Please sign in

https://www.rd-alliance.org/plenaries/rda-ninth-plenary-meeting-barcelona/rda-9th-plenary-programme

[have to login to the RDA website first]

16:00 - 17:30

Breakout 3 - WG/IG/BoF Working Meetings
Participants list sign-up
Agenda

- Review objectives of the meeting (5 min)
- Status of Metadata Standards Catalog (15 min)
- Proposed Metadata Elements and Proposed Process for 'unpacking' the elements to an agreed syntax (15 min)
- Breakout Groups Unpacking Elements (30 min)
- Group Report Back (20 min)
- Next Steps (10 min)
Metadata Standards Catalog

Update on progress

Alex Ball
University of Bath

RDA Plenary 9, Barcelona
5 April 2017
Motivation

We want to get researchers using standard metadata schemes, but

- they might not know of a standard relevant to their data
- even if they do, they might not know how to use it
- even if they do, it might seem too much like hard work
- even if it doesn’t, an ad hoc scheme might seem like a better fit

The Metadata Standards Catalog will

- make it easier to find out about standards
- make it easier to use standards (tools, examples)
- help with adapting and migrating between standards
While data curators, and increasingly researchers, know that good metadata is key for research data access and re-use, figuring out precisely what metadata to capture and how to capture it is a complex task. Fortunately, many academic disciplines have supported initiatives to formalise the metadata specifications the community deems to be required for data re-use. This page provides links to information about these disciplinary metadata standards, including profiles, tools to implement the standards, and use cases of data repositories currently implementing them.

For those disciplines that have not yet settled on a metadata standard, and for those repositories that work with data across disciplines, the General Research Data section links to information about broader metadata standards that have been adapted to suit the needs of research data.
So why do we need a new Catalog?

- Search, not just browse
- Access data with machine-to-machine protocols
- Richer information
  - versions, mapping directionality, endorsements
  - greater use of entity relationships
- More services
  - Extracting what you need from compliant metadata . . .
  - Calculating migration pathways . . .
  - Comparing elements in different schemes . . .
  - Generating ‘first-pass’ converters . . .
Migrating the data: DCC/MSD data model

More specific profile -> Metadata standard

Helper tool

Use case
Migrating the data: MSC data model

- Endorsement
  - Metadata Scheme
    - Version 1
    - Version 2
  - Mapping
    - Metadata Scheme
      - Tool supports Organization

- Profile of Endorsement
- Mapping from Version 1 to Version 2
- Tool supports funder, maintainer
- Organization supports funder, maintainer, maintainer
- Mapping to Metadata Scheme
- 5 April 2017 rd-alliance.org
Metadata Standards Catalog

The RDA Metadata Standards Catalog is a collaborative, open directory of metadata standards applicable to research data. It is offered to the international academic community to help address infrastructure challenges.

Metadata standards, profiles and schemes

- Browse by scheme name
- Browse by subject
- Search

Metadata-related tools

- Browse by tool name
Future developments

GUI
- Highlight standards bodies
- Dynamic filtering while browsing
- Side-by-side specifications
- Version history as timeline
- Search by article DOI
- Show maturity rating for schemes

API
- Make changes to database via API
- Query standards by their elements
- Query by element value encoding
- Query by article DOI
- Calculate crosswalks
More information

- Track progress against requirements:
  - github.com/rd-alliance/metadata-catalog-dev/issues

- View the new data model:
  - github.com/rd-alliance/metadata-catalog-dev/tree/master/db

- Try out a local instance of the prototype Catalog:
  - github.com/rd-alliance/metadata-catalog-dev
Thank you for your attention

The Metadata Groups
Unpacking the Elements

Keith G Jeffery
Spatial Coordinates

- **Purpose**: to define a location with respect to some fixed origin
  - **Geographical coordinates**
    - Latitude/longitude (height/depth)
      - UTM universal transverse Mercator
      - UPS universal polar stereographic
      - ECF earth centred, earth fixed (XYZ from centre of earth)
    - Easting/northing (height/depth)
  - **Astronomical coordinates**
    - Altitude/azimuth
    - Declination/right ascension
    - (and others involving time – light years, parsecs)
  - **Atomic coordinates**
    - Angstrom units from given origin in X,Y,Z axes
- **And what about relationship to time?**
Accuracy, Precision, Resolution

- Precision: the closeness of a value to the average value (usually denoted by the number of digits in the measurement)
- Accuracy: the closeness of a value to the true value (usually defined with reference to the accepted true value)
- Resolution: GSD: ground sample distance pixel spacing on the earth’s surface
- Note different in astronomical images, electron microscopy, stereoscopic 3-D images...
Metadata to define a point

- X,Y,Z (possibly T) in some declared coordinate system
- Precision
- Accuracy
- Resolution

- From this we can define lines, polygons, bounding boxes...
Elements (http://bit.ly/2nDH5Lr)

- Unique Identifier (for later use including citation)
- Location (URL)
- Description
- Keywords (terms)
- Temporal coordinates
- Spatial coordinates
- Originator (organization(s) / person(s))
- Project
- Facility / equipment
- Quality
- Availability (license, persistence)
- Provenance
- Citations
- Related publications (white or grey)
- Related software
- Schema
- Medium / format