

Fig.

1. Vocabularies 2 and the Registry

Markus Demleitner msdemlei@ari.uni-heidelberg.de

• Vocabularies 2 status

• UAT in VOResource: Plan

UAT in VOResource: Local Experience

• UAT in VOResource: Global Experience

• A Messenger Vocabulary for VODataService

• Crossref: procduct-type and SimpleDALRegExt

(cf. Fig. 1)

2. Vocabularies 2 Status

Current WD is from 2020-06-12.

Changes since the last interop:

- desise now has all info on a term in its term dictionary (instead of previous wider_terms and friends).
- · wider and narrower are mandatory in desise.
- desise media type is application/x-desise+xml.
- our vocabularies are now CC-0 by default. Use licenseuri and licensehtml for something else.

Looks stable enough for PR to me. There is an open request from Theory, though, who have use cases and practices for using "pure SKOS".

3. A Plan for the UAT

VOResource 1.1 says: "Use UAT", without saying what that means (use the concept URI? The preferred label? Something else?).

Current plan: have an IVOA-flavoured UAT with a fixed, machine-readable mapping to upstream UAT: http://www.ivoa.net/rdf/uat.

Basis: VocInVO2 externally managed vocabularies. These need an Endorsed Note.

A draft for a UAT EN is in the doc repo1.

 $1 \\ \hspace{0.2in} \texttt{https://ivoa.net/documents/uat-as-upstream/20201117/index.html}$

4. UAT: Adoption Experience

My data center² has about 500 subject keywords; I've migrated them to the UAT (the "by subjects" tab, or see the Registry).

Experiences:

- Infrastructure services (e.g., IVOID validator) don't really fit. VO Supplement? But for what? Meaning: Are there discovery use cases that would profit from VO-specific subject keywords?
- Something like #multi-messenger would have be handy.
- ... as would "to do with cubes" (concept needs improvment...)
- There's #survey, #catalogs, #sky-survey, #celestial-objects-catalog without a clear indication
 what's what.

5. UAT: Mapping the Registry

I've also mapped all terms I found in the VO Registry; that were 1010.

- 323 "unfixable" (most often, multiple keywords in one field, project or instrument names; mapped to ivoa:None)
- \bullet 54 keywords that might want representation in the UAT (in fewer concepts; mapped to ivoa:TryAgain)
- 633 plausible mappings

rr.subject in UAT: rr.subject_uat on x-tap://dc.g-vo.org/tap (\sim 50000 rows). Please review: mapping file³

6. UAT: Registry Browsing

Based on rr.subject_uat, I've built the Semantics Based Registry Browser SemBaReBro4.

Also note how compact desise-based vocabulary operations are (js source 5). Thanks to Marco and Giulia for quickly putting in CORS and https on ivoa.net.

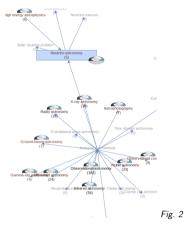
(cf. Fig. 2)

² http://dc.g-vo.or

http://svn.ari.uni-heidelberg.de/svn/gavo/hdinputs/sembarebro/res/mapping.tsv

⁴ http://dc.g-vo.org/sembarebro/q/ui/fixed

http://svn.ari.uni-heidelberg.de/svn/gavo/hdinputs/sembarebro/res/ui.shtml



7. Messengers in VODataService

VODataService has had waveband forever, with a controlled vocabulary ("Optical", "X-ray"...) in the schema.

Astronomy is going beyond EM (and there's solar system science!). Let's become a bit more flexible.

Proposal (part of VODataService PR):

http://www.ivoa.net/rdf/messenger

- with first addition #Neutrino.

Do we want this in "waveband"? I admit that all the various particles really aren't "wavebands". But then adding a new feature for something that is really about the same isn't nice either.

On the other hand, for backward compatiblity, with waveband we have to use uppercase terms, which VocInVO2 frowns upon. A well.

8. Cross-Reference

See also the talk on Vocabularies and DAL in the DAL session on Datalink-related developments. And please review pyVO PR#241!

9. Ready for PR?

I think yes.

There have been a few concerns from the Theory IG that we're trying to iron out.

What do you think?