a string of units. Drop the name.
~ Bob was having a hard time with names.
~ Otherwise we need to define a new class.
~ Will triage from PDS3.

Question: Last call for comments...
Answer: (Silence)

title: DDWG Notes 2020-12-17
Notes by Debra Kazden

Known Attendees: M. Costa, M. Drum, M. Gordon, E. Guinness, T. Hare, L. Huber, S. Hughes, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin and R. Simpson Known Observers: Ben (?), M. Le, B. Semenov and S. Slavney

DDWG Agenda
(Included in email sent Dec 15, from T. Hare, DDWG agenda for Dec 17, 2020)

0 Front-matter
•Next build freeze is January 21, 2021 •last meeting passed CCB-318 (liens provided) •quick LCCB review •lots of discussion topics below.

I. Ready for a vote (requested TA)
1) CCB-319 Add 'ns' – The abbreviated unit for 'Units Time' (1/10^9 s).
(No TA - will vote next time)

II. Status and New SCRs.
discussion (new):

1) CCB-320 Add 'W/m**2/sr/nm/(DN/sec)'under Units of Misc

2) new CCB-321 Add MPEG-4 as an encoding standard id for Product Native

3) new CCB-322 add "ODL3" to parsing standard id

4) CCB-264 Make the Line Feed (LF) character an allowed record delimiter
   from Dick, "Included in that discussion should be the scope of the change. The current wording in the SCR will allow LF delimiters in some cases, but not necessarily all; do we know where that boundary is? The change to SR 4C.1 affects both how we delimit records in Table Delimited, but also everywhere else that 4C.1 is used as a standard(possibly outside PDS)."

5) CCB-314 Bundle type of "Supplemental" seems oddly defined. (Mitch and Dick provided new comments)

6) CCB-209 Correct Definitions of Tagged-*-Object

?) CCB-204 - revisit? Define and enforce best practices for discipline and project dictionaries

Goal: These feel somewhat stalled - can we try to prioritize.
1) CCB-301 The attribute name in the DD Attribute and DD Class classes is not properly constrained. (Trent)

2) CCB-302 No reference type values defined in DD Attribute or DD Class contexts. (Mike D.)

3) CCB-303 The definition for skos relation name is not sufficient. (Lyle)

4) CCB-306 identifier reference in DD Association is not constrained. (Steve, Trent, others)

5) CCB-307 DD Attribute External and DD Class External rely on a lack of validation constraints as currently defined. (Steve, Trent, others)

6) CCB-310 Remove Unusable Elements in DD Rule by IM 2.0.0.0. (Steve, Trent, others)

7) not a bug CCB-311 Unused/unusable rule type permissible values should be deprecated and removed before IM 2.0.0.0. (Ron, Steve, Trent)

8) CCB-312 ldd version id does not appear to be constrained the way LDDTool expects. (Steve H., Mitch, Ed)

9) not a bug CCB-298 Missing permissible values for Target Identification/Internal Reference/reference type in Bundle and Collection. (need to assign, EN?)

10) not a bug CCB-288 Change Internal Reference reference type to 'guided' text **(Some Discussions)**

III. Discussions

parking lot
(Not Discussed)

Next meeting Thursday, Jan. 7th

DDWG Telecon

Boris, who begins as the head of NAIF officially on Monday, is here today to introduce Mark Costa. Mark will be attending the DDWG for NAIF moving forward.

Our freeze date for the next build is January 21. Emergencies need to get in.

We passed CCB-318 last time, with liens.

Question: Does everyone understand the LCCB? We had good notes, but basically we will have Ron and anyone we can find review LDDs.
Answer: There is an update to the Geometry LDD in git-hub. Not sure if Ron is a reviewer yet.
~ Haven't seen him automatically added yet.
~ Trent will also review it because he is using it. Interesting how everything has to be coordinated to dance together.
(Action Item)

Someone thinks we need to continue discussing the LCCB. We need to put a process in place.
~ Agreement.
~ There are no solutions that would have helped with the Geometry updates - were asked to add a class by Bob Deen. That sort of thing shouldn't be done in three days.

I. Ready for a vote

CCB-319 - Add 'ns' – The abbreviated unit for 'Units Time' (1/10^9 s).
See https://pds-jira.jpl.nasa.gov/browse/CCB-319

This still needs a TA.

Question: How do people feel about voting on this without a TA?
Answer: We can get a TA and vote next time. No time would be lost.
~ It's okay to vote next time.

II. Status and New SCRs.

CCB-320 - Add 'W/m**2/sr/nm/(DN/sec)' under Units of Misc See https://pds-jira.jpl.nasa.gov/browse/CCB-320

Thanks to Dick for putting comments in jira.

Trent clarified with Bob. This is still needed under units of misc. There are other odd units there too. The biggest clarification is that this is to describe unit of calibration, it's not in the data.

Question: Does that sound okay?
Answer: Someone still wants the DN out of the unit. Not an SI unit. No DN in the units.
~ DN indicates it's a number returned from the instrument.
~ Should make that official somewhere.
~ Data number in images.

Question: Actual Requested Changes has the units being added, but doesn't it need a definition?
Answer: That might help, but definitions already in units of misc are difficult.
Another Question: What is the attribute that will be in the label that needs this?
Answer: Not sure Bob told us. Probably in a local data dictionary. Something like calibration (something???)

Action Item - Trent will ask Bob and make a definition for it.
~ DN is a unit of misc. Electrons per DN. DN is data number.

More information and an example will be added to the SCR.

Question: Any other issues with this?
Answer: (Silence)

CCB-321 - Add MPEG-4 as an encoding standard id for Product Native See https://pds-jira.jpl.nasa.gov/browse/CCB-321

This feels like step one of two. People are still trying to understand product native. It was originally used, we believe, for seed data. Anytime there's a product native a product observational in a non-compliant format is also required. The problem now is video/audio. Lossless video is huge, 30 images per second. Not sure how to make it work. Need to assign it as product native. The problem is the product observational.

Wonders how the group feels about the rule that if there's a product native there has to be a product observational. Someone is not happy with it. Product native says it's from instrument and in a non-compliant format. Sees two options - we could allow product native without a product observational or push for video as product observational, which seems nonsensical.
~ Compression does not mean lossless. One of the reasons for PDS4 was to make sure everything was easily understood in PDS4. If you put a product native without a product observational that's shooting ourselves in the foot.
~ Someone sees a third option. Wonders if the associated product observational has to be exactly the same or if it could be a sub-sample.
~ Yeah, like using the first frame or every hundredth.
~ Just for this case since the sub-samples don't change much.
~ Key frames.
~ Might change the interval. This would be a stop gap measure.
~ Yes. Video can support compression. Very challenging compression that happens through the frames, but compression also breaks PDS4 rules. Video is hard.

Question: Is it really? Video exists quite well outside PDS in the scientific community. The standards are well understood. It's more that we aren't well versed.
Answer: Open standards. The issue is that we won't write our own scripts to open this up. Won't be a problem for 50 years.
~ Code will have long been written over those years.

~ That brings us to funding to make sure it's maintained.

Question: What's the likelihood of moving this forward if we allow MPEG-4 as product native? Any qualms?
Answer: Nervous. We do need a solution, but nervous about having encoded product in product native. The whole point about the product observational version of the file is to be able to convert it for scientific value and get product native. If only using the hundredth frame not sure you can do that.

Question: Is this just for the descent camera or on the surface too?
Answer: Surface and helicopters.
~ There are 40 cameras on Mars 2020.
Another Question: How large would a data product be? Same size as a High Rise product?
Answer: Huge. Did a one minute video out to raw frames - huge. Also completely unusable. Could print it as a whole book.
Another Question: Interpolated?
Answer: Will guess between frames. Not a lot of research in lossless, but straight to raw is not possible. Product observational has higher bar for the metadata. Can be lazy with product native.
~ Because it points to a standard.
~ Someone did an exercise to see what would be needed in product observational. Would need thirty attributes.

In the future there will be PDS recommendations for lossless compressed video.
~ Camera might compress things. Can't figure out what the impacts were. Can only interpret. Basic bits never change.
~ That's why capturing it as it comes down makes more sense as product native.
~ Once it's here we are not losing anything that came down.
~ If it's JPG on the spacecraft we are losing bits when it comes down.
~ PDS will want it to be lossless.

Our only option is to form a work group.

Question: How fast is an answer needed? Before January 21?
Answer: If we don't allow this the fall-back will be to call it a document.
Another Question: When do we need an answer?
Answer: Their first release is in July.
~ So, we need to figure this our by January 21.
~ There's no other build before July.

Question: Is anyone really opposing this SCR - not all the other stuff?
Answer: The other stuff is really important.
~ We could take a different approach and ask the MC to approve product native without product observational as a lien and then go back and add it later.
~ Someone doesn't trust the MC to do that.
~ Someone else doesn't trust Mars 2020 to fix it later.
~ This won't be ready by January 21.
~ Any additional value has to be approved by the MC.

Having product native without product observational - if the new product follows the requirements for long term compliance are followed and things are migrated.
~ This is an interim solution.
~ No one will do it.
~ If the MC is going to change the preservation policy they need to buy into this. Make sure there's funding to keep things from falling through the cracks.
~ Someone is worried about setting the precedent. MPEG-4 is not the only standard.

Question: Is there an ISO standard for MPEG-4?

Answer: Yes.

Question: In the IM, file area observational has array formats, tables, etc. Is there any reason we can't put video as an acceptable option?
Another Question: As a raw image?
Answer: As video. Seems like a legitimate option.
~ Need a data object to describe it. Fine with that.
~ That's the original ask - but it breaks PDS4.
~ Someone doesn't agree that it breaks PDS4.
~ We originally said data can be described as images, arrays or tables, but that's no longer true. We need to re-evaluate.
~ Video is a flavour of image.
~ Need to describe it in the model. Hard to document MPEG-4. Easier to put the ISO standard.
~ Probably not simple.
~ Something like encoded byte stream.

Cutting this off now. Everything is on the table.
~ We need an intermediate solution.
~ We can re-word the SCR.
~ Someone is not sure why we need an interim solution. The argument against documents isn't that product native is better.
~ Documents are not data. It's semantics.
~ The mission didn't like that.

We need a work group. This is in IMG's hands. IMG can provide a proposal. Product native is not the long term solution.

CCB-264 - Make the Line Feed (LF) character an allowed record delimiter See https://pds-jira.jpl.nasa.gov/browse/CCB-264

Question: Any comments on this one? Anyone thought about changing the SCR?
Answer: Section 4C.1 should have option to be re-written. It's a standard that can be used by people outside PDS.
~ Not confident anyone else has used it.
~ Todd set this up. The JPL solution is hard to deal with.
~ Someone is not following this conversation.

The definition of DSV is in the SR. It requires CRLF. If we allow LF we have to re-write it.
~ The only issue is if anyone has used it. Doesn't require a PDS4 label as written. Could break.

Joe should work with the document writing team on this.
~ It could break software.
~ People have queried their communities and no one complained.

Question: Are people really writing their on CSV readers?
Answer: Don't think it's a real problem to modify this. It's mainly being used by PDS.

Question: Do we need to reopen this or issue a new ticket?
Answer: No, it's open.
~ The CCB sent it back to us and asked about it's impact.
~ We need to re-pass it and send it back to them.

Not exactly clear what the limitations are or where we would allow the change.
~ Could leave the current requirement in the standard, but that would create confusion.

Unclear if this this applies to all ASCII files. C4.1 bothers me a bit. Doesn't say explicitly that you have to make one choice for the entire file. We can add that and pass it to the CCB with the hope of getting it in the next build. Can advertise the change to the community before the change is implemented.

Question: Maybe a minor lien and we can vote next time?

Answer: Someone needs to write the sentences.

~ We could vote today. Tell the CCB no impact was detected.

~ Someone did a quick search of the model. Sees a few places CRLF is used. We can list them in the SCR. Most labels are only LF already.

~ Unless we specify.

~ LDDTool puts CRLF.

~ Someone has seen both. Need to not have both in one file. Have to be consistent.

Action Item - Mike will take on doing the fixes for the SCR.

We will have a quick vote next time.

CCB-322 - add "ODL" to parsing standard id See https://pds-jira.jpl.nasa.gov/browse/CCB-322

This is why Susie is here today. Hopefully not a huge discussion. ODL or ODL3 as an existing tag. Someone put a long comment in jira. The basic issue is that people are not sure where ODL3 is documented. PDS3 used ODL2. See this as unnecessary, unless someone can document the difference between ODL2 and ODL 3.

~ Was original ODL.

~ People should read about this in jira and we can discuss it next time.

~ There are known differences.

The background is that MIPL has been using ODL for every image label. Not valid PDS3. Used PDS3 for awhile, but diverged. Mars 2020 is delivering labels that look valid, but aren't. Want to make sure no one thinks we are sanctioning them.

~ They conform syntactically, but not semantically, and some is just plain wrong.

~ Going to call it free text.

~ Someone is happy with that.

Someone suggests the label extensions are gotten rid of for these.

~ Yes, it makes them look like PDS3. Would change to ".ODL"

~ Can't validate them.

~ You can see they aren't PDS3.

~ The difference is documented somewhere. The library has four categories: PDS2, PDS3, ODL and ISIS.

Someone's issue is calling it ODL3. Understands mission operations is using that, but don't want any confusion.

~ We allow Vicker.

~ Against the 3. Don't know what the 3 means.

~ Let's see if the free text solution is acceptable.

Someone has been running into things that look like PDS but aren't for years. Has assumed they were PDS1. This could explain why things are out there that look like PDS3, but aren't.

~ Not giving it a name.

~ Not going to make a fuss. Will note that they are not PDS3 labels.

~ Someone objects and wants to know for parsing standard ID where the standard is.

It will be changed to ODL.

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Question: Any last comments?
Answer: (Silence)

Next meeting could be Tuesday, December 29 or Thursday, January 7.
~ Several people will not be available December 29.

Our next meeting will be January 7. We might also meet the following week.