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To: pds4ddwg

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#February 25, 2016

Notes by Debra Kazden

Known Attendees:

R. Chen, M. Gordon, L. Huber, S. Hughes, C. Isbell, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin, L.

Neakrase, J. Padams, C. Phillips, A. Raugh, R. Simpson, S. Slavney and J. Stone

##Meeting Agenda and Summary

1) CCB/SCR Statuses

-- CCB-129: Implement PDS4 Query Models (S.Hughes)

    -- 20150914: Open & Under DDWG review

    -- 20160222: Ready - can be a e-vote

    -- 20160223: Queued_for_Implementation: v1.6.0.0

-- CCB-146: URN Prefix for the Russian Space Agency (S.Hughes)

    -- 20160210: Open

    -- 20160211: Email from Boris questioning URN; Waiting on reply from Santa Martinez

    -- 20160222: Ready - may need discussion

-- 20160223: Queued for Implementation: v1.6.0.0

-- CCB-148: Add "Weather Station" to the enumerated list of permissible values for attribute

Instrument.type (L.Neakrase)

    -- 20160222: Open & TA'd

    -- 20160222: Ready - may need discussion

    -- 20160223: Queued for Implementation: v1.6.0.0

      -- per the CCB vote today, "Meteorology" has been changed to "Weather Station".

-- CCB-135: Update Data Providers' Handbook to v1.4.0 (R. Simpson)

    -- 20151012: Open

    -- 20151012: Note that CCB-110 (Appendix F of the DPH) will be superseded?

    -- 20151012: Requires TA

    -- 20151012: Ready for CCB review

    -- 20151028: Does not pass

    -- Recommend: DPH still needs serious editing before review; leave open for editing.

    -- 20151102: Back to DOC group for further editing; received comments from Matthew Tiscareno

(RINGS)

    -- 20160223: Closed; Rejected/Denied

    -- Per MC discussion:

    -- 2016-02-04/08 (MC, ASAP): Hughes asked for direction from the MC on how to proceed with DPH.

      MC decided to release the current, band-aided version that Simpson has.

      This includes an appendix   about the LIDVID formation rule for context products, which can be

forwarded to IPDA/ESA.

      -- posted to PDS website:

      -- https://pds.nasa.gov/pds4/doc/

    (Discussed)

2) Task Statuses - 5 Minutes each

    (Quick Updates)

3) SCR Issues to discuss:

-- CCB-65: Need additional Target Identification/type values (A.Raugh)

-- URGENT - enhancement / improvement

-- Open:

(1) Needs Proposed Solution

(2) Needs Requested Changes

-- 20150730: DDWG -- Anne to think about working the solution;

-- 20150813: formed WG: J.Mafi, Ed.G, A.Raugh, RJ

(Discussed - Jira to be updated)

-- 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

(Not Discussed)

-- CCB-100: Remove Array 2D and Array 3D from File Area. (T.King)

-- Open; Under DDWG Review: 20150201

-- 20150519: sent email to C.Isbell asking for input (since E is not available)

-- 20150602: sent email to C.Isbell asking for input (since E is not available)

-- 20150604: C.Isbell entered IMG comment -- waiting for Steve TA

-- 20150609: TA'd by Steve with recommendation to withdraw SCR

-- 20151007: J.Padams requested to table this until after Insight; Maybe end of November/early

December?

(Not Discussed)

-- 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

(Not Discussed)

-- CCB-131: Missing constraint on Special Constants attributes (A.Raugh)

-- 20150922: Open

-- 20160223: under DDWG discussion

(Not Discussed)

-- CCB-132: Units_of_Map_Scale Improperly includes pixel/deg as a unit (J. Padams)

    -- 20151007: Open

    -- 20151007: Email to Jordan to provide explicit changes to IM

    -- 20151008: I updated SCR to include specific changes required; ready for Steve to TA

    -- 20151012: TA'd; email to Emily and Dick to review

    -- 20151013: Email from Jordan to pull back for further discussion / work

    -- 20151022: Jordan to finalize new & improved proposal before next DDWG

    -- 20151104: Jordan updated SCR as comment in JIRA

    -- 20151105: DDWG agreed to send to CCB

    -- 20151116: Needs TA; then ready for CCB per DDWG

    -- 20151117: TA'd by Steve; Emily reviewed; Dick sent email with concerns

    -- 20151118: Set up telecon to discuss Dick's concerns

    -- 20151119: DDWG discussion; send to CCB if no comments

    -- 20151123: Needs TA; then ready for CCB per DDWG

    -- 20151202: Emily and Dick reviewed -- Ready

    -- 20151208: CCB e-vote; rejected

        -- M.Showalter proposed name changes:

        Units of Map Pixel Resolution

        Units of Map Pixel Scale

      -- CCB will have telecon to discuss

    -- 20151222: CCB sent back to WG / DDWG to re-work

    -- 20160204: MC on 2016-02-04, Jordan e al violently agreed on a workable solution

    (Brief Discussion - vote will be held in two weeks)

-- 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"

(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

(Not Discussed)

-- CCB-142: Create Data Quality Flags to hold metadata on Quality Flags (E.Shaya)

-- 20151229: Open;

-- 20160126: Under DDWG review

(Not Discussed)

-- CCB-143: Validate field_format via regex (Lev Nagdimunov)

-- 20160210: Open

(Not Discussed)

-- CCB-145: Improve statement of when a new version ID must be used (M.Gordon)

-- 20160210: Open

-- 20160211: Under DDWG review - no comments w/in 2 weeks, then goes to CCB

(Discussed - SCR will be updated and sent to CCB)

4) Topics for Discussion

-- Proposal: CCB-1xx: Remove Enumerated List from Instrument.type (L.Huber)

-- see attachment

(Discussed - tabled)

-- SETI Issues (R.Simpson et al)

-- Status

(Not Discussed)

-- IPDA PDS4 Project: 2014-2015 Final Report (S.Martinez, S.Hughes)

-- Status & develop implementation plan

(Not Discussed)

DDWG Telecon

CCB/SCR Statuses/Issues

Three SCRs went to the CCB - CCB-129, CCB-146 and the one to add the enumerated value of "Meteorology", which the CCB changed to "Weather Station". (CCB-148) These are all queued for implementation in 1.6.

There was a lot of discussion about instrument type, but the vote was unanimous.
 ~ No, it was five to two.
 ~ It was contentious.
 ~ Over if we should have it or not.

Question: Did the CCB have the same discussion as the discussion that instrument type shouldn't be an enumerated list?
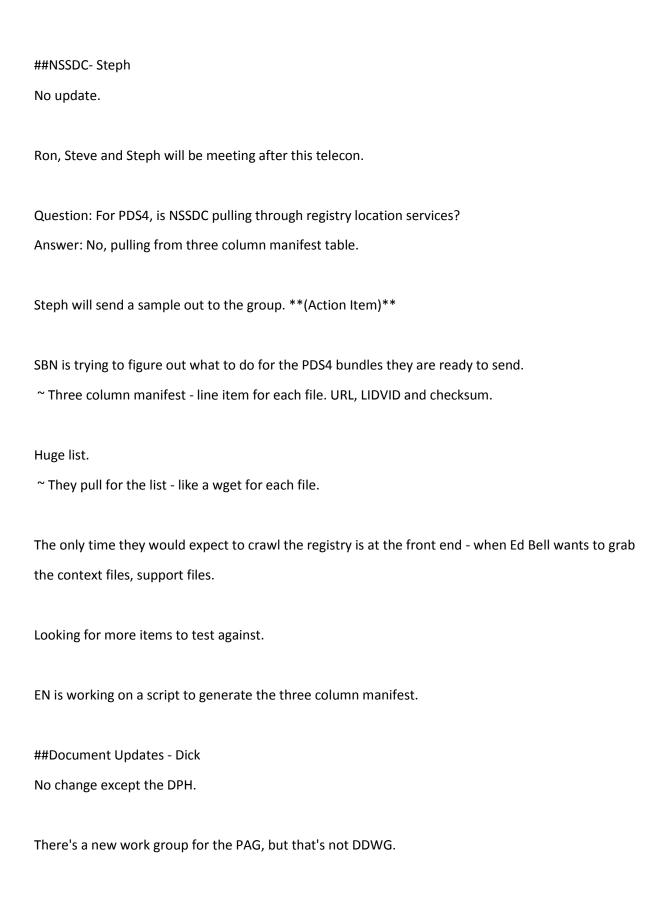Answer: It will all be re-hashed.

CCB-135 - the DPH - had been nixed, the the MC decided to release the current band-aided version, so it's released. Now it's the most recent. The SCR is closed because it's released. There will be another revision in the future, but we need to figure out the document team first. So, it's closed.

Task Statuses

Geometry - Mitch
Made some progress - maybe too much. Ed is not on the call today - will be back on Monday. His input is needed. Need to figure out where progress should stop.

NSSDC- Steph

No update.

Ron, Steve and Steph will be meeting after this telecon.

Question: For PDS4, is NSSDC pulling through registry location services?

Answer: No, pulling from three column manifest table.

Steph will send a sample out to the group. **(Action Item)**

SBN is trying to figure out what to do for the PDS4 bundles they are ready to send.

~ Three column manifest - line item for each file. URL, LIDVID and checksum.

Huge list.

~ They pull for the list - like a wget for each file.

The only time they would expect to crawl the registry is at the front end - when Ed Bell wants to grab the context files, support files.

Looking for more items to test against.

EN is working on a script to generate the three column manifest.

Document Updates - Dick

No change except the DPH.

There's a new work group for the PAG, but that's not DDWG.

Susie, Todd, Eric Palmer, Ron and someone else.

~ Maybe Nancy.

Product Update - Mitch

Mitch is still waiting for input on CCB-77. Will submit it.

SCRs -

CCB-145 - Improve statement of when a new version ID must be used See https://pds-jira.jpl.nasa.gov/browse/CCB-145

Don't want to discuss anything other than CCB-145. It only affects the SR. From Mitch. Two weeks ago we said if there were no comments then it would go to the CCB... but a comment was put in.

Comment was added because confused by what's still missing. SR - not just a formula for LIDs/LIDVIDs - thinks the addition made it more confusing.

Question: Does anyone else thing the proposal is confusing?
Answer: Someone else looked and agrees that even if just a change in label, need to increment the version ID.
~ Another person agrees with that.
~ And another - and putting in the SR - there's been discussion about when to increment the VID being unclear. On board.

Someone always thought that a change to the product means a change to the VID - product is label and object - so surprised by this. Thinks the paragraph will confuse things because it gets into MD5Checksums and things that aren't recorded by the registry - don't think we want all that in the SR.

This avoids us getting first release versions being version three because others were used up in peer

review.

~ Someone told users there are version numbers they could put in their ...(Interrupted)... not the PDS version number.

~ Shouldn't increment each time - in peer review can have zero for the major. Okay to reuse - outside the system - don't want them revved for every review.

~ We certainly are not going to put anything into the registry that hasn't been reviewed.

~ Thought the registry was going to do the tracking.

Question: Who's staging things that have not been reviewed?

Answer: Could have data that isn't in final state, but that still needs to be tracked. Would want to preserve the version even if it didn't make it into the archive.

Everything up to the archive version could be zero. All this says is if it has entered the registry then the VID is taken. Another product can't have the same VID if not identical. Some nodes have copies of other node products - registry will check that they are the same products. If not identical, shouldn't have same VID. Products in progress that aren't registered or exposed to the public don't have the same issue. Maybe the SCR needs to be reworded, but doesn't think it's that confusing.

Question: Anyone else have issues with this?

Answer: Another issue is that we don't have consulting nodes, we have archiving nodes.

Question: Anyone have issues with pushing this to the CCB as written?

Answer: Not all the CCB node representatives are familiar with this.

Question: Would curating node be better?

Answer: We never defined that either. Not sure it makes sense in PDS4 - outside user probably doesn't need to know that.

Another Question: How about responsible node?

Answer: That doesn't solve anything. System is responsible.

~ Someone disputes that. A single node is responsible for each instrument on each mission.

~ Will withdraw that. We have consulting nodes and lead nodes.

Question: Is consulting node okay instead of archiving node? Does everyone agree? Can it go to the CCB?

Answer: Someone would rather it be a footnote.

Another Question: So the SCR will be updated and go to the CCB. Is everyone okay with that?

Answer: (Silence)

**Action Item - Mitch ** will update the SCR.

##CCB-65 Need additional Target Identification/type values See https://pds-jira.jpl.nasa.gov/browse/CCB-65

Also see email from Anne, CCB-65 Notes for DDWG Telecon, Feb. 24, 2016, with attachment.

The email Anne sent is on target type modifications. She has four questions for the group.

Question 1: Is it okay to replace sample with specimen?

(Email says: "Replace 'Sample' with 'Specimen' everywhere? This change was planned after the initial telecons, but CCB-137 used 'Sample' rather than 'Specimen' for new values, so perhaps this change is not desired after all.") Answer from GEO: Sample was in line with existing values - that's why suggested it. Fine with specimen. No strong feelings either way.

Anne will leave it as sample.

Question 2: Clusters - redundant. Types of star clusters- more general or more specific?

(Email says: "We probably shouldn't have all of 'Open Cluster', 'Globular Cluster' and 'Star Cluster' - but which do we keep? 'Open' and 'Globular' are the two major (and apparently until recently the only)

types of stellar clusters. We could drop the more general term and require data migrators to figure out which type of cluster is referenced when migrating - not a particularly onerous task, nowadays. But I wonder if this sort of classification will get the attention it deserves from the PDS cohort? Perhaps it would be better to use the more general term for everything and let users who are kicking over rocks in a planetary archive looking for stellar cluster data sort the targets out themselves based on the target names.")

There is a preference for star cluster - more general term, but no strong feelings.
 ~ Someone agrees - go for more general term.

Question: Any objections to removing the specifics?
Answer: (No)

Question 3: Calibration field to ground based?
(Email says: "Add 'Calibration Field'? This would be used probably exclusively for ground-based data, and refers to a field of stars of known attributes used for calibrating photometry, usually. There are several standard catalogs of these things. I doubt users will search on these targets, so it is probably sufficient to call the field by its catalog name and use the 'Calibrator' type.")

Question: Any strong objections to adding calibration field?
Answer: (Silence)

Anne will add it. **(Action Item)**

Question 4: Exoplanet system value.
(Email says: "Add 'Exoplanet System' - This explicitly indicates extra-solar targets, whereas 'Planetary System', as a PDS target, seems to imply 'a planet and its satellites.'" -AND- "What is the current definition of 'Planetary System'? This is a hold-over from PDS3, but I couldn't find a PDS3 target object that had this TARGET TYPE value. (Not surprising - you can't search on it, so I'm trying to guess where I

might find such a thing.) If we don't need it, we should get rid of it now before it bites someone...")

Planetary system is for solar system, which PPI uses for radio science.

 ~ Thought it was for planets and moons.

 ~Whoops! Withdrawn.

Question: So, a planetary system is like the Saturn system or the Jupiter system?

 ~ So should be exoplanet system.

 ~ It exists in the solar system, but really looking at a star. So, if no objections, will update the SCR.

Action Item - Anne will update jira.

It's okay if this does not make it in to 1.6. Will take at least another build to get all of ground based covered.

##CCB-1xx

See email attachment from Lyle - CCB-1xx Remove enumerated list.docx - that came with this meting agenda.

This is a proposal for a new SCR.

Originally, CCB-91 - Change Instrument.type to Not Enumerated (See https://pds-jira.jpl.nasa.gov/browse/CCB-91)

Instrument type was a poorly enumerated list. Richard Chen proposed several additions, which were discussed and argued about for several months. Last March, we agreed that it should not be an enumerated list - sent it to the CCB. CCB got confused because the SCR had an enumerated list - requested it be resubmitted. So, that's what this is. Can send this to the CCB - say that DDWG has a

consensus that this is what we want or we can argue again.

GEO discussed CCB-148 (Add 'Weather Station' to the enumerated list of permissible values for attribute Instrument.type. See https://pds-jira.jpl.nasa.gov/browse/CCB-148) with Tom Stein. Context products are very important internally - not sure how search will work, so this argument doesn't matter. No point discussing this until EN tells us what will actually happen with instrument type.
 ~ Someone agrees. Went back to CCB-91 - had a fairly extensive note- were concerned that the current list wasn't appropriate. They were concerned about the usefulness of instrument type. They agree with Lyle, but there are other approaches that have been proposed. Need Sean to tell us the best approach. Agrees that we need more information and need to re-think the design, which probably means we need a team.

A team won't solve this. The list is short. If this will take more then a month than ATMOS will submit several separate SCRs to add several individual values - won't be a list to approve together.
Will send them all to the DDWG too.

The CCB won't be supportive until we address what we were requested to do. Just making it not an enumerated list isn't a satisfactory approach. Need to explore options.
 ~ Not sure. Think they agree it shouldn't be an enumerated list.

Question: Isn't not an enumerated list a better solution?
Answer: Need broader types.
Another Question: The CCB didn't want that. Don't get it. What do you want this to be? Completely useless as it is...
Answer: We all have our own ideas - need to hear from EN what the search tool is.
 ~ A long enumerated list will be like PDS3.

The requirements aren't clear. Not sure what the ultimate design is, but need the requirements for context products, search and all so that so we can make rational decisions.

Question: Do we want a tiger team to design some requirements?

Another Question: To come out with a new way to define instrument type? Not sure what the solution is...

Answer: Just want the list to not be enumerated. No change to the model. Just want responsible node to make the right choice for what goes in this field - not the data provider.

Wasting time. The CCB not willing to make it not enumerated until we offer a better solution.

Suggestion - part of the problem is that searching is still nebulous, but will do what nodes want it to do - will use attributes for string matching. Can imagen people searching for a certain instrument type or specific instrument. Don't think it's urgent now. Thinks defining instrument in terms of attributes is the way to go. Maybe need to do some additional design work. Tiger team is probably not a good idea, but could make type an un-enumerated list and design something that defines instrument in terms of attributes.
 ~ Someone likes that. If ATMOS wants to send in an SCR to make instrument type not enumerated list now, should ask Sean first - make sure he isn't using it.

Action Item - Lyle will call Sean.

The metadata consistency group considered instrument type as a possible search field that can be harvested. Sean has seen that.
 ~ But it's not part of the data bundle.
 ~ We need to go back to the requirements. We shouldn't be making patches - shouldn't be discussing this.

One of the design principals of PDS4 was that enumerated lists shouldn't be more than a dozen values.
 ~ That has no basis in fact.
 ~ It's been discussed in the DDWG telecons and face to faces. Old mistake from PDS3.

~ That was faceted based search.

~ The proposal will please everyone. Proposing to make non-enumerated, then define requirements, then redesign. In the meantime remove enumerated list.

~ Someone likes this - unless Sean is using the enumerated list. It comes back to what Sean is doing. It's a CCB decision to make non-enumerated, but we do need to explore alternative approaches.

Question: So instrument type values managed by nodes?

Answer: That's just a proposal. Not sure if instrument type is even going to survive.

Question: Instrument is a common level attribute - everyone has to agree. How would it be managed? That list is an enumerated list. New concept - node list - just adding something to the design. Not seeing how this solves anything.

Answer: No. That's not what was suggested. The argument for removing it now - current search uses instrument type - very corrupted results. Would not lost functionality based on the terrible results.

~ PDS3 didn't have the relevant values.

~ Even if we stop using type as a facet right now there's not a huge negative impact. Just shouldn't do this in a big rush.

There will be maintenance no matter what. Can't move forward without understanding requirements. Don't see a consensus. Doesn't understand.

~ We are trying to define a plan of attack.

~ Plan of attack could be status quo. ATMOS needs to add more values.

The correct solution for ATMOS was 'meteorology' and the CCB refused it.

There are ways to handle this. The idea that PDS4 search fails cause of PDS3 means we need to do more clean up.

Being told that meteorology was the wrong value was wrong.

Back to the real topic - we really should table this.

Back to CCB-65 for one second...

~ Richard looked up planetary system - it's only being used for solar system. The definition could be rewritten if that is desirable.

~ Yes.

Action Item - Anne will add to the SCR.

##CCB-132 - Units of Map Scale is Badly Defined See https://pds-jira.jpl.nasa.gov/browse/CCB-132

Someone has significant job security because of this one. Luckily, it continues to be commented on. Very close.

People keep chiming in on this. Think in two weeks we should vote. People need to move on. It's crazy we can't resolve this.

_____

Question: Is there anything else anyone wants to discuss?

Answer: There are several that we could close out with a two hour DDWG. We could also shoot people who keep turning them in.

~ We also have the SETI issues and a long list from Santa that also needs to be worked on. These are very big issues that we don't seem able to get to.

We should have a F2F in Los Angeles - force Sean to be there. Seems like a three day F2F could get stuff done.

A request was submitted to the powers that be. No word back yet.

Pick up in two weeks. ATMOS will have feedback from Sean.