# Meeting Minutes from the DDWG telecons:

**DDWG Notes 2024-01-04** 

DDWG Notes 2024-01-18

**DDWG Notes 2024-02-01** 

**DDWG Notes 2024-02-08** 

**DDWG Notes 2024-02-15** 

**DDWG Notes 2024-02-29** 

**DDWG Notes 2024-03-14** 

#### DDWG Notes 2024-01-04

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title: DDWG Notes 2024-01-04

layout: default date: 2024-01-04

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January 4, 2024

Notes by Debra Kazden

Known Attendees: M. Drum, L. Huber, T. Hare, S. Hughes, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin, B. Semenov and R. Simpson Known Observers: A. Bailey, P. Lawton, M. McAuley, J. Padams, E. Schaefer and M. Tiscareno

## ## DDWG Agenda

(Included in email sent January 2, from M. Drum, Agenda for January 4, 2024)

### ## Front-matter/What's new

- 1. We're moving to GitHub: <a href="https://urldefense.us/v3/">https://github.com/NASA-PDS/PDS4-CCB/issues</a>;!!PvBDto6Hs4WbVuu7!PbF7sHzZR7-nLB5UKmGB0abiuRu4qwz9GVnFq47nclHRKC-8pUth4aE98ITGkGZBp1Qo4VoaAaSHlCssalhemTqQH\_p0qPTM\$
- a. New issues should go there; active ones may need to be copied b. Jira is being frozen tomorrow (01/05) c. Jira will be migrated to new instance and shut down by next meeting d. Proposals from the F2F have been created there 2. DDWG Chair: Give congratulations/condolences to Joe Mafi!
- 3. SCR Freeze date: 2/12/24
- \*\*(Discussed)\*\*

## Ready for Vote

CCB-358 – Instrument Package Context products – Matt Tiscareno/Mike Drum

- The question around definitions seems to have been a misunderstanding, so no changes were made there \*\*(Voted to pass)\*\*

#### Tier 1 issues

- ~ (New issue) Define "backwards compatibility" and how it works with major version transitions.
- ~ CCB-356 Update Constraints on Author/Editor Lists (Ron Joyner)
- Discuss next steps
- ~ CCB-366 Schematron/Schema Version Conflict
- Need volunteer to provide language for SR ~ CCB-367 Provenance LDD Using PROV-DM Steve Hughes
- Still looking for use cases
- ~ CCB-164 Display Settings not required for images -- (IMG)
- Trent will take another look at this
- One issue was the one-to-many reference to make sure it made sense for multiple image objects
- ~ CCB-211 XML/schema based files as archival data Jesse Stone, Mike Drum
- \*\*(Some Discussion)\*\*

#### Tier 2 issues

- ~ Product Metadata Errata?
- Create a supplemental label to live next to original label, that can add aliases and supersede metadata

## \*\*(Not Discussed)\*\*

Parking lot – need a driver!

~ CCB-326 - Inconsistent Direction on How to Use Discipline Facets ~ RS: 259/281 (see new attachment to CCB-281) (on hold) ~ CCB-364 - Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

Next meeting: 1/18/24

# DDWG

## Front Matter

Everyone should have gotten email from Jordan. Let Mike know if you didn't. It has instructions to get on-boarded for the new GitHub and a time line for the transition. They are freezing jira tomorrow. Tickets will be migrated. Will be available to a few people.

Question: Are people responsible for migrating their own tickets or is EN responsible? Answer: Someone believes EN is handling it, but it hasn't been discussed. People might want to move anything urgent themselves.

- ~ Some EN folks just met and discussed this. Tickets are being moved as needed. They didn't discuss who would do it.
- ~ It's tricky because it's a manual process. No need to move everything at once. Think migrating the ones needed now is a good plan.
- ~ EN folks talked about dumping them all into an Excel sheet or something.
- ~ Mike actually did that, but it doesn't include all descriptions and everything.
- ~ We would want a complete dump.
- ~ It will be figured out.
- ~ Someone is worried because GitHub doesn't have all the features we are used to.
- ~ If someone could write up how to do it... Guidelines, so we can make sure people do things in a similar way.
- $\sim$  Good idea. In the meantime, if people want their ticket moved they should reach out to Steve, Ron or Jordan.

Joe Mafi will be the new DDWG chair after the next build freeze. We want to thank Joe for taking this over. The next freeze, for version 14.1, is February 12. Only a handful of meetings before that. We should discuss goals today.

- ~ Congratulations to Joe, although he's been around long enough to know better.
- ~ Thanks to Mike for all his work. We are in good shape, although it looks like we have some changes ahead.
- ~ Mike is getting out while it's still easy. Will still be around as a passive voice. Voices thanks to Joe. One of the last things that Mike would like to tackle is backwards compatibility. Wrote a presentation on his view and how he thinks it should work.

#### # Ready for Vote

## CCB-358 – Instrument Package Context products We actually need a new title for this ticket. Will discuss that later. Deprecated format, not backwards compatible. Checked history and saw there was some remaining confusion around things like granularity. Spent time yesterday changing the definition of type. Checked the examples. Would like to know if there are any questions.

~ (Silence)

~ Matt isn't here yet and he is a big part of this ticket.

Question: Any last comments before we vote?

Answer: (Silence)

\*\*The Vote for CCB 358

ATMOS - Abstain

EN - Yes

GEO - Abstain

IMG - Yes

IPDA - Not Here

NAIF - Abstain

PPI- Yes

RMS - Not Here

RS - Abstain

SBN - Yes\*\*

A lot of of abstentions and people absent, but it looks like a pass.

General Question: What's the precedence for un-depracating?

Answer: We did it once - for array 1D.

~ Someone will write something up to do with spectral.

~ Good Question. We should discuss backwards compatibility.

## Tier 1

## Backwards Compatibility

Mike's Backward Compatibility Presentation. (There is a link to the slides in the agenda)

#### Slide 1 - Problem Statement

~ We need to be wary of making incompatible changes to the IM. Heavy impact. There are tools to help, such as the deprecated flag to work with or the nodes working with DP's, semantic versioning and having major versions.

Slide 2 - The Backwards Incompatibility Process - from Python backwards compatibility rules.

Source: <a href="https://urldefense.us/v3/">https://peps.python.org/pep-0387/\*backwards-compatibility-rules</a> ;lw!!PvBDto6Hs4WbVuu7!PbF7sHzZR7-nLB5UKmGB0abiuRu4qwz9GVnFq47ncIHRKC-8pUth4aE98ITGkGZBp1Qo4VoaAaSHlCssalhemTqQH1xaKRW2\$

## Slide 3 - Proposal

Will turn this into a ticket about how the DDWG should approach non-backwards compatible changes in all versions going forward. Would have semantic versioning and a cadence for new versioning. Includes a process for when to make non-backwards compatible changes.

Question: Two minor releases, not point releases? Answer: Right. That refers to semantic versioning.

- ~ Someone said they are losing their understanding of major and minor versions. Things are getting fuzzy here.
- ~ Semantic versioning would get rid of the third digit of our four digits. 1.14.0.0 would become 1.14.0. The fourth zero was for patch. In that type of release could adopt backwards incompatible changes, which we have been doing. The idea, generally, had been after version 2.0 that there would be no backwards incompatible changes. Would lose transition periods. Would only have major versions. More of a burden. The hope is to rethink the idea that we would never do backwards incompatible changes. ~ So, basically, if we want to introduce something, we would deprecate something, then it would sit there for many minor versions and at the next major version it wouldn't work anymore. Think we are saying things will be deprecated awhile and then go away. ~ Correct.

Question: But if we can do the old way and the new way - is that backwards compatible? Answer: This is where the language has tripped us up.

- ~ So, temporarily compatible until remove the deprecation. Don't understand why we would do major versions where there's no change that requires it.
- ~ Fair comment. Concern is that we don't want a new version every time there's an incompatible change.
- ~ Someone doesn't think there will be that many. This is the first.
- ~ Someone else thought we were going to look at it every few years to access the necessity.
- ~ That's different. Accessing is fine.
- ~ We should know ahead of time if something will be backwards incompatible.

Another point, in the process of proposing a non backwards compatible change - need a robust explanation of why it's necessary and an assessment on the impact of the change. Need to make sure we really need to have it if we will need to change pipelines and re-migrate.

- ~ Need to prove it's necessary. That should be elevated several magnitudes.
- ~ Someone agrees. It will be hard to come up with rules for justification, but that's part of the ticket. Need to weigh if the new thing meets needs, is too big a burden, etc. On the point of major versions, will be it's own ticket because it will be a whole thing. We have discussed it. Sees it as very important that new DPs aren't coming into a model full of old, redundant features. Need to access needs. Not saying we have to do it to do it, but think it's our job to improve the model when we can. Two to three years is speaker's expectation of how often we would need to do it.

Every time there's a major version there is an impact, so we are kicking the can down the road. The model just keeps getting more complicated. Nice to wipe the board clean, but there will be impacts. ~ Always impacts no matter what. Yes, kicking the can, but showing people, warning them that this is coming. Another possibility besides time frequency is number of incompatible changes. (See the chat at the end of the notes).

~ Good call. Can pick a threshold.

Another issue might be the need to have a way for community communication, for feedback and to advertise how people outside the DDWG can register their concerns.

- ~ Someone agrees.
- ~ Something trackable.

- ~ We could do something with mailing lists to notify people. Could create a PDS4 users list.
- ~ Someone doesn't have any good ideas for solutions, but thinks we should have something.
- ~ Another person likes the idea of a feedback portal on the model, what the models needs, etc. This can be turned into a new issue on GitHub so we continue the discussion.

Question: Looking at 4A in presentation, new class a new member, so assumes there would be a new schematron rule, right?

Answer: Yes. Would not make it required at time of adoption, but at major.

Another Question: Is there a way to trigger a warning that something will be removed?

- ~ That's what someone was getting at...
- ~ The new chair of the DDWG should collect all of this feedback.
- ~ New chair strongly disagrees.

Someone had two philosophical notes. First, appalled that we treat the archive as something to change every few years. Not right. In SPICE history there have been lots of deprecated features, but none have been removed. Community first idea is why they are still kicking.

~ Another person respects that. Doesn't want to willy-nilly ruin things. Will move this to GitHub and put it on the agenda, with the new ideas added and get this moving forward.

## CCB-356 - Update Constraints on Author/Editor Lists

Comments have been posted about specific requirements from the CCB. Still worth doing once we have a better grasp on how to do backward incompatible changes.

Question: Does anyone feel the fire and want to take this on for now? Or we could get back to this later... Not seeing any fire.

Answer: Someone wants to know if we are just going to punt to a later date.

Another Answer: Yes.

Another Question: Were there a lot of changes for this?

Answer: Was a model change, but people have other things to work on.

- ~ Someone worked on it, but it became a big mess. Comments from the CCB asked for a lot of examples. Someone who is really hot on this can take it on. Don't want to start my GitHub experience with this.
- ~ Unclear we have any ability to push back on something that's not reasonable.
- ~ Someone made that comment in jira.
- $\sim$  EN will copy that to GitHub. We can take it to the MC if necessary. \*\*(Action Item EN)\*\*  $\sim$  Delaying this will cause more problems for getting it fixed.
- ~ Exactly. We'll get it done.

Question: Justification is missing. If it's that critical, shouldn't we re-migrate everything to take advantage of this?

Answer: Critical for the future. A bug in our IM. Not designed properly in 2010, but highly critical.

- ~ PPI doesn't have resources to re-migrate all of our holdings.
- ~ Someone else agrees this is a bug in the IM. When it went in they thought it wasn't good.

CCB wanted an attribute to specify ordering. That's a simple change that we should vote on - if we will do that before we push back to the CCB. Less trivial to order.

- ~ Someone agrees. A bit in the weeds, but ordering was a problem. Small change.
- ~ Another person is unclear on why the authors wouldn't be put in the order listed, but agrees another

attribute would solve the problem.

Regarding our relationship with the CCB - we are the lower house. The CCB is the upper house. It's political. We are not required to do what they say, but we need to come up with something they will approve.

- ~ We can't bypass the CCB and go to the MC.
- ~ That would be the nuclear option.

## CCB-366 – Schematron/Schema Version Conflict

We need a volunteer to provide language for the SR.

#Meeting Chat

from Jordan Padams to Everyone: 11:05 AM

+1

from Jordan Padams to Everyone: 11:07 AM

Do we have a # of backwards incompatible changes as a gate?

from matt to Everyone: 11:11 AM

I just joined. Apologies, a bad case of coming back from vacation.

from Jordan Padams to Everyone: 11:18 AM We could use PDS4 Information Model Discussion

Board: https://urldefense.us/v3/ https://github.com/NASA-PDS/pds4-information-

model/discussions/\_\_;!!PvBDto6Hs4WbVuu7!PbF7sHzZR7-nLB5UKmGB0abiuRu4qwz9GVnFq47ncIHRKC-

<u>8pUth4aE98ITGkGZBp1Qo4VoaAaSHlCssalhemTqQHyfdpQNG\$</u>

from matt to Everyone: 11:21 AM

Perhaps this has been mentioned, but I presume that point #3 will only come to pass if and when

incompatible changes have arisen.

from Jordan Padams to Everyone: 11:31 AM

Have to jump to another meeting. Thanks all. Great discussion

#### DDWG Notes 2024-01-18

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title: DDWG Notes 2024-01-18

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January 18, 2024

Notes by Debra Kazden

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

### ## DDWG Agenda

(Included in email sent January 16, from M. Drum, Agenda for January 18, 2024)

### ## Front-matter/What's new

- 1) New issues in GitHub:
- a) CCB#12 Document Nuances for Reusability of Generic LDD Classes/Attributes
- b) CCB#13 Ensure file name and directory path name adhere to SR
- 2)CCB-358 Instrument Package Context products Matt Tiscareno/Mike Drum
- a) Undergoing review by CCB. Not a slam dunk.
- 3) SCR Freeze date: 2/12/24
- \*\*(Discussed)\*\*

## Ready for Vote

- None this week

## Tier 1 issues

- CCB#4 Backwards Compatibility policies Mike Drum Presentation linked in email: Backwards Compatibility
- CCB#3 Adopt Semantic Versioning with version 2 transition Mike Drum
- CCB-356 Update Constraints on Author/Editor Lists (Ron Joyner) EN is taking this over
- CCB#10 Schematron/Schema Version Conflict Need volunteer to provide language for SR
- CCB-367 Provenance LDD Using PROV-DM Steve Hughes Still looking for use cases
- CCB-164 Display Settings not required for images -- (IMG)

### Trent will take another look at this

One issue was the one-to-many reference to make sure it made sense for multiple image objects

- CCB-211 XML/schema based files as archival data Jesse Stone, Mike Drum
- \*\*(Some Discussion)\*\*

### Tier 2 issues

- Product Metadata Errata?

Create a supplemental label to live next to original label, that can add aliases and supersede metadata \*\*(Not Discussed)\*\*

## Parking lot – need a driver!

- CCB-326 Inconsistent Direction on How to Use Discipline Facets
- RS: 259/281 (see new attachment to CCB-281) (on hold)

- CCB-364 - Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

Next meeting: 2/1/24

# DDWG

## Front Matter

Before we really begin, a technical question to the group. Someone has a bunch of PDFs to migrate, has Acrobat, but wants to know if there is another tool that can be used to convert to PDF/a level 1h

~ SBN has instructions and tools on their home page.

The transition to GitHub is underway. A number of issues have been migrated. The new format for the name should indicate if something is in GitHub versus jira. Jira might still be up.

There are two new issues, things to clarify.

- ~ Someone commented on the second one (CCB#13). Thinks what's being asked for is a forward slash, but that changes the standard. Not ready to do that. It would mean we could have multiple levels of sub-directories. Opens a lot of potential new problems. Not just a matter of cleaning up validate.
- ~ Someone thought it was to allow full directory trees.
- ~ No, that's a different use. Don't think we ever expected whole directory trees.
- ~ Good point. We should clarify the utility of directory path name.
- ~ Sub-directories work, not trees.
- ~ Would need slash for child directories.
- ~ Would have label with a sub-directory parallel to it, could put children, like GIFs there.
- ~ Someone is confused.

All directory names are relative to the label.

- ~ Someone is looking at 19.14 in the SR. It allows slashes.
- ~ Someone else though we only allow LIDs.
- ~ PDS4 doesn't say much about directories.
- ~ Only for documents.

Question: Where does directory path occur?

Answer: In document labels.

- ~ Thought PDS4 is completely agnostic to file directory path.
- ~ The document people wanted it.
- ~ Some parts of documents are more complicated. This is to help organize complicated documents.

The concern is that it's not just updating validate. There are some SR issues here.

- ~ In The IM specification, directory path name is ASCII Short String Collapsed, which allows slashes in the formation rule.
- ~ This might be a battle that's already done.
- ~ Not sure what's in the SR, but the formation rule allows the slash.

Question: If there is a sub-directory of GIFs would you individually label those?

Answer: No. You would have a directory with a label with lots of files that are part of one document.

Could have sub-directories for GIFs, but everything would be covered by one label in a parent directory. Some of the objects might have directory path name.

Another Question: How do you label them?

Answer: Path name is GIF. System glues them together with a slash.

- ~ So there's a resident directory with an implied sub-directory.
- ~ Nothing is implied. Need a directory path name.
- ~ We need some agreement. Need to clarify that it all makes sense. There might be a standards issue here.
- ~ Someone tried looking in GitHub, but it was harder to navigate then jira.

The question is how many people agree we don't need a slash.

- ~ Someone agrees, but we should see what our documents say and then have a discussion.
- ~ Another person found documentation that included slashes. Need to clarify how directory path name is to be used and validate issues.
- ~ Someone else is pretty sure slash is in all the relative paths. Thinks it's allowed. It would be a change if we remove it.

Someone is trying to follow the discussion. The SR has directory path name ASCII Short String Collapsed. Maybe that's an issue. Also, GitHub says directory path can have a dot, but not sure that's in the SR. Need to clarify if a dot in directory path name is allowed.

- ~ Relative path for where you're at starts with a dot.
- ~ SR doesn't include the dot. In Issue 13 the dot is included.
- ~ It was added for issue 13. It's open for discussion.
- ~ If it's allowed, the SR needs to be updated. Data type needs to be clarified too. Easier to validate against. We need more research on this to move forward.
- ~ Someone is not sure they followed all this, but thinks we could put all files described by one label in a directory.
- ~ Another person wants to know if they are suggesting nesting labels.
- ~ No. If many files all described by one label, could put them in the same sub-directory so they are not mixed with a bunch of other files. Since PDS4 is directory agnostic.
- ~ Someone is not seeing the value. Registry should be able to find all parts of the product. Is doing lots of restorations with lots of files. Trying to break into several directories would be a lot of work.
- ~ There's no requirement. Up to the DP.

Maybe people could look and see if this has been used. Easier to change things if they haven't been used.

- ~ Reporter found examples of use, but not sure if it was used legally.
- ~ The problem was during validation.
- ~ That's surprising.

The freeze date is coming up. February 12.

- ~ Someone wants to discuss what we can do before the freeze.
- ~ We will.

The CCB is discussing CCB-358 - instrument package. They are meeting next week.

~ Someone hopes this won't come back to us. We'll see. Believes the issue is understanding the

problem we want to solve and why we want to solve it that way.

~ Someone else agrees. We will have to wait and see where this goes. There is also some hesitancy of going forward with something that so many people abstained from or weren't here to vote on.

The SCR freeze date is less than a month away. Only one meeting is scheduled. The freeze date is for CCB to approve SCRs, not for documents, but there is a bit of wiggle room. We could meet February 8 once more. That would probably be okay.

- ~ The 12th might be a holiday for some people. Lincoln's Birthday.
- ~ Not a federal holiday.
- ~ It's not clear that any SCRs are close enough to get through in the time left. Backwards compatibility policy won't be a short discussion. Semantic versioning is not tied to the build.

Question: Can we look at CCB-356? An email was sent out this morning to ask for comments on the suggested changes. They were an attempt to address the CCB issues.

Answer: (Yes)

# Tier 1 issues

## CCB-356 - Update Constraints on Author/Editor Lists

We definitely want to get this one out. It should be our number one priority.

Question: What does the DDWG need to do?

Another Question: Where is the pressure to get this through coming from?

Answer: EN.

Another Question: What did EN volunteer to do for this?

Answer: Jordan identified this as high priority for the DOI group.

Another Question: When looking at the list of SCRs, CCB#10 - what is that?

Answer: Ambiguous in the DPH and SR in the case of schema and schematron having different

version.

~ Okay.

So, for author list, an updated PowerPoint was sent out by Ron Joyner, CCB-356 enhancements, on January 18, 2024. Sharing that now.

No changes to slides 1,2,3,4 or 5.

Slide 6 - added sequence number. An integer. Already in the IM. Could use in the author, editor or contributor lists.

Question: Sequence of authors or contributors in total? Could it have a first author? Answer: Each would be independent sequences. If we want to interleave then we would need to make some changes.

- ~ Someone thinks this works.
- ~ A definition was provided.

Question: Any questions?

Answered with a Question: Is this required?

Answer: Optional.

No changes to slide 7.

Slide 8 - One CCB comment was that they wanted to interleave author and organization. Added a blue box to show it can already be done.

Slides 9 - 13 - same, added sequence number in each. Blue boxes.

Slides 14 and 15 - no changes.

Slide 16 - added a definition for sequence number. It's kind of ambiguous. We might want to modify it. Also added an example.

- ~ Someone commented that we should note if sequence is not used that the order in the label is the sequence.
- ~ Someone else said that nothing is supposed to be assumed in PDS4.
- ~ Maybe we should make this required.

Question: Are there times where it's not an explicit list or it shouldn't be?

Answer: (Silence)

~ Author list always has some ordering, even if it's just alphabetical.

Another Question: Interleave or separate author, editor or contributor?

Answer: Separate. Contributors never get listed in citations, usually in the acknowledgements. Not sure how that got into the citation list.

~ Someone would love to change that.

Question: Back to slide 2, what we have now. Don't see contributors, so we are adding it?

Answer: Yes. New class.

Another Question: Who asked for that? Answer: It might be from Datacite. ~ Someone wondered if it's ordered.

Question: On slide 4. We were just discussing that EN needs this, but wants to know exactly what. Is it so that edge cases can be archived or that we needed an ordered list everywhere? Edge cases with a comma can be worked.

Answer: Comma is a delimiter within a field. Not how we do it for PDS4 modeling paradigm for separating things.

- ~ There's a lot of critical information that we aren't getting, like orcID. It gives us better legitimacy as an archiving organization.
- ~ Someone agrees. Had a conversation about the importance of orcID because names change. OrcID could be added and still be backwards compatible, but we need to understand the purpose of this author list and if this overhaul is needed.
- ~ Valid argument, but don't think we originally considered that. Things have changed.
- ~ If EN is saying we must do this, then fine.

EN wants all the extra metadata. Don't see a clean way to do that in a purely backwards compatible way. Should go through the list of what the CCB wanted, which we mostly have, but they also want

examples. Don't think a re-vote is necessary.

- ~ A re-vote is totally necessary if we are rewriting the SCR.
- ~ Someone agrees.
- ~ Another person is working on an example.
- ~ The CCB wanted to see how to format a reference for major publications, to verify it could be done for the most common publications. Like for JGR. They want to see that this has all the information they need to provide references.
- ~ Someone thought they wanted a lot more, but that might be a good way to approach the usability of this.
- ~ This is mostly for documenting producers of data sets.
- ~ Yes, but also for journal articles. A much bigger job.
- ~ Someone is happy to help provide some examples. Don't think every node needs to do it.

Question: With so much pressure to get this done, what is the impact on EN if this misses this build?

Answer: Jordan is extremely interested in getting this into this build. He's willing to work with the CCB.

- ~ There would be six months of products that wouldn't get to use this that might need to be redone.
- ~ Someone assumes that would have to be done anyway. Would like to know if we are talking about half a dozen or four dozen.
- ~ Someone else thinks it might be wanted for the website, to be able to display it properly.
- ~ They wouldn't need that in the next six months.
- ~ Another person has an idea on why, but we are past time now. We can ask Jordan to email us why he is pushing for this. Think we can vote next time or have another meeting.
- ~ It's unclear why we would need extra time.
- ~ Just wondered what the impact is if we don't get this through. Would like to do it carefully, thoughtfully, not just push it through.
- ~ Understands, but not sure what the DDWG needs.
- ~ Would like to see many examples. Concerned about documents and having information in multiple places.

Someone is asked if they would like to make the examples.

- ~ Says they could find someone to do it, but need something to use. Schema. So they know they were done right. It's kind of a chicken and egg thing.
- ~ We should know what to do.

Not hearing any substantial wishes for changes. We can discuss this again and vote in two weeks.

- ~ It would be nice to have people do examples in different contexts and have instructions on what to use. Maybe the thing that Ron just sent.
- ~ Someone thinks we need to use what Ron just sent. There isn't anything else.

Question: Did we decide if this is backwards compatible?

Answer: Not in the long run, but along side.

- ~ Anyone using version 1 won't meet the EN requirements.
- ~ We're not going to immediately require new things.
- ~ Temporarily backwards compatible.
- ~ And what we have been using will be deprecated.

People will work on examples.

~ We are overtime.

The IM isn't perfect. We put it out there and started using it.

- $\sim$  This is not our first non-backwards compatible change. Doubt it will be the last.
- ~ Yeah, it won't be the last.

DDWG Notes 2024-02-01

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February 1, 2024

Notes by Debra Kazden

Known Attendees: M. Drum, E. Guinness, L. Huber, T. Hare, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi and R. Simpson Known Observers: A. Bailey, P. Lawton, S. Loftin, E. Schaefer, M. Seritar and M. Tiscareno

## ## DDWG Agenda

(Included in email sent January 30, from M. Drum, Agenda for February 1st, 2024)

### ## Front-matter/What's new

- 1) pds-jira.jpl.nasa.gov will be shutting down on 2/1
- a) Export of history here: <a href="https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-CCB/tree/main/data\_\_;!!PvBDto6Hs4WbVuu7!PP0HOtiDEewn4f\_c1xlfW5AA2\_NihjzqhTuobUoHO8">https://github.com/NASA-PDS/PDS4-CCB/tree/main/data\_\_;!!PvBDto6Hs4WbVuu7!PP0HOtiDEewn4f\_c1xlfW5AA2\_NihjzqhTuobUoHO8</a>
  B4XKDntWDXkqLql7AtQK73v7QqQcE4sSGfoE90\_H8cvlRaYkFKv\_bF\$
- b) As-needed, a select group of people can access the backup

here https://urldefense.us/v3/\_https://nasa-

pds.atlassian.net/jira/software/c/projects/CCB/issues\_\_;!!PvBDto6Hs4WbVuu7!PP0HOtiDEewn4f\_c1xIfW5AA2\_NihjzqhTuobUoHO8B4XKDntWDXkqLqI7AtQK73v7QqQcE4sSGfoE9O\_H8cvIRaYi0JCt02\$

## 2)New issues in GitHub:

- CCB#16 Allow micro amps and nano amps as units of current
- CCB#18 Never finished CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational)
- CCB#19 Never finished CCB-325 documentation updates (Title: Support for video and audio as product observational)
- 3) CCB-358 Instrument Package Context products Matt Tiscareno/Mike Drum
- Undergoing review by CCB. Not a slam dunk.
- 4) SCR Freeze date: 2/12/24
- \*\*(Discussed)\*\*

### Ready for Vote

- CCB-356 Update Constraints on Author/Editor Lists Ron Joyner/Dick Simpson
- Latest proposal here: CCB-356-proposal-v3-20240108.pptx
- Rationale for urgency Please read!
- Go over examples and discuss Ed's latest concerns (email on 1/30)
- Vote if we feel ready; if not, vote in 1 week
- \*\*(Discussed)\*\*

#### Tier 1 issues

- CCB#4 - Backwards Incpatibility policies - Mike Drum

Presentation: Backwards Compatibility

- CCB#3 Adopt Semantic Versioning with version 2 transition Mike Drum
- CCB-356 Update Constraints on Author/Editor Lists (Ron Joyner) EN is taking this over
- CCB#10 Schematron/Schema Version Conflict Need volunteer to provide language for SR
- CCB#12 Document Nuances for Reusability of Generic LDD Classes/Attributes
- CCB#13 Ensure file name and directory path name adhere to SR
- CCB-367 Provenance LDD Using PROV-DM Steve Hughes Still looking for use cases
- CCB-164 Display Settings not required for images -- (IMG) Trent will take another look at this One issue was the one-to-many reference to make sure it made sense for multiple image objects
- CCB-211 XML/schema based files as archival data Jesse Stone, Mike Drum \*\*(Some Discussion)\*\*

#### Tier 2 issues

- Product Metadata Errata?

Create a supplemental label to live next to original label, that can add aliases and supersede metadata \*\*(Not Discussed)\*\*

### Parking lot – need a driver!

- CCB-326 Inconsistent Direction on How to Use Discipline Facets
- RS: 259/281 (see new attachment to CCB-281) (on hold)
- CCB-364 Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

Next meeting: 2/8/24

#### # DDWG

Prior to the official start of the meeting there was a discussion about determining if PDFs are PDS4 compliant.

- ~ Someone said that apparently the validate tool does a better job of determining if a PDF is compliant or not. Acrobat just says yeah, we think it is.
- ~ So the question is how to convert them.
- ~ Ron can help.
- ~ Concern is that validate doesn't like the ones in question, and Adobe and Ghost script aren't working.
- ~ They might have to be regenerated from a Word file.
- ~ These are nearly 20 year old PDFs. Don't have the original source.
- ~ Send Ron the link that is being used to validate.
- ~ Another person has also had this issue. Suggests Ubuntu and (ask Trent).
- ~ JPL won't allow him to install that. They barely allowed him the newest Java.

### ## Front Matter

Jordan asked Mike to share the links again for GitHub. Jira is being shut down today. People can let Mike or Jordan know if they need access.

- ~ Someone said the main issue seems to be getting the attachments.
- ~ Jordan is refining his way of grabbing it all. The second attempt was better. Attachments will be

elsewhere, where only ten people will have access.

- ~ Someone knew this was going to be a pain.
- ~ It's unclear how easy of difficult it will be to bring over the attachments.
- ~ If you zip them up, you can do it.

A couple of new issues were added. Issues 16, 18 and 19.

##Issue#19 (Never finished CCB-325 documentation updates)

It was noticed that some documents weren't updated and that we had an lien from CCB-325 (Support for video and audio as product observational), which was approved about a year ago.

- ~ It's not clear if we need to vote on this.
- ~ Reporter wasn't sure where to put this. Need documentation updates to go somewhere. Unclear if there's someone working on the Concepts Document and the DPH, but we need this documented in there.
- ~ Ron's the stuckie now.
- ~ This is low priority, but it's work across the board.

Question: A zip of all the documents?

Answer: Yes. GitHub is particular about file extensions, so had to zip it up. Years ago our websites were hacked by a JPEG, so GitHub is very particular.

Officially, we never voted on the lien to add encoded video to file area ancillary and file area browse, but everyone agreed we needed it.

~ We can do an evote.

Question: Is it in product observational?

Answer: Yes, and product observational supplemental.

- ~ Sounds like a bug, so we should let the CCB know, but they aren't required to vote.
- ~ The CCB wanted this lien.
- ~ Someone thought liens were before the vote and part of the vote.
- ~ We let this one go without the lien.
- ~ We will vote on the lien and let the CCB know.

#CCB-358 – Instrument Package Context products

The CCB met last week. There's still no full decision on this yet. Deliberations are ongoing. It will probably be sent back to us. Mike wasn't at the meeting.

- ~ Lyle attended because Lynn was unavailable.
- ~ The CCB has some concerns over where this fits in the context system. Also, another concern came up that we are getting multiple LIDs to the same product. That's bad practice. Concerned.
- ~ Matt also attended. Unsure where that came from. There were ideas flying all over the place. Unclear if we really need this for the current build. Trying to figure out what's going on and help.
- ~ There are lots of issues with this and context product system. Can't learn enough about the observation system from the products since they were dumbed down. We lost understanding of what the observing systems really are. We lost hierarchy. In my opinion, it should be a separate ticket, but this is when it's coming up.
- ~ A previous SCR deprecated most values for the observing system component type. We took that

out and put it in the context products.

- ~ Yes. It's a problem we created and need to fix.
- ~ Someone isn't sure the product labels are where we should address this. Views that as metadata to search on. We will get different hierarchies and results if that's in the labels. It's more uniform in the context products.
- ~ Search should be using the context products.
- ~ Someone agrees.
- ~ Another person agrees, but you lose direct usage, but we already have references. It's a trade we already made.
- ~ Someone else agrees. Relationships should be in the context products, but should also have keywords in the labels. This doesn't need to be in this build.

## # Ready for Vote

## CCB-356 – Update Constraints on Author/Editor Lists

This does need to be in this build. Jordan wrote a white paper about why EN needs this in this build, which is in 12 days.

We tasked Jordan with three items to address. First, a rational for this non-backwards compatible change. The document does it. Jordan gets an A for that. The second task was to answer why we have this artificial deadline. It's addressed at the end of the document, and the answer is "because". That's insufficient. Jordan gets a D for that. The thirds task was to address why this is necessary and what we will do with the millions of products not under this IM. Unclear if we are not worrying about those, and if so, then the reason to do this is a non-starter, but if we are going to worry about them and need to re-migrate everything the impact is enormous and we'll need money. For that Jordan gets an F.

For part two, this is something we should adopt as soon as possible due to the possible loss of metadata.

- ~ There's no mission pressure here.
- ~ Were all to put pressure on ourselves.
- ~ Migrations are happening now.
- ~ This affects my node if we have to re-do all our migrations.
- ~ The timeline is to get this in the IM.
- ~ It would just be for new projects or IDPs, but it's true the value is diminished if we are not going to re-do older data sets. There are two issues to work out. In general, it's probably a good thing to do, but we need to do it right.
- ~ Someone agrees. The urgency and pressure is coming from people who want to read the labels and move the data to the Astro system. Also concerned with the argument that we need more information. Would vote in favor of this, but don't think it's urgent.
- ~ Another node would like to see this done ASAP. Agrees about the impact on completed stuff, but we are trying to finish migrations in the next six to nine months. Wonder if we can separate the question of what to do with stuff already in the archive from things we need to do. Don't think there's much disagreement that this is a good idea. The impact on the existing archive is the issue.
- ~ Someone agrees with the first speaker, especially the concern about the funding and who is allocating it. As to why do it now we've already done a lot of the work on this. Inclined to move it along.

- ~ Another person agrees regarding why not do it now. It's a moving target. Hasn't seen a hard and fast list of what we need to fix. Old capability will still be allowed, so if this is ready to go let's put it in and get the metadata.
- ~ This will come out in summer. No mission pressure, just migrations and IDPs would start using it. We need to consider it's utility if the vast majority of our data won't be using it.

Question: What are the issues? Any documentation issues?

Answer: Some came up this week.

- ~ It's a moving target.
- \*\*Action Item Everyone\*\* if there are issues, post them to GitHub.
- ~ Someone sent issues to the email list.
- ~ In terms of moving this forward, there has been a lot of effort. If we back burner it it will take a lot of effort to bring it up again.
- ~ We shouldn't back burner it.

Another thing to consider is that as perfect as we ever get anything, in the first six months there are always little details found when we really start using new things. That enables us to see if there are problems to fix.

- ~ Someone just wants to be clear, this is a good SCR. It moves us forward. Concerned with the idea that we have to do it by February 12. It's a big enough change that we should take time to do it right. Before we vote we need some commentary about remediation. It might resolve the problem if we only fix bundle files for previous migrations and fix validate to accept that. Could be simple and cheap. Interested in hearing other ideas.
- ~ Someone else is not hearing objections to the SCR. The concern seems to be about retrofitting, but that's not part of this SCR. The old way would be available until version 2.0.
- ~ Another person has concerns about sequence and stuff. They aren't major problems. Can be cleaned up in the next week. Not seeing that the SCR is a problem. Could vote next week. Need to decide if we are going to require retrofitting.
- ~ The previously emailed concerns have been posted to GitHub and added to the SCR.
- ~ That's a good point. Worry about retrofitting is becoming part of the SCR. Need to stop that right now. Separate. Very worried about the retrofit becoming part of the SCR.
- ~ Someone agrees. It's a very important discussion, but it could take a year or more and will involve the MC. Not a good idea to tie the issues together.
- ~ Another someone agrees. If anything, the point about urgency is tied to the future and migrations. If we delay that's six more months of things that would need to be migrated again.
- ~ If this is just going to be there for harvest, we could probably do something programmatically. It might not be a big deal. Not all nodes would re-migrate.
- ~ Someone agrees. This is a standards decision with policy implications. When we go to version 2.0 we will have to decide if we need to re-migrate everything. It's a big question that we will need to discuss. On this issue, there's been very little discussion since December on either Jira or GitHub. Think we can work this out and get this done.

Mike has reached out to Jordan to see if we can get an extension. Seems like the issues brought up can be addressed and we can advance this.

~ A few examples have been provided. Now they are all on GitHub. We can have conversations there instead of in email so that everything will be available to everyone. We should have our conversations in GitHub as we go forward.

- ~ Someone didn't have any problem putting together their example.
- ~ Someone else had an example with a big issue. To do with duplication in documents. Schematron rule requires citation information class in document class. Issue with duplication. Doesn't make sense.
- ~ Maybe not to a human, but not a big obstacle. Can just copy and have it twice.
- ~ The issue is if they are different.
- ~ Maybe validate needs to check.
- ~ Unclear what to do about the document issue. Maybe because it had author/editor list prior.
- ~ Needs to be where software will look.
- ~ Technically, different schematically, I think. Might have a different author for a document.
- ~ A person is trying to think about why we would want them to be different, author list and citation information.
- ~ That's the whole point. It's under two objects. They can be different. We need to decide if we want them both. With two objects it can be different.
- ~ We need to document in the DPH that they are semantically different. DP can decide how to use them.
- ~ It's not a deal breaker. Something to clarify in the DPH.

We should meet again next week and just focus on this topic. Issues can be posted to GitHub. We can vote next week.

~ Someone encourages everyone to try some examples.

#### DDWG Notes 2024-02-08

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title: DDWG Notes 2024-02-08

layout: default date: 2024-02-08

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February 8, 2024

Notes by Debra Kazden

Followed by Notes by Dick Simpson, Meeting Chat and Mike Drum's GitHub entry summarizing the liens

Known Attendees: M. Drum, E. Guinness, L. Huber, T. Hare, S. Hughes, R. Joyner, D. Kazden, J. Mafi, S. McLaughlin, B. Semenov and R. Simpson Known Observers: A. Bailey, M. Bentley (for T. Lim), P. Lawton, S. Loftin, J. Padams, E. Schaefer and M. Tiscareno

## ## DDWG Agenda

(Included in email sent February 6, from M. Drum, Agenda for February 8th, 2024)

### ## Front-matter/What's new

Front-matter/What's new

- New issues in GitHub:

(none this week)

- CCB-358 Instrument Package Context products Matt Tiscareno/Mike Drum Deliberations ongoing in GitHub
- SCR Freeze date: 2/12/24
- \*\*(Brief Mention)\*\*

## Ready for Vote

- CCB-356 – Update Constraints on Author/Editor Lists – Ron Joyner/Dick Simpson See Latest proposal powerpoint

Rationale for urgency

Current leins/issues - Please read

\*\*(Discussed - Voted to pass with liens)\*\*

#### Tier 1 issues

- CCB#4 - Backwards Incompatibility policies - Mike Drum

Presentation: Backwards Compatibility

- CCB#3 Adopt Semantic Versioning with version 2 transition Mike Drum
- CCB-356 Update Constraints on Author/Editor Lists (Ron Joyner) EN is taking this over
- CCB#10 Schematron/Schema Version Conflict Need volunteer to provide language for SR
- CCB#12 Document Nuances for Reusability of Generic LDD Classes/Attributes
- CCB#13 Ensure file name and directory path name adhere to SR
- CCB#16 Allow micro amps and nano amps as units of current
- CCB-367 Provenance LDD Using PROV-DM Steve Hughes Still looking for use cases
- CCB-164 Display Settings not required for images -- (IMG)

Trent will take another look at this

One issue was the one-to-many reference to make sure it made sense for multiple image objects

- CCB-211 - XML/schema based files as archival data - Jesse Stone, Mike Drum

- CCB#18 Never finished CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational) E-vote on lien fwd to Ron
- CCB#19 Never finished CCB-325 documentation updates (Title: Support for video and audio as product observational) Fwd to Ron \*\*(Brief Discussion. Will evote on #16)\*\*

#### Tier 2 issues

- Product Metadata Errata?

Create a supplemental label to live next to original label, that can add aliases and supersede metadata \*\*(Not Discussed)\*\*

## Parking lot – need a driver!

- CCB-326 Inconsistent Direction on How to Use Discipline Facets
- RS: 259/281 (see new attachment to CCB-281) (on hold)
- CCB-364 Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

### Historical links:

- Export of history here: <a href="https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-CCB/tree/main/data\_\_;!!PvBDto6Hs4WbVuu7!PDXIwQcISQ58hdJtuKrvHggxODGD8hd1HHM8rE4D68BV1xyMCPVuLedFy7pl7SHlxJfn6acQ8VKkdtLa9UjX6eR9IFIS0439\$
- Backup here <a href="https://urldefense.us/v3/">https://nasa-pds.atlassian.net/jira/software/c/projects/CCB/issues\_;!!PvBDto6Hs4WbVuu7!PDXlwQcISQ58hd</a> JtuKrvHggxODGD8hd1HHM8rE4D68BV1xyMCPVuLedFy7pI7SHlxJfn6acQ8VKkdtLa9UjX6eR9IAlYE9 le\$ (limited seats)

Next meeting: 2/15/24

#### #DDWG

We have a full group today and we are only going to focus on one main issue - CCB-356, Update Constraints on Author/Editor Lists. There is still more to discuss on instrument packages, but that won't be today.

Ron put together a summary of issues for us to discuss.

- ~ Went back through all the comments to bring up the issues and create a list of what the DDWG needs to do. Posted a link to the CCB concerns. Sorted out comments with proposed solutions. The first is to add sequence to parent organization. DDWG needs to vote to adopt schema changes and then fix the PowerPoint, SR, DPH, test cases etc, to prepare for CCB review.
- ~ Someone said they were unclear on why an organization would have multiple parents.
- ~ Another person said they saw an example where the author was the US MARSIS team. That probably includes people from several organizations.
- ~ Those would not be parents.

Question: Then what does parent mean?

Answer: Hierarchy, like NASA is the parent of JPL or a University is the parent of a department.

Another Question: So what do we do?

Answer: Maybe a contributors list or affiliates. Certainly not parents.

- ~ That's fine. Was confused.
- ~ Adds another level of complexity to add parent class. Think someone had another example.
- ~ It had multiple affiliations, like the example a lab is part of a department which is part of a

university.

- ~ Each is a parent of it's children. Parent may have a parent of it's own.
- ~ Nesting.
- ~ Yes.
- ~ Not necessary for the case we are discussing. Still confused. If listing a team unclear if we need to tie them to different organizations.
- ~ Can see where an author might have multiple affiliations.
- ~ Affiliations is the next discussion.

Question: If authorship is attributed to a team, like the Magellan Radio Science Team, are they listed as an organization?

Answer: Definitely not a person, so would have to say organization.

~ Alright.

Question: Do we want to revisit again with nested?

Answer: We want to get this finished.

- ~ Someone agrees. This is not a blocker.
- ~ Yes, but there it's probably more common than we think. Might happen more often than we think.

A lot of people work for Cal Tech and JPL.

~ Affiliations.

The link with the CCB comments isn't accessible.

- ~ EN can give it to people on a piecemeal basis. Only ten people have access.
- ~ The link to the PDF at the top has all of the comments.
- ~ Everything from the Jira ticket is in that PDF.

Question: As far as associating people with organizations - the association is already zero to many. It needs sequence number. Is that the change here?

Answer: Yes. And would like to vote on the first one.

- ~ Before we vote, trying to understand how to apply this to an instrument team where the members are from different institutions.
- ~ A team would report to a PSG and that would report to a mission. If we want to report the members of a team, not sure this is the way to do that. Had a Mariner 9 Radio Science team article-the author was the Mariner 9 Radio Science team. There was a footnote that had a list of team member names.

Another Question: Does it hurt anything to do it this way?

Answer: Complicates the meaning of parent organization.

- ~ We can put a definition.
- ~ Very hard to control. Makes it difficult.
- ~ Maybe this needs to be redesigned to be nested.
- ~ We can come up with a better solution separately later without adding a new class. No one has identified a clear need for this.
- ~ We're trying to do citations. Transplanting entire organization into PDS label sounds like we are overdoing it.
- ~ Sounds like you want to take parent organization out.
- ~ Okay with nesting, but can't see a DP providing it all.
- ~ Then not sure why to have it.
- ~ Interoperable. Other organizations have it.

(More discussion on what's actually harvested)  $\sim$  Seems to someone that this is good enough.

- ~ Another person agrees. If we need more we can do another SCR.
- \*\*Vote for the lien on the screen\*\* (See liens listed below. Note taker could not see the screen.)
- \*\*ATMOS Yes\*\* (Sure, yeah, whatever) \*\*EN Yes GEO Abstain\*\* (leaning no, confused) \*\*IMG -

Yes IPDA - Abstain NAIF - Abstain PPI - Yes RMS - Yes RS - No SBN - Abstain\*\*

That is 5 yes, 4 abstain and 1 no.

~ Passes overwhelmingly by the DDWG definition of passing.

Now, for affiliation, to adopt sequence number.

- ~ Someone thinks it's fine.
- ~ Another person thinks it can go through.

Question: This is in person?

Answer: An affiliation.

- ~ In class of person.
- ~ Saw a case where there were two affiliations.
- ~ This is a sequence number within affiliation of a person. Seems like an asterisk to someone.

Question: Does anyone oppose this?

Answer: (Silence)

~ Okay. We will adopt this lien too, to add sequence number to affiliation.

Next discussion is on ORCID/RORID.

- ~ Someone thinks the comments in examples are just that the DDWG needs to adopt that the values are full URL.
- ~ Another person said in the example JPL is incorrectly used for RORID. Both RORID and ORCID suggest using full URL. I agree. We should decide how we want that formatted.
- ~ So we need to adopt format.
- ~Yes.
- ~ Mike will pull it up for people to see the fill URL.
- ~ They suggest full URL for clarity.
- ~ Someone is in favor of this.

Question: Can we adopt this lien as well?

Answer: (Silence)

~ Okay. Three liens so far.

A new comment was added. Pointed out that max value of 16 for sequence is a boo boo that needs to be corrected.

- ~ There's also a minimum value of zero. Should be one.
- \*\*Action Item Ron\*\* will make the changes. Will make it one to a big number.
- ~ ASCII positive integers should be sufficient.
- ~ Someone is not sure that's a type.
- ~ We will have problems if it is a ridiculously big number.
- ~ Those have to be typed in.
- ~ We don't want author list to be unreasonable.

Question: Is it clarified in sequence number that these should be sequential?

Answer: Yes. In the definition.

- ~ Something has gone terribly wrong if they get to two billion.
- ~ Ron will discuss the type to use with Steve.

Another Question: Shouldn't ASCII non-negative with a minimum of one work?

Answer: Just working on a type for schema.

Another Question: Can't we just set a limit of one?

Answer: In schematron, but it won't address concerns about possible billions. \*\*Action Item - Ron\*\* will write a schematron rule with minimum value of one.

Question: Is this a change or a clarification?

Answer: The comment covered everything with citation information.

- ~ The real comment is wondering if there are places where we are going to require some of these new classes, like a product bundle has citation information. If we want a DOI for a bundle, we have to have authors. Seems to be a disconnect in the PowerPoint with that, so wants to know where this will be required.
- ~ Citation information is just required in documents.
- ~ But if you want a DOI for a bundle you have to tell the DPs.
- ~ Validate will tell them.
- ~ Our documentation on this is lacking.

Question: Are you saying a DOI for a bundle requires citation information?

Answer: You need an author to fill out the DOI request.

- ~ Someone is not sure that's tied to a product label.
- ~ EN requires it. It's useful information. You can do whatever you want, but if we say you need an author, you need something there to get a DOI. EN can figure something out if there isn't one.
- ~ We can't require this yet for backwards compatibility. Can fix that.
- ~ EN can check on that.
- ~ With schemas.

Another Question: Is this relevant to the SR and DPH or just validate?

Answer: If we make the rule, we need to document it. Should be in the SR.

- ~ Chapter 9.
- ~ Chapter 9 says if we have a science data collection we have to have certain things, like primary results. This could go there if we decide certain products need to have this.

Question: Is it a lien to adopt requirements and document in the SR?

Answer: Someone thinks so. ~ Someone else agrees.

Another Question: How do we word the lien?

Answer: Bundle products require old or new system and it should be documented in Chapter 9 of

the SR.

Another Question: So this is a lien we want, right?

Answer: At least for bundles. Believe citation information is already required for documents.

- ~ Yes
- ~ But to this lien, SCR says author/editor lists go away if we adopt this. They are deprecated, so bundle products should require list author or list editor and we should document that in Chapter 9. We're moving on from author/editor list.

- ~ We can say the old way is deprecated and starting with IM X you should use the new classes.
- ~ That sounds like a DPH thing.
- ~ Some people have been discussing this. Don't want to document deprecating things. We want people using the new way.
- ~ Difficult to document. Updates need to be in the PowerPoint, SR, DPH, etc. SR Chapter 9.2.2. already says citation information authors list must be included for collection and for bundle too.
- ~ Someone hasn't looked recently.
- ~ We need to update that to refer to list author and list editor to be consistent with the new IM. That would work for me. Say bundle products must use citation information with list author.
- ~ Someone completely agrees, but there was a lot of concern about backwards compatibility. We wanted to retain ability to use the original attributes, not the new classes.
- ~ Yes, but we shouldn't document as acceptable practices.

We should vote on this lien.

Question: Anyone opposed?

Answer: (Silence)

~ So, we have five liens. We can vote on the ticket with these liens.

Not everything is in order yet. GitHub has no TA, system impacts, etc. Don't agree statements in Jira are all accurate. Think the impact is high, and as mentioned last time, based on the urgency document that Jordan wrote, there needs to be a way to go back and fix things. Sees that as an unfunded mandate. Will be sending that to the MC.

- ~ There are tons of things that are non-backwards compatible.
- ~ EN says this is really urgent. That has nothing to do with anything else.
- ~ EN doesn't think they are mandating this. Proposing improvements.
- ~ The document reads like a mandate. Agrees it's a good idea, but my node has already migrated everything.
- ~ The SCR doesn't include retrofitting.
- ~ Then want words saying that.
- ~ That's the default. Separate issue if the MC wants us to re-migrate.
- ~ The DDWG doesn't have the authority to mandate anything. We don't have funds to mandate.
- ~ What I read said this is so important that we need to do it.
- ~ But that's not what this is. Would love to have HQ give us more money.

Question: Did you hear about the lay offs at JPL yesterday?

Answer: EN is aware.

The question is if stuff in the system can be re-done without re-doing all the data sets.

- ~ We can try. That's what EN does for DOIs. Registry can. Interfaces will need a way. It won't be perfect, but most tools won't care. DOI software and Annalist Notebook will be impacted.
- ~ Someone understands the concerns, but thinks there may be ways to get there without re-doing everything. Maybe a way to do some of it programmatically.
- ~ Could just update all the bundle files, but would have to validate against two versions of the IM.
- ~ Validate will run with two versions of the IM, it just complains at the end.

Question: We are over time. Do you want us to update language to say this is not required by adoption of this ticket?

Answer: Yes. Some words that say there's no intent to mandate any non-backwards compatible

changes to previously archived bundles or products.

- ~ The DDWG cannot mandate. That's a matter for the MC.
- ~ This SCR does not require retrofitting previously migrated products.

Question: Is anyone opposed?

Answer: It's fine.

Another Question: Are we good to vote?

Another Question: Are we going to discuss the DPH edits?

Answer: Someone doesn't recall the issues.

~ People reviewed what was written. Needs some work. Can have a lien that the DPH language still

needs work. ~ Okay. Done.

Let's vote with the liens that are on the screen (see below)

\*\*The Vote - with liens - for CCB-356:

ATMOS - Yes

EN - Yes

GEO - Abstain\*\* (too many liens)

\*\*IMG - Yes

IPDA - Abstain

NAIF - Abstain

PPI - Yes

RMS - Yes

RS - Yes

SBN - Yes\*\*

## CCB#19 – Never finished CCB-325 documentation updates (Title: Support for video and audio as product observational)

A bunch of stuff was added. There were policies to update and document. Document updates are a no brainer, but policy updates are another issue.

~ This was voted on.

Question: Do the updated policies exist?

Answer: (Note taker could not hear speaker, but Dick's notes below say "CCB-325 allows compression, but MC never changed its compression policy to accommodate this change.")

## CCB#16 - Allow micro amps and nano amps as units of current

Before we finish up for today, someone wants to know if we are not voting on this before the deadline. It seems simple.

- ~ Someone agrees.
- ~ The TA was done.
- ~ It needs definitions.
- ~ That could be liens.
- ~ This seems very simple to vote on and clear away.

We can do an evote.

- ~ A change to the IM, not a bug fix. It does need a vote.
- \*\*Action Item Matt\*\* will add definitions to the SCR.
- ~ Someone appreciates that.

We will do an evote so we can all look at it.

- ~ It needs the characters for micro amps, etc.
- ~ Matt will add the definitions and make things make sense.

People will look at it.

\*\*Action Item - Mike\*\* will get the evote out to everyone.

## # Summary of Liens Approved for CCB-356:

Lien approved: Adopting 0:M for Parent Organization and the sequence number attribute Lien approved: Adding sequence number to (Affiliation) Lien approved: Update the description of the orcid/rorid attributes to require the use of the full URI form for ORCID/RORID Lien approved: Update sequence number to have a minimum value of 1 and a maximum value of some very large number Lien approved: Edit SR 9.2.2 to require that Bundle and collection products should use the new List Author (etc) classes Lien approved: "DDWG cannot mandate any backwards changes to previously archived products. That determination is left to the Management Council" Lien approved: DPH language still needs refinement

# Notes from Dick Simpson

From: mdrum@psi.edu

To: Loftin, Sheri A. (GSFC-690.1)[ADNET SYSTEMS INC], Patricia J. Lawton, Hollibaugh Baker, David M. (GSFC-6901), Mia Mace, Richard Simpson, Tang, Vivian (US 398B), Jesse Stone, Joseph Mafi, Debra Kazden, Jordan Padams, Carol Neese, Hare, Trent M, Hughes, John S (398B), Bailey, Alyssa M (US 392N), Lyle Huber, Anne Raugh, Tanya Lim, <a href="mailto:boris.semenov@jpl.nasa.gov">boris.semenov@jpl.nasa.gov</a>, Edward A. Guinness, <a href="mailto:e.schaefer@wustl.edu">e.schaefer@wustl.edu</a>, Mitchell Gordon, Mcauley, Michael M (US 398B), Mclaughlin, Stephanie A. (GSFC-690.1)[TELOPHASE CORP], Matthew Tiscareno, Joyner, Ronald (US 398G), <a href="mailto:daniel.s.kahan@jpl.nasa.gov">daniel.s.kahan@jpl.nasa.gov</a>

Subject: Special Agenda for February 8th, 2024

Date/Time: 2024-02-06T11:04:00 PST

Hi all,

We will have an "emergency" DDWG telecon this Thursday, February 8th at 9:30 PST (12:30 EST, and 10:30 in Arizona). Call-in information is listed at the bottom of the agenda.

For the latest version of this agenda, see the Google Doc

DDWG Agenda

Called to order by Mike Drum at 9:31 PST.

Attendees: Dick Simpson, Ron Joyner, Lyle Huber, Mike Drum, Pat Lawton, Ed Guinness, Ethan Schaefer, Trent Hare, Alyssa Bailey, Joe Mafi, Sheri Loftin, Mark Bentley, Steve Hughes, Debra Kazden, Boris Semenov, Jordan Padams, Matt Tiscareno, Stef McLaughlin

Front-matter/What's new New issues in GitHub: (none this week)

CCB-358 (new link) – Instrument Package Context products – Matt Tiscareno/Mike Drum Deliberations ongoing in GitHub

SCR Freeze date: 2/12/24 (key dates here)

Ready for Vote

CCB-356 (new link) – Update Constraints on Author/Editor Lists – Ron Joyner/Dick Simpson Latest proposal powerpoint Rationale for urgency Current leins/issues - Please read

Ron summarized current status. He has reviewed previous comments and tried to accommodate them. He has posted a link to the earlier CCB comments; but Ed said that is not accessible. He has proposed a way to deal with multiple parent organizations; these and others, need to be translated into the PowerPoint. But Dick wondered why an organization would have multiple parents. A long discussion followed on multiple parents, affiliations versus parents, etc. Votes on multiple parents:

Y: Huber, Hughes, Hare, Mafi, Tiscareno

N: Simpson

A: Guinness, Bentley, Boris, Drum

Adopt sequence number. Limited discussion on need for sequences of affiliations. No opposition. The examples need to be edited to use correct ORCID and RORID, including the 'http'. The descriptions for the attributes need to be corrected similarly. No objections. sequence\_number needs to be ASCII non-negative integer with minimum 1.

Ed said that authors are required when requesting a DOI. Does that mean that Citation\_Information is required in a bundle label since a DOI is required? The answer appears to be "yes". No opposition.

Mike wanted to vote on the CCB; but Lyle said there are still issues. He said the impact statement is inadequate and that the impact is potentially high if there is an unstated requirement to retrofit the products already in the system. Most comments following were that there is no requirement to retrofit any archived data for any non-backwardly compatible change in the IM. Jordan said EN has been trying to add DOIs to existing data; but there is no guarantee that this will work for everything — some desirable information is simply not available. PDS tools are not impacted by addition of DOIs. Lyle suggested updating bundle labels without touching contents; validate may complain, but it won't reject.

Lien about DPH language.

Vote on CCB-356:

Yes: Huber, Hughes, Hare, Mafi, Tiscareno, Simpson, Drum

No:

Abstain: Guinness, Bentley, Semenov,

Not Voting:

Tier 1 issues

CCB#4 – Backwards Incpatibility policies – Mike Drum Presentation linked here: Backwards Compatibility

CCB#3 – Adopt Semantic Versioning with version 2 transition – Mike Drum

CCB-356 (link) – Update Constraints on Author/Editor Lists (Ron Joyner) EN is taking this over

CCB#10 - Schematron/Schema Version Conflict Need volunteer to provide language for SR

CCB#12 – Document Nuances for Reusability of Generic LDD Classes/Attributes

CCB#13 – Ensure file\_name and directory\_path\_name adhere to SR

CCB#16 – Allow micro amps and nano amps as units of current Matt said this is simple and should be included in the next build. Guinness agreed, but Ron said he wanted a more specific request. Mike preferred an e-vote after someone cleans up the SCR.

CCB-367 (new link) – Provenance LDD Using PROV-DM – Steve Hughes Still looking for use cases

CCB-164 (new link) -- Display\_Settings not required for images -- (IMG) Trent will take another look at this

One issue was the one-to-many reference to make sure it made sense for multiple image objects

CCB-211 (new link) - XML/schema based files as archival data - Jesse Stone, Mike Drum

CCB#18 – Never finished CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational) E-vote on lien

fwd to Ron

CCB#19 – Never finished CCB-325 documentation updates (Title: Support for video and audio as product observational) Fwd to Ron Ron said there are two MC policies that need to be updated (hard); documentation also needs to be updated (easy). Hare saiud CCB-325 allows compression, but MC never changed its compression policy to accommodate this change.

Tier 2 issues

Product\_Metadata\_Errata?

Create a supplemental label to live next to original label, that can add aliases and supersede metadata

Parking lot – need a driver!

CCB-326 (link) - Inconsistent Direction on How to Use Discipline\_Facets

RS: 259/281 (see new attachment to CCB-281) (on hold)

CCB-364 (link) - Disallow bundles referencing collections by LID

Historical links:

Export of history here: https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-

CCB/tree/main/data\_;!!PvBDto6Hs4WbVuu7!PDXIwQcISQ58hdJtuKrvHggxODGD8hd1HHM8rE4D 68BV1xyMCPVuLedFy7pI7SHlxJfn6acQ8VKkdtLa9UjX6eR9IFIS0439\$

Backup here https://urldefense.us/v3/\_https://nasa-

pds.atlassian.net/jira/software/c/projects/CCB/issues\_;!!PvBDto6Hs4WbVuu7!PDXIwQcISQ58hd JtuKrvHggxODGD8hd1HHM8rE4D68BV1xyMCPVuLedFy7pI7SHlxJfn6acQ8VKkdtLa9UjX6eR9IAlYE9 le\$ (limited seats)

Adjourned 10:43 PST Next meeting: 2/15/24

#Meeting Chat

from Mark Bentley to everyone: 9:43 AM

CCB feedback was:

from Mark Bentley to everyone: 9:43 AM

(ach, sorry, text limit)

from Jordan Padams to everyone: 9:45 AM

Organization: PDS PPI Node (obviously spelled out)

from Jordan Padams to everyone: 9:45 AM Parent Orgs: UCLA, University of Iowa? from Jordan Padams to everyone: 9:51 AM

At that point we would just create context products for all these people/orgs. I'm not sure we need

to go down that rabbithole at this time. from Jordan Padams to everyone: 10:25 AM

https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-CCB/blob/main/docs/author-

editor-list-update-

<u>rationale.md\_\_;!!PvBDto6Hs4WbVuu7!PDXIwQcISQ58hdJtuKrvHggxODGD8hd1HHM8rE4D68BV1xyMCPVuLedFy7pI7SHlxJfn6acQ8VKkdtLa9UjX6eR9IPKORq98</u>\$

from Jordan Padams to everyone: 10:25 AM

Jsut updated

from stef mclaughlin to everyone: 10:30 AM

NSSDCA has the same question as Ed's about enhancing information already in system and

archived and avoiding re-doing previous data. from Jordan Padams to everyone: 10:31 AM

+1 we can try to work out a software solution to help those migrations

from Jordan Padams to everyone: 10:31 AM

or updates I should say

#### DDWG Notes 2024-02-15

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title: DDWG Notes 2024-02-15

layout: default date: 2024-02-15

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February 15, 2024 Notes by Debra Kazden

Known Attendees: M. Drum, L. Huber, T. Hare, R. Joyner, D. Kazden, J. Mafi and B. Semenov Known Observers: A. Bailey, B. Hirsch, E. Schaefer, M. Seritan and M. Tiscareno

### ## DDWG Agenda

(Included in email sent February 14, from J.Mafi, Agenda for February 15, 2024)

### ## Front-matter/What's new

- 1) Submitted to the CCB:
- CCB#15 (JIRA-CCB-356) Author/Editor List
- CCB#16 Add mA and microA as Units\_of\_Current
- CCB#20 (JIRA-CCB-358) Instrument Package Context Products
- 2) New issues in GitHub:
- CCB#24 Reform unit definitions
- CCB#25 Reform Units of Misc, Units of None, and Units of Rates
- CCB#26 Fix definition of Units of Amount of Substance
- CCB#27 DOI requires at least an author or editor
- 3) SCR Freeze date: 2/12/24
- \*\*(Discussed)\*\*

### Ready for Vote

- None

## Tier 1 issues

- CCB#4 Backwards Incompatibility policies Mike Drum Presentation: Backwards Compatibility
- CCB#3 Adopt Semantic Versioning with version 2 transition Mike Drum
- CCB#5 Move to V.2.0.0 for December 2024 Release
- CCB#10 Schematron/Schema Version Conflict Need volunteer to provide language for SR
- CCB#12 Document Nuances for Reusability of Generic LDD Classes/Attributes
- CCB#13 Ensure file name and directory path name adhere to SR
- CCB#21 (JIRA-CCB-367) Provenance LDD Using PROV-DM Steve Hughes Still looking for use cases
- CCB#22 (JIRA-CCB-164) Display Settings not required for images -- (IMG) Trent will take another look at this One issue was the one-to-many reference to make sure it made sense for multiple image objects
- -CCB#23 (JIRA-CCB-211) XML/schema based files as archival data Jesse Stone, Mike Drum
- CCB#18 Never finished JIRA-CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational) E-vote on lien Fwd to Ron
- CCB#19 Never finished JIRA-CCB-325 documentation updates (Title: Support for video and audio as product observational) Fwd to Ron

\*\*(Discussed)\*\*

Tier 2 issues

- Product Metadata Errata?

Create a supplemental label to live next to original label, that can add aliases and supersede metadata

\*\*(Discussed)\*\*

Parking lot – need a driver!

- JIRA-CCB-326 (link) Inconsistent Direction on How to Use Discipline Facets
- RS: 259/281 (see new attachment to JIRA-CCB-281) (on hold)
- JIRA-CCB-364 (link) Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

### Historical links:

Export of history: https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-

CCB/tree/main/data\_\_;!!PvBDto6Hs4WbVuu7!ICgRiVpFAlkxwB2XW-

XFNV02Gk5EO22tH8MGgnNy8fjSmsloPh3-22ibvJZjpJvlxoK5UN6JC11yilSooek1oAq6hO1DbKil\$

Backup: https://urldefense.us/v3/\_https://nasa-

pds.atlassian.net/jira/software/c/projects/CCB/issues\_\_;!!PvBDto6Hs4WbVuu7!ICgRiVpFAlkxwB2

XW-XFNV02Gk5EO22tH8MGgnNv8fjSmsloPh3-

22ibvJZjpJvlxoK5UN6JC11yilSooek1oAq6hCSa\_vAi\$ (limited seats)

Next meeting: 2/29/24

# DDWG

Prior to the official start of the meeting there was a brief discussion about tracking SCRs. Ron added a "ready to vote on" column to the tracking. There are three SCRs now ready for a vote. The TAs have been done. They are not on the agenda for a vote today.

~ Today we will do a survey of SCRs and their status and check priorities for what we want to work on next.

## Front Matter

Joe Mafi's first meeting as the new DDWG Chair.

Thank you to Mike for his service the last few years and for the help moving forward.

Three SCRs have been submitted to the CCB - 15, 16 and 20. Unclear when the CCB discussion will end or the current status.

- ~ Author/editor list is being voted on this week. We will probably know something by the end of the week. There have been some concerns.
- ~ Liens and the timeline seem to be the issues. Need to solve the liens.
- ~ The updates were made. Need to post them. Ron sent them out for comment this morning.

Instrument package hasn't been officially bounced back, but effectively.

~ CCB said it needs to be discussed at the F2F to figure out what people actually want.

~ That's unfortunate.

There are four new issues in GitHub. Three are issues related to unit definitions and that sort of thing. Seem pretty straight forward, but discussion on the format of the descriptions was requested.

- \*\*Action Item Everyone\*\* should look at CCB#s 24, 25 and 26, so we can give advice next time.
- ~ There is some busy work to get these done. No need to rush, just want to make sure to do what the DDWG wants before doing the busy work.

The fourth new issue in GitHub is CCB#27 - DOI requires at least an author or editor. Proposes a new schematron rule to require if there's a DOI that an author or editor list is included.

- ~ This depends on if author/editor list is approved.
- ~ Even if the old way is deprecated it wouldn't be removed.

There are three SCRs to vote on next time that have TAs done - CCB#s 18, 25 and 26.

CCB#18 - Never finished CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational). This was from Trent. It goes back to expanding support for video - products browse and ancillary. There's another one for documents (#19 - Never finished CCB-325 documentation updates (Title: Support for video and audio as product observational).

~ Ron is working on that. We can vote on #18. It's more of a bug fix.

The other two SCRs are about units.

- \*\*Action Item Everyone\*\* take a look at CCB#s 18, 25 and 26 and be ready to vote next time.
- ~ CCB#s 25 and 26 are separate actions so they are separate issues. #25 is more questionable than #26, so look more carefully at that one.

## # Remaining Issues

We will go through the list of SCRs and check their status - decide what to work on next, see what's close and what might need to be moved to GitHub that people might want to champion.

##CCBs #3 (Adopt Semantic Versioning with version 2 transition), #4 (Implement policy around backwards incompatible changes and major version transitions) and #5 (Move to 2.0.0 for December 2024 release)

These are all linked to the move to version 2.0. The issue is that CCB#5 has a target date of December 2024.

- ~ That should be bumped. That would be the build we are working on now. We are not ready yet, but will drive forward. Regarding non-backwards compatible policies, the presentation has been amended. Ready for more discussion. Not overly complicated.
- ~ Someone thinks it might be useful to have a discussion on these at the F2F.
- ~ Another person agrees if there are any low level concerns the DDWG can work through them in the comments and then have a more high level discussion at the F2F.

## CCB#10 - Schematron/Schema Version Conflict (PDS-JIRA-366)

Ron is researching if it is even possible using schematron. Both are in the pre-amble. Back burner

for now. Just not sure how to do it.

- ~ It seems like they should match.
- ~ It is curious that validate checks it.
- ~ Someone is pretty sure that Jordan said it did.

Question: If validate checks it is it important to have a schematron rule?

Answer: Someone would think it's a validate warning.

Another Question: If schematron is not required is there an issue here?

Answer: Not sure there is, especially if it requires a lot of work.

- ~ Someone believes Jordan just wanted a statement in the SR.
- ~ There is text in the attachments for the SR and DPH.

Maybe this can just be moved forward.

 $\sim$  It needs a TA. \*\*(Action Item - Steve)\*\*  $\sim$  There is a TA column in GitHub to let Steve know to do it

## CCB#12 - Document Nuances for Reusability of Generic LDD Classes/Attributes

Unclear what the status of this is. It is something that someone likes to do a lot with LDDs.

 $\sim$  This might be from Steve or Dick. (They are not here today.)  $\sim$  This seems like something the Steve would be concerned about.

## CCB#13 - Ensure file name and directory path name adhere to SR

There are four issues in the comments. If we can get answers the schematron, DPH, etc., can be modified and we can push this forward. If we can do it today that would be helpful. The first issue is simple. In an attachment. Directory path name - question is if it includes a slash. A yes/no vote.

- ~ Someone has concerns. Would like to look at this for the next meeting.
- ~ Dick had concerns too.
- ~ We can wait. There is an example to look at.

Someone wonders what the implementation is. Viper wants to use dictionaries.

- ~ That's issue number 2. Someone wanted to say No. It takes a lot of schematron rules.
- ~ Unclear if Viper still wants this.
- ~ They might move to underscores. Unsure.
- ~ PPI just did a Clipper review with a dot in the LIDs. In the bundle root name. Not sure if that's just for the ECM instrument or the policy for Clipper.
- ~ SR is clear that dots are not allowed in directory names.
- ~ That was pointed out to Viper.
- ~ PPI will tell Clipper \*\*(Action Item Joe)\*\*

Question: A lot of this is not captured in GitHub. Is it in Jira?

Answer: The Viper issue just came up.

- ~ Came up as part of a discussion when someone saw slashes.
- ~ SR Chapter 6 talks about slashes.
- ~ The character set doesn't include slash or dot.
- ~ Slash is a divider between directory and sub-directory. The question is really about directory path name and SR kind of implies yes.

We need to discuss this. People should look at the four issues for next time.

## CCB#21 - Provenance LDD Using PROV-DM (JIRA-CCB-367)

This is from Steve. We probably can't discuss it without him.

## CCB#22 - Display Settings not required for images (JIRA-CCB-164)

This was from Anne. Trent and Ron are looking at it.

- ~ Looking to see what can be done. Maybe a couple of things, but worried it will be bad.
- ~ Someone agrees. Started work on the schematron.
- ~ Not everyone is understanding how it will work. Unsure how to do it. No asterisks in XML.
- ~ Someone is asking how to implement in schematron.
- ~ We need to figure out how it will function before we write rules. People are currently abusing this. Looked at trying to see how to make it work. Steve suggested compound, but not sure.

Question: Can this be done with local references?

Answer: Can only have one. Think there are some technical issues here. Not sure if people have strong feelings on this. It's an imaging issue. Don't want to be overly constrained. Ran across this recently with HDF files.

Another Question: Are those legal?

Answer: Can be uncompressed raw.

- ~ Thought not fixed length.
- ~ Someone thought they were.
- ~ HDF5 is close to something illegal. Better check.

Someone thinks they remember discussing this and it made sense. Wanted multiple instances of display settings and multiple arrays and which applies to what.

- ~ Yes, but prefer one display settings that point to many.
- ~ Might need more than one. We want an elegant solution.
- $\sim$  Schema rule. The original issue seems to be that display was never added because we couldn't find an elegant way to do it. Think we punted.
- ~ Everything is supposed to be explicit instead of implied in PDS4.
- ~ Composite would probably work, but afraid it would break readers.
- ~ Might just be a container.

Someone sent Trent a FITS file they are working on for cubes. Many planes in a cube with the same display direction.

- ~ Trent will look at it. Technically, every array should have it's own display.
- ~ Want to require that, but not over populate the label.
- ~ Someone agrees. We need a solution. It will come up, but unsure how to do it in XML.

We should discuss this at the F2F.

~ Someone agrees.

Originally thought this would be easy.

~ That tends to be the case with things that linger.

- ~ Might not be backwards compatible and go into version 2.0.
- ~ We need to be creative.
- ~ Don't want to break the XML rules.
- ~ Let's discuss this later.

## CCB#23 - XML/schema based files as archival data (JIRA-CCB-211)

Unclear what the status of this is. Think there is data coming in already.

- ~ Not yet. This has been back burnered. Intending to get back to this. Should get through the 2.0 issues first, but this is relatively well defined. Needs more discussion.
- ~ There is no project pushing for this.
- ~ Unaware of any, but there have been some hacky cases where people used it.
- ~ InSight used XML. GEO wanted this. High priority for them.
- ~ There's a framework for this. If someone wants to champion it they can feel free.

## CCB#18 - Never finished CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational)

Ready for a vote.

## CCB#19 - Never finished CCB-325 documentation updates (Title: Support for video and audio as product observational)

Related to CCB#18. Pretty straight forward.

Ready for a TA.

The browse and ancillary one seemed straight forward.

- ~ There are lots of open issues.
- ~ Just documentation. Think the main thing is the policy update.

This needs to be on the agenda. Two MC policies. DDWG can vote on number 4 in the Requested Changes, but the others are policy for the MC to decide.

- ~ We already asked the MC to vote. The policy said something like to check every ten years or so to make sure they still work. See the attachment.
- ~ Voted on it at a F2F. The policy update is pretty benign.

Question: Do we want a new policy update?

Answer: Just need to make sure everyone agrees.

~ For number 4 it's the documentation. Really bug fixes.

There was some confusion over this.

~ The DDWG voted, the MC approved. Think we're good.

Question: Can you write a comment to the documentation on that?

Answer: Yes. \*\*(Action Item - Trent)\*\*

Once the updated policies are approved, need to tell EN to post them on the policy page.

- ~ The MC already said yes. Not sure they will want to see this.
- ~ Need to make sure nothing here is above and beyond what they approved.
- \*\*Action Item Trent\*\* will look back at the original presentation and try to post it.

## Product Metadata Errata and Superseding

Question: Is there an SCR for Product Metadata Errata?

Answer: It was an idea. Hasn't grown legs. Can probably die. Was to allow for things like updating an original label without updating it. Like an errata. Corrections.

Another Question: Was it intended to overwrite the original label?

Answer: Thought it would be like product supplemental, but it wasn't fleshed out. It was to update an older version.

- ~ To fix things that are already released.
- ~ Yes, without incrementing the version. To include corrections and point to new LIDs or other things relevant to the label, but this has been solved by versioning.

This brings up superseded. Versioning without a direct tie. There are folks working on virtual labels that point to an existing file. Imaging arrays - RBG order. Might be out of bounds. Probably not useful for the archive.

Question: Would it be for annex?

Answer: Could have multiple labels for data product with different flavors, but maybe taking PDS4 too far.

~ This reminds someone of that thing Mitch wanted to do with half products. There are lots of cool ideas out there, but we need a registry first.

Question: Remove this?

Answer: Yes.

Question: Is anyone going to take on the idea of superseded? Do we have a capability to say this supersedes that - a better product to use?

Answer: Someone thought equivalent versioning.

- ~ Someone else thought Jordan was talking about something. Had a problem with InSight where the LIDs changed between versions and needed to connect them.
- ~ That was done by adding an alias, but no forward reference.
- ~ So, we have a mechanism, but it's not very satisfying.
- ~ Product Metadata Errata was a stab at it.
- ~ Someone thinks Jordan worked on a registry solution.
- ~ Someone else thinks that's true.

Our time is up. We will have some votes next time. February 29.

#### DDWG Notes 2024-02-29

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title: DDWG Notes 2024-02-29

layout: default date: 2024-02-29

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February 29, 2024

Notes by Debra Kazden, followed by Meeting Chat

Known Attendees: M. Drum, E. Guinness, L. Huber, T. Hare, S. Hughes, R. Joyner, D. Kazden, J.

Mafi, B. Semenov and R. Simpson

Known Observers: A. Bailey, B. Hirsch, P. Lawton, E. Schaefer, M. Seritan and M. Tiscareno

# ## DDWG Agenda

(Included in email sent February 27, from J.Mafi, Agenda for February 29th, 2024)

#### ## Front-matter/What's new

- 1) Submitted to the CCB:
- CCB#15 (JIRA-CCB-356) Author/Editor List
- CCB#16 Add mA and microA as Units of Current
- CCB#20 (JIRA-CCB-358) Instrument Package Context Products
- 2) New issues in GitHub:
- None
- 3) SCR Freeze date: 2/12/24
- \*\*(Discussed)\*\*

## Ready for Vote

- 1) CCB#18 Never finished JIRA-CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational)
- 2) CCB#25 Reform Units of Misc, Units of None, and Units of Rates
- 3) CCB#26 Fix definition of Units of Amount of Substance \*\*(Voted to pass #18, Discussed #25 and #26)\*\*

### Tier 1 issues

- 4) CCB#13 Ensure file name and directory path name adhere to SR
- 5) CCB#24 Reform unit definitions
- Needs DDWG advice on definition formation rule
- 6) CCB#19 Never finished JIRA-CCB-325 documentation updates (Title: Support for video and audio as product observational)
- Need to verify that required PDS policy changes have been approved by the MC
- Needs TA
- 7) CCB#27 DOI requires at least an author or editor
- 8) CCB#4 Backwards Incompatibility policies Mike Drum
- Presentation: Backwards Compatibility
- 9) CCB#3 Adopt Semantic Versioning with version 2 transition Mike Drum
- 10) CCB#5 Move to V.2.0.0 for December 2024 Release
- 11) CCB#10 Schematron/Schema Version Conflict
- Need volunteer to provide language for SR

- 12) CCB#12 Document Nuances for Reusability of Generic LDD Classes/Attributes
- 13) CCB#21 (JIRA-CCB-367) Provenance LDD Using PROV-DM Steve Hughes
- Still looking for use cases
- 14) CCB#22 (JIRA-CCB-164) Display Settings not required for images -- (IMG)
- Trent will take another look at this
- One issue was the one-to-many reference to make sure it made sense for multiple image objects 15) CCB#23 (JIRA-CCB-211) XML/schema based files as archival data Jesse Stone, Mike Drum \*\*(Voted to pass CCB#10)\*\*

### Tier 2 issues

Product Metadata Errata?

- Create a supplemental label to live next to original label, that can add aliases and supersede metadata \*\*(Not Discussed)\*\*

# Parking lot – need a driver!

- 1) JIRA-CCB-326 (link) Inconsistent Direction on How to Use Discipline Facets
- 2) RS: 259/281 (see new attachment to JIRA-CCB-281) (on hold)
- 3) JIRA-CCB-364 (link) Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

## Historical links:

- Export of history: https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-CCB/tree/main/data\_;!!PvBDto6Hs4WbVuu7!PsjZsH6lk3bC8FZJa4t-pl\_jb7flCvHoPb1louuloBOe5XPPjEvvuNsc6Pc5iu0F0z7dGXC5-1TdFqEliwWdjwXONaRol27P\$
- Backup: https://urldefense.us/v3/\_https://nasa-pds.atlassian.net/jira/software/c/projects/CCB/issues\_;!!PvBDto6Hs4WbVuu7!PsjZsH6lk3bC8FZ Ja4t-pl\_jb7flCvHoPb1louuloBOe5XPPjEvvuNsc6Pc5iu0F0z7dGXC5-1TdFqEliwWdjwXONaYaf-Ca\$ (limited seats)

Next meeting: 3/14/24

# DDWG

## Front Matter

Received the news from the CCB that #15 and #16 have passed. There are concerns about #15, but it passed. There was some question about getting these into the next release because they passed very late.

- ~ Both should be included. EN hasn't started the implementation yet. But we need to reign ourselves in for the cut off dates in the future.
- ~ It does have a tendency to creep. It's good news that these got in. Jordan was pushing for #15 and #16 was a pretty simple addition.

We have three listed as ready for a vote today, but based on discussions maybe two of them are not ready.

# Ready for Vote

## CCB#18 – Never finished JIRA-CCB-325 "lien" for browse and ancillary (Title: Support for video

and audio as product observational)

This is an extension of support for video over to browse and ancillary products. There was a question about the status of the MC policies.

- ~ Someone was unable to find the presentation. Not 100% sure of what we voted on, but we did vote. Tried to look in the MC meeting notes, but didn't have access to all the folders.
- ~ Someone else said they should have it.
- ~ The vote was probably during the executive session.
- ~ Might be a provisional vote. The issue is that we want to make sure the changes here are what were approved by the MC.
- ~ This is a bug fix for what was passed a year ago.
- ~ Someone agrees.

Question: Did the MC approve the policy change?

Answer: Yes. MC helped craft the policy that every 10 years or so we make sure.

- ~ The policy on the website is not updated.
- ~ There is an SCR for updates to those documents.
- ~ Don't think this needs to go to the MC.
- ~ Someone's recollection is that this was approved by the MC. Think their main discussion was about what changes to allow for data products.

Question: Aren't we talking about video as a data product?

Answer: Video as a data product is already approved. This is to allow for browse and ancillary.

Question: Other questions or comments?

Answer: Someone found the presentation to the MC in St. Louis. Put it in the chat. (See chat at the end of the notes)

\*\*The Vote for CCB#18

ATMOS - Yes

EN - Yes

GEO - Yes

IMG - Yes

IPDA - Not Here

NAIF - Yes

PPI - Yes

RMS - Yes

RS - Abstain

SBN - Yes\*\*

CCB#18 passed.

# CCB#25 – Reform Units of Misc, Units of None, and Units of Rates and CCB#26 – Fix definition of Units of Amount of Substance

There has been a lot of discussion on both of these in terms of details of definitions and categories units are assigned to. Not sure how to cover all the discussion.

#### ## CCB#25

CCB#25 should be split into three SCRs. There are different issues for each one.

- ~ That is possibly true, but they would all depend on each other.
- ~ Someone thinks they are related. That's why they were put together.

Some of the changes discussed involved moving things between the different units of type and updating the definitions. Not sure how to discuss this.

- ~ Someone noticed this before. We had an SCR to pass some units. It was hard to ignore that things could have been better. Decided to look through the unit classes. Thought these three were in danger of being a catchall. There was a suggestion to have units of miscellaneous. Fine, but assumes we put them in because we had a use case. Looking at them it seemed that things could be refined. There was a suggestion to rename units of countable. There was discussion about SI units for units of none and units of rate. Looking at the classes, I think what we have is a hodge podge and it could get worse as more are added.
- ~ Good goal. Seemed like concerns are with how it's done.
- ~ When someone read this, philosophically it makes sense, but also read the TA and impact statement. Doesn't agree that it is minimal impact, especially if we change the name of units of miscellaneous. We would need to update the LDDs. Unsure if that will affect labels, maybe just LDDs, but there could be impacts. Cautionary tale. If we do this then the dictionaries will all need clean up. When the IM changes, dictionaries will all break. Stewards will need to be aware of this.
- ~ Oh wow.
- ~ That's a very good point. Regarding the TA saying there is minimal impact, that was for what TA person does. Changing the definitions of the units would be easy. Would deprecate if we move units around. Non-backwards compatible. Hadn't considered the impact to the LDDs.
- ~ Another person said that's totally right. Hadn't thought of that. It's a bigger problem than realized. Sees it as an argument to get rid of units of miscellaneous.
- ~ Philosophically, you are right, but if we do this stewards need to rebuild LDDs before the new IM.
- ~ LDDs will be impacted.
- ~ Labels shouldn't be heavily impacted. Just need to update the IM and LDDs.
- ~ That's how it's supposed to work.

We can now discuss specific changes.

~ Looking at the comments in GitHub seems like the direction we go depends on if we want to create a unit of gain and take the step to define things more directly. The point that this hodge podge could lead to a lot of nonsense.

Question: Aren't these really calibrations? Not sure I would call it a gain.

Answer: Different settings.

- ~ Don't see that.
- ~ Sounds like the impact statement needs to be expanded so the nodes can examine it. Important to move forward, but what actual changes to make also needs a decision.
- ~ We should form a Tiger Team.
- ~ Matt will be on the team.

Question: Other volunteers?

Answer: (Silence)

~ Joe will be on the team, but we need other folks too. We will table this for now. We needs folks to volunteer.

One approach would be for the Tiger Team to come up with a specific set of changes and have the stewards evaluate how much work it would be or have the stewards look through the dictionaries to see how often used.

- ~ Will affect all dictionaries. If only we had a registry to tell us about all the instances.
- ~ That's probably do-able.
- ~ Was kind of joking. Hoped EN would jump in.
- ~ EN will check.
- ~ It might require that all data is in the registry. Not sure it all is.
- ~ There may be things in the dictionaries that haven't been used that would require changes.
- ~ Unsure if we can search dictionaries without searching all the data products. EN can help sort that out.
- \*\* Action Item Steve\*\* will bring this up at the EN meeting next week.

One data point - someone is not at all bothered by having a bucket to throw weird units into. The public doesn't see them anyway.

- ~ Someone agrees.
- ~ True, but DPs will be relying on them not to be dumb going forward.
- ~ We could rely on peer review to make sure they aren't.
- ~ The framers of this made a choice to have the bucket.
- ~ At some point we have to do our job and look at what the DPs give us. These classes got in the dictionaries.
- $\sim$  If I have a gain state, it has to be in units of miscellaneous, and I as a DP have to give it to you in the correct units, not pixels.
- ~ Maybe we could use validate.
- ~ In the Cassini LDD it defines permissible values for units of miscellaneous. Maybe that makes this okay.
- ~ In the dictionaries it can be explicit. It just requires more work.

Someone is willing to be on the Tiger Team if EN will help. Thinks how it is done in Cassini is good. If all of them are done like that, maybe it's okay. Maybe we just need to remind stewards to use extra care if using this class.

~ Someone agrees.

We will set this aside for now. There is still some work to gage the impact. We can decide if the SCR needs to be rewritten.

#### ## CCB#26

There was also a lot of discussion about units of substance.

- ~ Amount of substance is a well understood concept with specific units.
- ~ It says it's mass, but that's not correct. Would like to find new wording. Would like to preserve flexibility. Maybe the words number of particles is causing the issue. Maybe it could be amount.
- ~ Could be quantity.
- ~ That's the point. Amount of substance is well understood in the science community.
- ~ Ascetic decision. Flexibility. Might suggest we vote on the amendment and then the SCR.

Question: Any use cases aside from mol?

Answer: Someone thinks it came from Susie. Think we need some informed opinion first.

- ~ Susie is long gone. Asked someone, haven't heard yet.
- ~ Let's hold off until we get more input, more use cases, more information on the original intent.
- ~ Yes, but we don't want to exclude future possibilities.
- ~ Someone thinks the general science community would be astonished. People should look at the Wikipedia entry for Amount of Substance.
- ~ We could also put in the definition or have this fight again if someone tries to add another permissible value.

(Conversation got very confusing)

- ~ Dick's amendment.
- ~ Add the Avogadro constant. A quantity of particles scaled by Avogadro's constant.

Matt put the amendment in the chat. (See below)

Someone never heard the term.

Should be Avogadro's number.

Treating mol as a unit.

Someone read about this yesterday. In 2019, SI defined it as a conversion factor. It shows how nomenclature has changed.

Someone else read the Wikipedia entry for Amount of Substance out loud.

We want the constant to get to units of mols.

- ~Yes.
- ~ Or we could leave it off.

We should vote on if we want the Avogadro's constant in or out of the definition.

- ~ Let's get the wording correct and vote next time.
- ~ Yes. Vote next time.

Question: Any additional comments?

Answer: (Silence)

## CCB#10 - Schematron/Schema Version Conflict

CCB#10 is ready for a vote. Probably not controversial.

- ~ This is the version conflict one.
- ~ Requires some verbiage in the SR and DPH to force people to use identical versions.

Question: The issue was how it's enforced. Validate can do it?

Answer: Yes. It would take a lot of effort to figure out how to do it in schematron. The bang is not worth the buck.

Question: Any last comments or questions before the vote?

Answer: (Silence)

\*\*The Vote on CCB#10

ATMOS - Yes

EN - Yes

GEO - Yes

IMG - Yes

IPDA - Not Here

NAIF - Abstain

PPI - Yes

RMS - Yes

RS - Abstain

SBN - Yes\*\*

CCB#10 has passed.

# Meeting Chat

from Matt Tiscareno to everyone: 9:41 AM

Video – Background

PDS4 does not support video as observational products Missions are generating Video as

observational products Immovable object, meet unstoppable force

from Matt Tiscareno to everyone: 9:41 AM

Videos can be archived as Documents, if they are in the MPEG-4 Part 14 format H/264 video format, AAC audio format. Both are lossy compression. Open source.

We may want to take this chance to also introduce direct support for compressed audio formats as well Specific video formats may need to be migrated on a sub-50-year timescale This is a practical numbers game – If we lose 0.01%\* of the bits, we may be able to save 99%\* of the money

\*Specific numbers TBD

from Matt Tiscareno to everyone: 9:41 AM We are going to go for it. This is your warning.

We will take several precautions to ensure that this new frontier cannot be abused to allow other lossy compressed formats into the archive We will build in obvious indicators for these formats to

ensure they stay usable in 20 years

from Matt Tiscareno to everyone: 9:42 AM

11/22 MC F2F artifacts:

https://urldefense.us/v3/\_\_https://drive.google.com/drive/folders/1Csa27xfwOmxYL4WAczmMiRNbpQcvOyg4\_;!!PvBDto6Hs4WbVuu7!PsjZsH6lk3bC8FZJa4t-

pl\_jb7flCvHoPb1louuloBOe5XPPjEvvuNsc6Pc5iu0F0z7dGXC5-1TdFqEliwWdjwXONY-g4\_XQ\$

from Matt Tiscareno to everyone: 9:42 AM

Therein, #8a Drum presentation:

https://urldefense.us/v3/\_\_https://docs.google.com/presentation/d/16XuB2gTxo3JRYSXIeNbugrG3CNCD0XT9ydvqu3ZvzVg/edit\*slide=id.p\_\_;lw!!PvBDto6Hs4WbVuu7!PsjZsH6lk3bC8FZJa4t-pl\_jb7flCvHoPb1louuloBOe5XPPjEvvuNsc6Pc5iu0F0z7dGXC5-1TdFqEliwWdjwXONeHuZnSB\$

from Matt Tiscareno to everyone: 10:22 AM

Matt's proposed definition:

from Matt Tiscareno to everyone: 10:22 AM

Units\_of\_Amount\_Of\_Substance is a magnitude of quantity of chemically unique and identifiable

particles (atoms, molecules, ions, etc.) from Matt Tiscareno to everyone: 10:22 AM Dick's amendment is to add "normalized by the Avogadro constant" DDWG Notes 2024-03-14

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title: DDWG Notes 2024-03-14

layout: default date: 2024-03-14

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March 14, 2024

Notes by Debra Kazden

Known Attendees: M. Drum, L. Huber, T. Hare, S. Hughes, R. Joyner, D. Kazden, T. Lim, J. Mafi, S. McLaughlin, B. Semenov and R. Simpson Known Observers: A. Bailey, B. Hirsch, P. Lawton, S. Loftin, E. Schaefer, M. Seritan and M. Tiscareno

## ## DDWG Agenda

(Included in email sent March 12, from J.Mafi, Agenda for March 14, 2024)

We will have a DDWG telecon this Thursday, March 12th at 9:30 PDT (12:30 EDT, and 9:30 MST in Arizona). We will discuss the questions listed in Ron Joyner's 12/27/2023 comment for CCB#7, and likewise for the questions in Ron's 1/31/2024 comment for CCB#13 so that these SCRs can move forward. Please also be ready to discuss and vote on CCB#27, CCB#26 (including deciding between the two proposed definitions in the "Problem Statement" and in my comment of 3/12/2024), and CCB#25.

#### Front-matter/What's new

- 1) Submitted to the CCB:
- CCB#20 (JIRA-CCB-358) Instrument Package Context Products
- CCB#10 Schematron/Schema Version Conflict
- CCB#18 Never finished JIRA-CCB-325 "lien" for browse and ancillary (Title: Support for video and audio as product observational)
- 2) New issues in GitHub:
- None
- 3) Beta test dates: 4/23/2024 5/21/2024 \*\*(Discussed 7, 13 and 28)\*\*

## Ready for Vote

- CCB#27 DOI requires at least an author or editor
- CCB#26 Fix definition of Units of Amount of Substance
- CCB#25 Reform Units of Misc, Units of None, and Units of Rates \*\*(Discussed 26 and 27)\*\*

### Tier 1 issues

- CCB#7 Missing schematron rule to check that Product Bundle. Target Identification. Internal Reference. reference type is bundle to target
- CCB#13 Ensure file name and directory path name adhere to SR
- CCB#11 Add a Funding Information class to the Identification Area
- CCB#24 Reform unit definitions

## Needs DDWG advice on definition formation rule

- CCB#19 – Never finished JIRA-CCB-325 documentation updates (Title: Support for video and audio as product observational) Need to verify that required PDS policy changes have been approved by the MC Needs TA

- CCB#4 - Backwards Incompatibility policies - Mike Drum

Presentation: Backwards Compatibility

- CCB#3 Adopt Semantic Versioning with version 2 transition Mike Drum
- CCB#5 Move to V.2.0.0 for December 2024 Release
- CCB#12 Document Nuances for Reusability of Generic LDD Classes/Attributes
- CCB#21 (JIRA-CCB-367) Provenance LDD Using PROV-DM Steve Hughes Still looking for use cases
- CCB#22 (JIRA-CCB-164) Display Settings not required for images -- (IMG)

Trent will take another look at this

One issue was the one-to-many reference to make sure it made sense for multiple image objects

- CCB#23 (JIRA-CCB-211) XML/schema based files as archival data Jesse Stone, Mike Drum
- \*\*(Discussed 7, 13, 11)\*\*

### Tier 2 issues

- Product Metadata Errata?

Create a supplemental label to live next to original label, that can add aliases and supersede metadata \*\*(Not Discussed)\*\*

# Parking lot – need a driver!

- JIRA-CCB-326 Inconsistent Direction on How to Use Discipline Facets
- RS: 259/281 (see new attachment to JIRA-CCB-281) (on hold)
- JIRA-CCB-364 Disallow bundles referencing collections by LID \*\*(Not Discussed)\*\*

#### Historical links:

- Export of history: <a href="https://urldefense.us/v3/\_https://github.com/NASA-PDS/PDS4-CCB/tree/main/data\_\_;!!PvBDto6Hs4WbVuu7!MvjAXBV0GTXoVmlub\_NaKOvqxFjTjasYyaR\_d39-fvtFlQ17okMTApuUhYARpnzTwJpdSreVluRjA\_pelxRG4Scvr9YTTLc3\$</a>
- Backup https://urldefense.us/v3/\_https://nasa-pds.atlassian.net/jira/software/c/projects/CCB/issues\_\_;!!PvBDto6Hs4WbVuu7!MvjAXBV0GTXoVmlub NaKOvqxFjTjasYyaR d39-fvtFlQ17okMTApuUhYARpnzTwJpdSreVluRjA pelxRG4Scvr0oU-LU3\$ (limited seats)

Next meeting: 4/4/2024

# DDWG

## Front Matter

We have a series of questions to decide for CCBs #7 and #13. If we can answer the questions then work can begin on the schematrons to support these issues.

## CCB#7 - Missing schematron rule to check that Product Bundle.Target Identification.Internal Reference.reference type is bundle to target

The question is from December 29, 2023. It is suggested that we expand this to other product types to ensure values are consistent with the product type. Asking for approval. ~ Seems logical.

We could do a strawman vote if there aren't any questions or comments. A quick straw poll to approve the expansion.

\*\*Strawman Poll to approve the expansion to the other product types:

ATMOS - Yes

EN - Yes

GEO - Yes

IMG - Yes

IPDA - Yes

NAIF - No.\*\* NAIF said this is changing something for Spice. Has a big impact for NAIF.

Could remove spice to target.

- ~ It could be required to be data to target.
- ~ NAIF needs a time out on this.
- ~ Strike spice kernel from the list pending NAIF input.

\*\*Continuing the Strawman Poll:

PPI - Yes, with the amendment.

RMS - Yes

RS - (no answer - audio issues) (No)

SBN - Abstain\*\*

Question: The proposal changed half way through. Does anybody want to change their vote? Answer: This isn't just a matter of setting up new rules. We need to set up new permissible enumerated values, so voting no if it's still on the table. Don't want to see this happen now.

- ~ Someone is confused by that.
- ~ We would need to add target path in IM specification.
- ~ So, each is being proposed. Currently, the IM has schematron rules for ancillary to target and document to target. SCR suggested adding bundle and collection. This now is suggesting we go further and add each value to the list.

Another Question: Is ancillary to target currently an enumerated value reference type or would we have to add it?

Answer: The SCR isn't complete. It doesn't have the Requested Changes.

This is a strawman poll. Someone can go off and do the work and then we can vote on the final approval if that is okay.

- ~ Yes, if this is a strawman poll. We can flesh this out.
- ~ Someone else agrees. The actual SCR has no Requested Changes. Agree it is missing enumerated values that need to be added.

Back to Spice. It would make this easier if it could be added.

~ That will make it harder for NAIF. They have products with data to target. It will not be backwards compatible if we change from data to target.

Question: Would it be okay to make it officially data to target for Spice?

Answer: Yes. NAIF has been using that.

~ It will now validate.

The SCR will be extended to add additional product types.

## CCB#13 - Ensure file name and directory path name adhere to SR

There is a question about the schematron rule to test for directory path name and path name. Not sure what we have decided. Need to answer the questions for this. Think ASCII directory path name makes sense. It allows the slashes. Unsure why it wasn't used when this element was first created.

~ Someone thinks some details with the forward slash, but thinks ASCII path name is probably a better way to go.

Question: Do we need to check with systems? Another Question: About the terminating slash?

Answer: Thinking about issues they are having trying to parse data out across multiple machine types.

- ~ Seems like a bug using the wrong attribute type. Potential issue. Need someone deep in the weeds to look.
- ~ In GitHub, the question remains unanswered if we can change to path name.
- ~ That doesn't fix the entire problem. Trying to get schematron rules to do better validation against the values.

Question: Are we manually re-implementing ASCII path name as type? Why are we making plain text act like a path name?

Answer: Question is if character set includes slash if we change this. Yes. Does not include dot. For the last question regarding terminating slash, unsure. We should ask Jordan.

~ ASCII directory path name meets the formation rule, but doesn't magically write the validation rules. Think we should do what directory path name says. Technical details can be addressed from there.

Question: Are there still any issues preventing the writing of the schematron rules? Answer: Character set includes slash, does not include dot. Dot and double dot are not allowed. Ending in a slash is fine. Can change data type to use the proper character set, if we all agree, the schematron rules can be updated to enforce what the SR says.

~ Someone would like to do a strawman poll to change the directory path if there are no questions or comments.

\*\*Strawman Poll to change data type to ASCII directory path name and update the SCR:

ATMOS - Yes

EN - Yes

GEO - Yes

IMG - Yes

IPDA - Yes

NAIF - Yes

PPI - Yes

RMS - Yes

RS - Yes

SBN - Yes\*\*

We will get that moving forward.

# New SCR

## CCB#28 - As a user, I want validate to allow delimited tables with whitespace-only numeric fields

This was added two days ago. The problems is that GEO has CSV files that are space padded and validate is throwing errors. DSV standard is not clear. There's another update that needs to be made to clarify how padding spaces are counted. Unsure if there are any objections to saying that is allowed.

- ~ The DSV standard came from Todd King. We should look at it carefully.
- ~ Spaces have always been an issue. Someone sees no problem with leading and trailing spaces.
- ~ That depends on the application reading the files.
- ~ True. Just wanted to see if any objections to the change. People can speak up or add comments in GitHub.
- ~ Not everyone has read it yet.

# Ready for Vote

## CCB#27 - DOI requires at least an author or editor

This had been waiting on CCB#15, which passed.

Question: Any question or comments?

Answer: Someone thinks this says we will require author or editor list, but we are using list author or list editor. That's pretty important.

- ~ We were waiting for CCB#15, so the schema and rules were modified for both attributes and classes.
- ~ Another person had that same question. Couldn't find that. In the Requested Changes it needs to be clear to do the TA. Fine, if it's clear.

The SCR needs to be modified to add list author and list editor classes as alternatives.

- ~ A lien.
- ~ We could vote with a lien.

A number of questions were posted yesterday. We need to address those.

- ~ Extended for scope (speaker spoke very fast. Note taker did not catch it all. See GitHub) ~ The problem is with documents. They can be problematic. Two areas for author/editor. Someone could put the DOI in the wrong part.
- ~ If we drop document the problem solves itself.
- ~ But we have documents with DOIs. Things like user guides, where we would definitely want the author/editor list.
- ~ Sounds like we have more work to do.

Let's vote on if this is only constrained to bundle and collection.

~ And documents with PDS issued DOIs.

Question: Can we enforce that programmatically?

Answer: No. Would need to be peer review. Could put it in the SR.

- ~ This needs updates.
- ~ If we include document with PDS DOI here there's no way to enforce. We would have to enforce it across all documents.

Another Question: Doesn't PDS have some control over DOIs?

Answer: The PDS preamble.

- ~ Would mean parsing DOIs to do validation.
- ~ Would get ugly.
- ~ Yes, but seems like that's where we are heading.
- ~ Nodes have used several different organizations for issuing DOIs. Could get complicated.

This needs to marinate longer. We need to figure out how to address these legitimate concerns.

We are implementing the approved SCR. Now we are talking about additional schematron rules to implement. Wonder if we need some constraints.

- ~ Implementing CCB#15. That has nothing to do with DOIs directly.
- ~ If it's not an issue, okay.
- $\sim$  This SCR is for if there's a DOI. CCB#15 just swaps in list author or editor. That can be implemented.
- ~ So this is further constraint we might want down the line.
- ~ Yes, if there is a DOI.

## CCB#26 - Fix definition of Units of Amount of Substance

We need to have a few votes. Need to decide if the definition will include reference to Avogadro's number.

~ Calling it Avogadro's constant.

Question: There is a proposal in GitHub, a comment from RS on March 13. The alternative is in the Problem Statement. Any thoughts on this? Explicit mention of Avogadro's constant or not? Answer: Bob Deen has added comments.

- ~ He gives us an out.
- ~ The point was made that we might need a chemist to weigh in.
- ~ Someone thinks that was from GEO because they are archiving laboratory results. Think it's always with Avogadro's constant. We need someone in the chemistry community to comment on this. Don't like defining things we don't know about.

If normalized by Avogadro's constant is in the unit definition it should go in the definition of each enumerated value. Would prefer quantity. That's general enough.

- ~ Not proposing to add.
- ~ Problem Statement for the SCR is author's proposal. Updated after our last meeting.

Strawman Poll - change the definition or not. If want to wait for expert opinion - abstain and say so.

\*\*Strawman Poll - vote to include mention of Avogadro's constant in the definition or not. Abstain if want outside comment:

ATMOS - Not Include

EN - Not Include GEO - Not Include IMG - Not Include IPDA - Abstain

NAIF - Not Include

PPI - Not Include

Ti Not motado

Rings - Not Include

RS - Abstain

SBN - Abstain\*\*

Strong majority to not include Avogadro's constant in the description. Would like to postpone the actual vote until next week and someone can get expert advice.

# Tier 1 Issues

## CCB#11 - Add a Funding Information class to the Identification Area

This is an issue to start moving forward. There have been some comments. Bob Deen talked about adding organization for funding provided if not a PDART. Unclear if that is prohibited by this approach. Seems like the funder could be an organization or a grant.

Question: Any thoughts on this?

Answer: There was a comment on January 16. Memory is that we did implement and it's done, but ticket got migrated. Needs to refresh them-self, but thinks this is already done.

Question to Steve - This was CCB-355. Now CCB#11. Is this already implemented?

Answer: Steve doesn't remember - will do some research on this \*\*(Action Item - Steve)\*\*

Our time is about up for today. Two weeks from now is the MC, so the next date we can meet is April 4.

Question: Any problem with that?

Answer: That's in three weeks. It changes our stagger.

~ We could wait four weeks and meet April 11.

Another Question: Any objections to changing the stagger?

Answer: Fine if Vivian changes the invitation.

Question: One quick last issue. CCB#24 and CCB#25 need Tiger Teams for units. Currently the

team is Matt and Joe. Does anyone else want to join?

Answer: Dick will join the team. Another Question: Anyone else?

Answer: (Silence)

Back to CCB#11 - we implemented a funding acknowledgment class, which is very different from CCB#11. Question is if we think CCB-355, which wasn't migrated, is sufficient. Should look and see if what was implemented is sufficient or if we need to add funding information class.

 $\sim$  There's a link to the original issue. We can compare them and see.

Steve can confirm that in build 13.1 funding acknowledgment class was implemented.

~ It looks very similar to funding information class. Might need to modify the one we added. Will add a comment in GitHub \*\*(Action Item - Joe)\*\*. This is from Jordan. Will see if we need to make any changes or if this can be closed.

Next meeting April 4.