From: Debra Kazden <dkazden@igpp.ucla.edu>

Sent: Friday, August 05, 2016 10:59 AM

To: pds4ddwg

Subject: Notes from PDS DDWG 2016 08 04

title: DDWG Notes 2016-08-04

layout: default

date: 2016-08-04

August 4, 2016

Notes by Debra Kazden

Known Attendees:

R. Alanis, R. Chen, E. Guinness, S. Hardman, L. Huber, S. Hughes, C. Isbell, R. Joyner, D. Kazden, J. Mafi, S.

McLaughlin, L. Nagdimunov, L. Neakrase, J. Padams, A. Raugh, R. Simpson, and J. Stone

Meeting Agenda and Summary

- 1) SCRs Under Discussion:
- -- CCB-77: Augment Product Update with File Area Update S. Hughes
 - -- Open: under DDWG discussion
 - -- has been TA'd
 - -- 20141002: There is now a tiger to work Update in general that will start in a few months
 - -- 20150519: Waiting for M.Gordon?
 - -- 20150922: DDWG discussion topic; SCR needs to be updated by Mitch
 - -- 20160324: Mitch prefers to supersede this SCR and add new SCR
 - **(Not Discussed)**

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-- CCB-125: The bit mask attribute seems to be misplaced and possibly missing where needed (A.Raugh)
  -- 20150915: Open; needs DDWG discussion
  -- 20151008: Jordan to provide example label that uses bit mask
  -- 20160323: WG: J.Padams, R.Simpson, A.Raugh, R.Joyner
  -- 20160617: updates discussed by DDWG
  -- 20160621: Jordan waiting for feedback / comments; then will go back to DDWG
  **(Not Discussed)**
-- CCB-131: Missing constraint on Special Constants attributes (A.Raugh)
    -- 20150922: Open
    -- 20160223: under DDWG discussion
    -- 20160322: EN governance; will take lead
  **(Not Discussed)**
-- CCB-133: Special Constants class precludes the ability to specify multiple invalid/missing constants (J.
Padams)
  -- 20151012: Open
  -- 20151021: Under DDWG review
  -- 20151022: WG -- Jordan, Steve and RJ; sent email to WG with proposed changes
  -- 20151105: Jordan -- special constants needs to be specified per "band" not per "axes"
  -- 20160706: email to Jordan asking about status / progress
  **(Not Discussed)**
-- 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
  **(Not Discussed)**
-- CCB-142: Create Data Quality Flags to hold metadata on Quality Flags (E.Shaya)
  -- 20151229: Open;
  -- 20160126: Under DDWG review
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- -- 20160322: Ed didn't like Simpson's CCB-142 implementation
 - -- Ed wants a lot of specifics embedded into XML
 - -- Simpson trying to figure out how to make it 'simpler'
- -- 20160323: Simpson generated presentation for DDWG review / comment
 - -- tabled until next session (20160410)
- -- 20160428: updates discussed by DDWG
 - -- requires IMG & others expertise to carry forward
- -- 20160505: discussed by DDWG; E.Shaya led discussion; 2 competing implementations
 - -- address 2 issues:
 - -- bang for buck in terms of worth doing
 - -- implementation recommendation
 - -- WG: Steve, Anne, Jordan & Chris, Lev
- **(Not Discussed)**
- -- CCB-149: Should PDS4 allow packed data? (E.Shaya)
 - -- 20160309: Open & Under DDWG review
 - -- 20160310: Sent email to E.Shaya asking that he upload his version of the IM for packet data to JIRA
 - -- DDWG will review and provide comments
 - -- PPI has volunteered to attempt to convert a PDS3 product using the Packed Data class
 - -- 20160322: dependency on CCB-153; and vice-versa
 - -- 20160428: sent email to J.Mafi for status on providing examples
 - -- 20160706: sent email to J.Mafi for status on providing examples
 - **(Discussed with CCB-153)**
- -- CCB-151: Bundle Member Entry and Internal Reference do not require either LID or LIDVID. (A.Raugh)
 - -- 20160309: Open & Under DDWG review
 - -- 20160322: EN governance; will take lead
 - **(Not Discussed)**
- -- CCB-153: SR Needs Additional Description of Packed Data Fields. (E.Shaya)
 - -- 20160321: Open
 - -- 20160322: dependency on CCB-149; and vice-versa

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-- 20160728: Under DDWG discussion
  **(Discussed)**
-- CCB-154: Promote a Mission Information class to Discipline Governance Level. (S. Hughes)
  -- 20160321: Open & Under DDWG review
  -- 20160428: updates discussed by DDWG
         -- formed WG: Steve, Anne, Jordan, Joe
  -- 20160512: emailed Steve asking if the WG had met and is SCR ready to go back to DDWG for
discussion?
  -- 20160615: emailed Steve asking if the WG had met to resolve issue
  **(Not Discussed)**
-- CCB-155: Need "Example Set" to include program test data. (A.Raugh)
  -- 20160323: came from discussion of CCB-144
  --20160323: Open; request to provide additional examples; to include 'test data'
  **(Not Discussed)**
-- CCB-156: Inconsistent Discipline Dictionary Technique for Local Internal Reference, et al. (A.Raugh)
  -- 20160418: Open
  -- 20160623: Under DDWG review
  **(Discussed)**
-- CCB-159: Bug fixes for Version 1.7.0.0. (J.Hughes)
  -- 20160426: Open & Under DDWG review
  **(Not Discussed)**
-- CCB-162: Move <md5 checksum> from Object Statistics to Array (R.Simpson)
  -- 20160622: Open & Under DDWG review
         -- emailed Steve to TA
  -- 20160629: TA'd; back to DDWG for discussion
  -- 20160630: C.Isbell & Jordan & Dick to resolve issue(s); then back to DDWG
  **(Not Discussed)**
-- CCB-164: Display Settings not required for images (A.Raugh)
  -- 20160707: Open
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-- 20160727: Under DDWG discussion **(Discussed)** ## Notice sent before the telecon in email from R. Joyner - August 3, 2016 See enclosures: -- a list of the full topics under discussion by the DDWG CCB/SCR Statuses: -- None This week's agenda will focus on the following topics. (1) Please review and be prepared to discuss and possibly vote: -- CCB-153: SR Needs Additional Description of Packed Data Fields. (E.Shaya) -- 20160321: Open -- 20160322: dependency on CCB-149; and vice-versa -- 20160728: Under DDWG discussion; please review SCR for possible vote -- CCB-156: Inconsistent Discipline Dictionary Technique for Local Internal Reference, et al. (A.Raugh) -- 20160418: Open -- 20160623: Under DDWG review -- 20160706: form WG -- CCB-164: Display Settings not required for images (A.Raugh) -- 20160727: Open & Under DDWG discussion -- 20160728: form WG -- 20160728: A.Raugh to update SCR to add applicable set of objects ## DDWG Telecon Again, people had trouble getting in to the call. Someone is unable to view CCB-153 in jira. ~ Server problem.

Question: Can Sean do anything about that?

Answer: Will wave his magic wand.

~ Jira's dead right now.

Someone added a comment to jira at 9:00a.m.

~ They broke it.

Still waiting for people to get on the call - including Joe or someone who can vote for PPI and Ed Shaya.

~ Someone is willing to vote for PPI.

Two different emails went out for this telecon. Different hosts. Need to make sure the host is Ron Joyner.

~ SBN still having difficulty getting in. Maybe others are also having issues.

~ Anne has arrived. Says she can't use Web-Ex - it accepted her meeting number and froze.

~ Maybe since jira is down things are somehow interrelated.

~ Someone suggests trying a different browser for Web-Ex.

~ Someone else just arrived - couldn't get their password to work.

It seems we have a full quorum with the exception of Ed Shaya.

CCB-153 - SR Needs Additional Description of Packed Data Fields See https://pdsjira.jpl.nasa.gov/browse/CCB-153

Where we left off on CCB-153 was that we were basically trying to get a vote to endorse or not so much on if packed data should be in the archive and if it should be described in product observational.

~ Thought the issue is if it should be included at all - including as a product native.

~ That discussion will take us down a rabbit hole.

~ Comment withdrawn.

Question: We're voting. Any discussion on limiting to product observational?

Answer: All the radio science data would have to be converted to formats not being used.

~ Five years ago - Road-map - we are stepping back from a key design principal from then.

~ Five years ago we allowed packed data and acknowledged that radio science has packed data.

~ Creating a new format that no one has software to use is not simple.

Packed data is used by specialists in radio science. PDS should support all users. Product native would

give access, but putting it in a PDS4 format makes it available to users who can't use it in the current

format. Totally in keeping with the PDS mandate.

~ Someone accepts the argument, but not the conclusion.

Question: Could you summarize the outcome of a yes versus no vote?

Another Question: Can RS take that?

Answer from RS: Not sure what we're voting on.

~ Neither is ATMOS.

We are voting to endorse or not allow packed data in the archive as product observational.

Question: Was that CCB-149?

Answer: Looking at 149, yes.

~ Not prepared to vote on 149. It wasn't on the agenda and jira isn't working now.

To address migration - we could ask the challenge to write code to transform this into compliant PDS4

data. It's a difficult job, but perfectly suitable for the challenge.

~ Someone is doing it now, but it's a multi-year project.

Question: Are we clear on the vote?

Another Question: Is it CCB-149 or CCB-153?

Answer: CCB-153.

~ No, no, no - it's CCB-149.

~ No, cause ultimately we want to move forward with this or remove it - as written. There is very specific

language it wants in the SR.

~ That assumes packed data remains. CCB-153 is a fix. CCB-149 is up/down on packed data itself. Need

to decide that first, but CCB-149 isn't on the agenda.

Question: Do you want to run the meeting?

Answer and Another Question: Sure. For CCB-149, all in favor of retaining packed data?

Answer: Someone is uncomfortable voting on this.

~ We should wait a week.

~ No. Let's cancel the meeting.

~ Not ready to vote. This is an MC level call - to approve or deny this. Especially since it's in PDS3.

~ Someone disagrees, but there could be a budget issue if we want to support packed data. A financial

burden for PDS. There's legacy data and it's still coming in. It is an MC issue.

~Documents say we need to be able to transform all data - it's in our principals.

If we have a quorum, we should raise the question to the MC of if they wish to have packed data

supported for the archive.

~ Someone agrees. The MC is aware of this issue.

The motion is to raise the question to the MC - should packed data be supported in archive.

Question: Isn't that what I was trying to get a vote on?

Answer: Got in trouble with the word "endorse" and because jira is down.

So we will vote, yay, nay or abstain. Rings voted by email, but are not present for this.

**The Vote - to raise the question to the MC - should packed data be supported in archive.

Rings - Not Present RS - Yes SBN - Yes NAIF - Not Present PPI - Yes GEO - Yes IMG - No EN - Yes ATMOS - Yes, to moving this to the MC** **Action Item - Ron** will send an email to Dan to get this on the MC agenda. Question: Who will be the spokesperson? Answer: RS is willing, but would like to do it jointly with SBN. ~ Okay with SBN. ~ Will look at the two SCRs jointly. Need to be quick. The next MC is Monday, or it could be for September. Should have a discussion. ~ This is probably not new to them. They'll need to review the various node concerns. SBN and RS will discuss it - starting with an email draft they can toss around. ~ Joe and Lev want to be copied on the email. (Ron reports that he sent an email to Dan) Question: Is there more on 153/149? Another Question: Should we give a head's up to Tom Morgan?

 \sim It needs to be put on the MC agenda to discuss. Mike A'Hearn sent email on this six months ago, but

they probably don't want to decide on the spur of the moment.

Jira appears to be back up.

Question: Any more on CCB-153?

Answer: (Silence)

CCB-156 - Inconsistent Discipline Dictionary Technique for Local Internal Reference, et al.

See https://pds-jira.jpl.nasa.gov/browse/CCB-156

Where we left off was that there's a development version of 1.7 out with exposed classes which affects

LDDs. Folks with LDDs need to test the impact and report back. Would be really helpful to see the

results, effects. Will need to re-submit LDDs as appropriate.

Question: Is everyone on board?

Answer: (Silence)

On the SCR, there are about three topics listed in the SCR. Maybe we should discuss breaking it into

separate SCRs. Some of it might be fixed by exposure. The more specific and bounded an SCR the easier

to get it closed, implemented and adopted.

~ Fine. It needs to get done.

~ Will discuss it - maybe after this.

Question: Anything else?

Answer: (Silence)

CCB-164 - Display Settings not required for images See https://pds-jira.jpl.nasa.gov/browse/CCB-164

We left off last time with an action Item for Anne to make a set of applicable objects.

~ Fail. Will try again for next time.

Question: Does anyone want to say anything about CCB-164?

Answer: People were talking - not sure why we need display settings for 2D and 3D images. In PDS3 - the same. Every label will be the same.

~ That's not the SBN experience.

If you have a tool for PDS and you have a 3D array, best case is to assume last two are sample and (?) and first is line, but if that's not true then the user gets garbage. When writing tools need to be able to assume the nodes are the same.

It's part of the PDS4 philosophy not to allow anything in a label to default. So many issues with that in PDS3 - especially with images. Being explicit is the way it should always be. There should be no doubt.

Question: So why not be more explicit with what's allowed. Not an expert, but think we should be prescriptive about how they're allowed to be described in PDS.

Answer: Band, sample and line are not required.

~ Someone is not understanding. Original goal was to completely prescribe formats. Instead, relatively free storage. In display you can't make assumptions or assume software will have correct display order. It's not coupled. Some SBN users complain when north isn't where they thought it was. This happened in PDS3. No PDS4 images yet, but PDS3 was a disaster.

~ Agrees, but moving forward, maybe we need to be more prescriptive in how DPs are allowed to provide their data.

~ We already had this discussion. There are good reasons why things might be described in different ways.

Question: How often would SBN see bottom to top versus top to bottom?

Answer: Fifty percent of the time. IDL changed their standard about ten years ago. There's even confusion in data from the same sources. There's a problem with east/west too.

Another Question: So issues with left to right versus right to left too?

Answer: SBN would be happy to tell people to invert their images. Thought this was settled, but a new value was added for left to right versus right to left.

Question: Are we done? Anyone else?

Answer: (Silence)

This takes us to the end of the agenda. Would like people to supply a few of their favorite SCRs or appropriate topics for us to discuss. The document work group has identified some IPDA comments to discuss. Hope to get a resolution that could be incorporated in the documents. Was thinking of moving this back to bi-weekly, but not ready yet.

Ed is gone the next two weeks. Maybe Susie can attend.

Dick is gone next week.

Jordan is gone next week.

Ed Shaya was invited. He has several SCRs.

~ He doesn't work for PDS any more.

Question: Can he appoint an alternate?

Answer: Send the list of his SCRs to Anne. She will figure it out.

~ Lev seems pretty familiar with Ed's issues.

~ Yes, familiar with the packed data issue and another one too that had a work group working on it.

Email was sent to Ed Shaya regarding an alternate.

Next week with a smaller set of people.