Report: Mike Kearney attendance at RDA Plenary 10, Montreal QC Canada, Sept 18-22, 2017.

I presented the CCSDS Data Archive Interoperability WG notional architecture plans to two RDA groups;

- Data Fabric Interest Group
- Preservation Tools, Techniques, and Policies Interest Group

In summary, in each of those WGs, we accomplished the objective of socializing our direction with external groups to help avoid divergent approaches, and garner future support at the appropriate time of architecture development. Nobody expressed any concern or criticism for the approach. Lots of Q&A after each presentation. Several individuals commented that they might be interested in development of the "plug-in" modules when the time is right.

I attended quite a few other groups, and twice gave a short verbal 3-5 minute report to those other groups on what the DAI WG is doing.

## Overall impressions:

- Very active community, with very distributed non-integrated groups.
- Their 18-month timeline to produce products is beneficial in that it keeps products simple and groups productive, but it limits the scope of what they can do.
- Many people were very aware of OAIS, but literally nobody knew what CCSDS is.

Opening Plenary keynote speaker was Dr. Yoshua Benigo, a Canadian researcher talking on Deep Learning and AI.

- Deep learning packages learn from "common" formats of data resources.
- Benigo said it's not really about the format, it's about the consistency of the data sets. Naming processes and ontologies, for example.
- MK thought From this, are there some features/characteristics of OAIS preservation archives that can make them more "amendable" to access by deep learning packages?

## **Data Fabric** Interest Group:

- Presentation went very well
- They are looking at all components of the "Data Fabric" and they think that OAIS could be the "preservation component."
- Co-chair asked the DAI architecture would be "usable" for non-preservation or non-OAIS archives. I replied that we couldn't say until we're farther down the road, but I hoped it would be.
- MK thought I think this question needs to be addressed in the DAI WG and resolved.
- Someone asked about existing OAIS implementations. Bob Downs gave some examples.
- Someone asked about participation of other groups, and Bob Downs supplied that info as well.

Wednesday morning plenary was reports from WGs that have product milestones.

- The <u>Data Type Registries</u> WG is in their second incarnation. Interesting work. Has been adopted by the EU's ICT and may be adopted by ISO.
  - o Had side discussions with Larry Lannom, co-chair of that group.
  - MK thought DAI may want to consider whether usage of data type registries affects long-term preservation practices.
- Research Data Collections WG is developing APIs to such collections.
- Research Data Repository made frequent mention of preservation, and their applicability Distributed Digital Preservation.

## Preservation Tools Techniques and Policies Interest Group:

- As in the DFIG, the presentation went very well.
- This group is a community of researchers, so I focused more on how researchers will benefit than how the architecture will be put together.
- Question from audience: Will it have advanced technology like restful interfaces? I responded that we believe this approach allows that type of technology, either Restful, HTML5 or other technology would be decided later.
- Question about whether we would release anything as open source? I responded that CCSDS requires two prototypes before approval, and it is possible but not guaranteed that those prototypes could be released as open source. Beyond that, it would be up to implementers to decide, since CCSDS and ISO are not in the software implementation business.
- One person expressed that there might be a need for more Provider and Consumer interfaces. I responded that we have a goal to keep the interface as generic as possible, so multiple interfaces are not needed (for example, one for each designated community). However, we would have to get farther down the line to know if we would be successful with that goal.
- Natalie from Notre Dame said that when the time is right, she may know of a funding source that could fund some future software development of plugins.
- Matthew from EIS (?) said that David Giaretta once told him that there could never be an OAIS
  protocol because of the nature of OAIS. I simply hypothesized that "things have changed."