Vocabularies in the Registry

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the plan

- I'm going to propose an addition to the Resource schema, to accommodate structured vocabularies
- ...and make some observations on how I see this being used.



but first...

- There is a distinction in practice between 'ontologies' and 'vocabularies':
- Ontologies are for machine reasoning, and are typically composed of 'is-a' relations
- Vocabularies are for searching and browsing, and the broader/narrower relations are **not** 'is-a' relations
- We're talking about vocabularies, here
- http://www.ivoa.net/Documents/latest/vocabularies.html



the resource schema

```
<xs:element name='subjecturi'
type='xs:anyURI'
minoccurs='0'
maxoccurs='unbounded'/>
```

I suggest adding a subject URI to the resource record, containing a URI (or CURIE?) which names a SKOS Concept



how would this be used?

- 70-80% of registry entries have non-empty <subject>
- They include keywords like 'AGN', 'Survey Source', both 'Galaxy Cluster' & 'cluster of galaxies', and 'Binaries:cataclysmic'
- <subjecturi>jour:CataclysmicVariables</subjecturi>
 <subjecturi>iau93:CataclysmicVariableStars</subjecturi>
- A search for jour: CataclysmicVariables finds records with this term attached, with an option to retrieve also broader terms, and the terms to which these are mapped



do I have to type URIs?

- http://explicator.dcs.gla.ac.uk/WebVocabularyExplorer/goes from strings to URIs in multiple vocabularies
- Currently ranks rather poorly, but will improve
- Possibly apply this technique mechanically to add keywords to existing registry entries
- Possibly apply this in a UI to help users add formal vocabulary terms when creating registry entries



conclusion

```
<xs:element name='subjecturi'
type='xs:anyURI'
minoccurs='0'
maxoccurs='unbounded'/>
```