title: DDWG Notes 2017-01-19

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January 19, 2017 Notes by Debra Kazden

Known Attendees:

R. Alanis, M. Gordon, E. Guinness, S. Hardman, L. Huber, S. Hughes, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin, L. Nagdimunov, L. Neckrase, J. Padams, A. Raugh, R. Simpson and J. Stone

Notice sent before the telecon in email from R. Joyner - January 17, 2017

CCB/SCR Statuses:

- -- CCB-168: ASCII NonNegative Integer may or may not include + sign? (L.Nagdimunov)
 - -- 20170103: Open & Under DDWG review
 - -- 20170108: Closed withdrawn by author

This week's agenda will focus on the following topics.

- (1) Please review, be prepared to discuss, and possibly vote -- should the complete TA be ready:
- -- CCB-171: Split hardware-compatible ASCII numeric types from the unbounded (L.Nagdimunov)
- -- 20161012: Requested Lev provide cogent statement of the issue to be resolved; send to DDWG to start email exchange & discussion
 - -- lots of email discussion; inconclusive as to whether issue is converging or diverging?
- -- 20161026: Can a problem statement be written into an SCR where there is some measure of certainty that this is the issue to be resolved ?
 - -- at least one email questioning whether this issue is worth the time / effort to discuss / resolve
 - -- 20161109: Lev requested another week to work issue; before additional DDWG discussion
 - -- 20170103: Open & Under DDWG review
 - -- 20170105: request Steve and DocWritingTeam to TA by end-of-next-week
 - -- DWT TA provided; waiting on IM TA
 - **(Very brief discussion TA has a lien against it)**
- (2) Please review and be prepared to discuss:
- -- CCB-131: Missing constraint on Special Constants attributes (A.Raugh)
 - -- 20150922: Open; under DDWG discussion
 - -- 20160310: until someone volunteers to lead the effort -- on hold
 - -- 20160929: back to DDWG to form WG; candidate for sunset clause
 - -- 20161010: from Anne: Jess Stone (jstone@psi.edu) will be the SBN rep for this
 - -- need participants to form WG
 - -- 20161013: WG formed: J.Stone (Chair); Lev & me (participants)
 - -- sent email to Dick & Jordan to ask if they will participate on WG

- -- 20161026: sent email to Dick to see if discussions between Dick and J.Stone are solid enough to update SCR
- -- 20161026: Dick to update SCR; will split off NaN & INF; to be addressed in separate SCR -- see CCB-170
 - -- 20161109: Dick has made extensive updates to SCR; needs Steve to TA
- -- 20161109: At DDWG, Dick dropped out of WG; Lev/Anne to define competing implementation(s); send to DDWG
 - -- 20161129: In wait-state until can attain consensus within SBN
 - **(Very Brief Discussion waiting for a decision on CCB-171**
- -- CCB-138: Mismatch between context object types and values of <type> in <Observing System Component> class (A.Raugh)
 - -- 20151202: Open; under DDWG review
 - -- 20151203: WG: Anne, Steve, Dick, Jordan, and RJ
 - -- 20160310: until someone volunteers to lead the effort -- on hold
 - -- 20160929: back to DDWG to form WG; candidate for sunset clause
 - -- on hold; not high priority; too few people resources
 - -- bring back to DDWG: Dec 2016
 - -- 20170103: back to DDWG discussion
 - **(Very Brief Discussion on hold until it is brought up again)**
- -- CCB-170: Deprecate IEEE 754 NaN and Inf in Favor of PDS4 Special Constants (R.Simpson)
 - -- 20161110: Open & Under DDWG review
 - -- 20161129: in wait-state until CCB-131 is resolved
 - **(Not Discussed)**
- (3) Email exchanges and other stuff
- -- PDS4 equivalent for the PDS3 keyword SOURCE PRODUCT ID (S.Slavney / J.Padams)
 - -- 20161129: Open; under DDWG discussion; form WG
 - -- 20170105 A.Raugh emailed two PDS3 citation examples to DDWG
 - **(Discussed work group formed)**
- -- High Speed video in PDS4 submission (L.Huber)
 - -- 20170119: Open; under DDWG discussion

One of our PDART data providers is asking about including high speed videos as part of their submission. Our feeling is that since these are not going to be considered as the primary data but just supporting information, we would like to

consider including it in a document collection.

The movie format in question (.MOV) already has an ISO standard (MPEG-4) so we could reference that in the SCR but we would have to waive the PDF/A requirement for this format since there is no reasonable way to do that.

- **(Discussed SCR will be written)**
- (4) Product Update (M.Gordon)

- -- 20161109: Mitch sent out Product Update email; send to DDWG to start email exchange & discussion
 - -- 20161129: Mitch to send out example(s)
 - **(Discussed SCR will be written)**

DDWG Telecon

Request that people use the WebEx regular log in so that we know who is on the call by name. When people just call in they are assigned a caller number that has to manually be changed to a name once the person is identified.

CCB/SCR Statuses

CCB-168 was withdrawn by the author.

CCB-171 - Split hardware-compatible ASCII numeric types from the unbounded See https://pds-jira.jpl.nasa.gov/browse/CCB-171

We agreed last time to vote on CCB-171. Comments were made. It was TAed. If people didn't have enough time to digest it we can wait to vote.

- ~ The TA has a lien against it.
- ~ So let's wait.

Question: Any objections?

Answer: (Silence)

High Speed video in PDS4 submission

This is new. (See explanation text from ATMOS above - under number 3)

One of ATMOS providers - a lab facility - submitting for PDART. Submitting as documentation. Format is .MOV - Quick time. Has ISO standard - MPEG-4. Can't include PDF-A, but the wording requiring that is open to this.

Question: Will there be a lot of objections? Can ATMOS make a simple SCR and push this forward?

Another Question: What kind of product?

Answer: Product document. MPEG-4 would be the document type.

SBN has Deep Impact movies they have been sitting on - waiting for a way to include them when there was an appropriate standard. Glad it's here.

Question: Product document, not product ancillary?

Answer: Documents provide explanation and illustration.

~ Yeah, provides information about the data.

Question: Where does it say PDF-A or whatever?

Answer: Probably file type. Would have to look it up. This is a good place to start for video. Includes

basic information. We may need additional information, but seems fairly straight forward.

- ~ Look at document file that's where you specify the format.
- ~ Okay. My other question is if you want .MOV seems good. MPEG derives from it. Seems like a good choice. Just wouldn't want a proliferation of these.

Wikipedia says .MOV is an MPEG-4 - the extension is just different.

- ~ Been extended to MPEG-4.
- ~ Someone sees something about proprietary compression by Apple. Maybe we need to convert to MPEG-4 before we archive this.
- ~ That's certainly possible, but Microsoft Word etc are also proprietary.
- ~ And you know what I think of those. We can have copies of other formats.

ATMOS should submit the SCR so we can take pot shots at it and discuss it in two weeks.

~ Okay.

CCB-131 - Missing Constraints on Special Constants Attributes See https://pds-jira.jpl.nasa.gov/browse/CCB-131

We didn't discuss this last time because Anne was on vacation. This was in a wait state while SBN came to a consensus.

Question: Does SBN have that yet?

Answer: Not yet.

~ People have been out of the office.

~ No.

Someone plans to work on this after there is a decision on CCB-171. Waiting for ducks to align.

~ Sounds reasonable.

So - we are waiting for CCB-171 first. No further discussion now.

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

We agreed in September 2016 to put this on hold until December 2016, so bringing it back now. We had a work group.

Question: Do we want this on the priority list?

Answer: Someone doesn't have time for it now.

- ~ We can defer.
- ~ Put it on hold until it is brought up again.
- ~ Okay.

PDS4 equivalent for the PDS3 keyword SOURCE PRODUCT ID

Some examples were sent to the group, but not everyone is clear on the problem.

Regarding the reference list idea, I understand and think it works. Creating a label is not so obvious, but can work. IMG put it in processing history cause it gives more context. Could put it in reference list - IMG just thought it made more sense in processing history.

- ~ GEO agrees. Referencing a PDS3 product a bit obscure to do it that way. Not documented in PDS4.
- ~ In PDS3 we had source product ID and citation text, which tells how to reference another product for PDS3. Need to update PDS4 documentation to explain how to do it, but concerned that you can't tell you are referring to the source of a product.

If we have processing history and want to reference by LID that seems reasonable.

- ~ This is for PDS3 products without LIDs.
- ~ To use reference list we would need reference types like data to raw type. Thought processing history used something other than LIDVID, but doesn't know.
- ~ In processing history there might be references to things not in the archive, but mainly references to things that are in PDS3 or PDS4.

Question: Does the registry make any assumptions?

Answer: It hasn't come up yet. No one has referenced PDS3 products from PDS4 products yet.

- ~ If PDS3 products were unique they could be harvested.
- ~ Some PDS3 data sets didn't have product IDs. It's not always there. Agree that it's the right thing to use for PDS3.

We need to decide how we want to reference source products.

- ~ In SBN's migration, they point back from calibrated to raw products. Think that's different from documenting the full history for an image.
- ~ Rings has another issue. Products combining into a product like 60 source products to produce something need a type. There's no reference type in external reference. Making it up as we go. Not comfortable with that. Also, if there are 60 products, would like to point to them in a way that makes sense.
- ~ This came up in BOPPS. We created a table of contributing raw products that made up the image. Documented the relationship easily.

At least part of the problem is that if we can't use internal reference in PDS4 to reference PDS3 because there are no LIDVIDs than maybe the short term solution is a look up list.

- ~ They have PDS3 products. You can register them. You could ingest PDS3 data if you were referencing them.
- ~ But PDART providers aren't going to do that. Not sure why we don't just make look up tables. Register product IDs and LIDs.
- ~ We have thousands of PDS3 data sets that will never be migrated. Also, we have a PDART user using data that is not in PDS. Only from NSSDC. We need a global solution.

Proposal to take this off-line and form a team to work on it. Seems there is consensus that we need something. No SCR yet.

~ Someone likes the idea.

Jordon and Ed will participate.

Note there won't be a single solution. The case of referencing PDS3 from PDS4 products will have many different cases. Forcing it all into one pattern may not be helpful.

~ Good point. Suggests the first step is to identify the different problems. Agrees that one solution probably doesn't fit all.

Question: Volunteers? Answer: (Silence)

Someone agrees that there's not one solution that fits all. It won't be required.

Question: Anyone else joining in the fun?

Answer: Just Jordan and Ed.

~ It depends on the goal. Someone is not interested in processing history, but is interested in improving internal reference to handle PDS3 references.

~ Will keep that in mind.

Request that people send their problems and concerns over referencing products to Jordan. **(Action Item)**

Question: Do you think internal reference could be improved to reference PDS3?

Answer: It's possible, but not a good idea. It's a short term issue. Think referencing PDS3 products is short term.

- ~ There will be large chunks of PDS3 that won't be migrated.
- ~ They will get smaller over time. Like PDS2 is a smaller fraction now. Wouldn't make major changes to PDS4 to accommodate PDS3, but we do need to be able to reference stuff in other archives.

~ Spot on.

A work group has been formed. They will let us know when they are ready to bring this back.

Moving on...

Product Update

See email from Mitch RE: PDS4 Data Design Working Group - Telecon Announcement - Jan 19, 2017 - 9:30AM PDT, sent January 18, 2017, 11:54 AM and attachments.

~ There has been some back and forth on this in the last day.

Not sure if 24 hours is enough lead time for everyone.

Someone had requested an example with multiple objects in the same product - with different targets. First column is LIDVID, second is information. Has to tell why this record is different from the one that follows it. Each field has to be defined in a data dictionary. That caused confusion - someone thought it meant that we were trying to do partial x-paths, but that's not so. Wonders if this should be renamed product supplementary or metadata - like for if we had a first delivery with 20 values and a second with 50 values. Considered this at one

time- the mechanics, but it seems good for Sean to only have one place to look to get the metadata.

Question: Any Questions?

Answer: Yes.

Question: Where will this live? What place?

Answer: Not worried about directories - this will be in the collection. That's the logical place to look. Another Question: Logistics - suppose we produce an update to something archived by another node - so it forms a primary member of the collection? So send it to the steward of the collection? Answer: Yes. Give it to the steward to get into the registry. ~ Okay.

Question: Anyone else? Next step?

Answer: Write the SCR.

Question: What do we call this? The word update seems confusing. Objections to product supplemental or product metadata?

Answer: Thought we already have a product supplemental.

- ~ No, we have file area supplemental.
- ~ It could be product metadata.
- ~ Someone prefers metadata.
- ~ Supplemental gives the wrong impression.

Question: Do people agree with not making it product update?

Answer: Someone likes update - tells what's being provided.

~ Someone agrees. Confusion should be addressed in the description.

Question: How about product update metadata?

Answer: Metadata is so generic. This is just for the label.

- ~ No. This updates some parameters not just the label.
- ~ This is not the content. Not the digital object itself.
- ~ Definitely not, it's the metadata.

Question: Would metadata update be less upsetting? The SCR will contain deprecating product update, which is a non-backwards compatible change. Mitch's email had an attachment - the second page of that compares the current product update class to the new proposed one. They are different. So, if the new attribute is required - that's non-backwards compatible. We could make it optional. Want a way to identify changes that are just to the label.

Answer: Sounds reasonable. Likes the insurance.

Another Question: So you want a keyword that says this is a change to the label only?

Answer: We originally had a keyword to indicate if the update is to the parameters or the label.

Another Question: There was a concern about trying to replace things in label with a better value...?

Answer: Would have to give a better x-path etc.

- ~ It doesn't hammer the x-path.
- \sim If in the future we want to replace stuff there's not enough information in the previous labels to do it.
- ~ Think that's not going to be the case. If something is in a label four times, then you would have a reason in product update have to be clear could build the x-path.
- ~ Someone suspects this isn't true.

If we put this in now, hopefully it's less awkward to change if we need to in five years. It's not like using x-path, that's implementation.

- ~ X-path is implementation like XML is.
- ~ At this point we can do it with IM terminology.

Question: Anyone else?

Answer: (Silence)

Working on a presentation, but will try to have an SCR for next time. **(Action-Item - Mitch)**

Question: Anything else? We're over time. Two weeks?

Answer: Bye.