



Fig. 1

## 1. Vocabularies 2 and the Registry

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- Vocabularies 2 status
- UAT in VOResource: Plan
- UAT in VOResource: Local Experience
- UAT in VOResource: Global Experience
- A Messenger Vocabulary for VODataService
- Crossref: proconduct-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 has 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 repo<sup>1</sup>.

<sup>1</sup> <https://ivoa.net/documents/uat-as-upstream/20201117/index.html>

## 4. UAT: Adoption Experience

My data center<sup>2</sup> 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 been handy.
- ... as would "to do with cubes" (concept needs improvement...)
- 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`)
- 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` (~ 50000 rows). Please review: mapping file<sup>3</sup>

## 6. UAT: Registry Browsing

Based on `rr.subject_uat`, I've built the Semantics Based Registry Browser `SemBaReBro`<sup>4</sup>.

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

(cf. Fig. 2)

<sup>2</sup> <http://dc.g-vo.org>  
<sup>3</sup> <http://svn.ari.uni-heidelberg.de/svn/gavo/hdinputs/sembarebro/res/mapping.tsv>  
<sup>4</sup> <http://dc.g-vo.org/sembarebro/q/ui/fixed>  
<sup>5</sup> <http://svn.ari.uni-heidelberg.de/svn/gavo/hdinputs/sembarebro/res/ui.shtml>

