

Title of the contribution

PROV-O profile creation for describing and tracking editorial actions on Controlled Vocabularies

Contributors

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Type of contribution

Presentation of the objective of the project and associated use cases.

Abstract

Controlled vocabularies are continuously evolving. These evolutions typically stem out of changes in the domain described by the vocabulary itself or from changes in the point of view of the vocabulary on the domain. Whatever the case, also according to [1], there are several reasons to keep a formal and comprehensive trace of the changes in the vocabulary, which can be summarized in the following:

- Keep a trace of the work of the editorial team
- Have information on the sources of the changes (i.e. external authority, experts, users, editorial team...)
- Have information about the rationale of the changes
- Be able to inform the users of the vocabulary about the changes they should apply on their local version of the vocabulary

In addition to the above, there are also specific usages for machines:

- Have a trace of each fine grained change in the stored (RDF) representation of the vocabulary (as a first step the presentation will focus on a SKOS representation of vocabularies)
- Be able to do reasoning on the quality of the vocabulary by reasoning on the sources of the changes
- Automatically control the coherence and completeness of the changes
- Be able to automatically apply the changes on a published representation of the vocabulary
- Automatically evaluate the impact of the changes on a local information system

To this end and within the context of the presentation, the authors will propose two inter-related vocabularies to describe the changes, previously mentioned: the first one concerns a vocabulary of the changes as described by business experts (i.e. move the concept X to make it a narrower concept of concept B instead of A), while the second vocabulary describes basic changes on the level of the RDF and SKOS representations of the vocabulary.

The project results will be extended in a larger project proposing a PROV-O (provenance ontology) [2] profile to describe controlled vocabulary changes. The taxonomies will enable to formalise the codification of the instruction in the revision of the components of a controlled vocabulary.

The project examples derive from existing and ongoing work on the controlled vocabularies of the Publication Office of the EU, while the results of the project are applied by the EU Publication Office

for the management of the EU controlled vocabularies and for the distribution of those vocabularies which will include PROV-O based representation of the changes.

References

- [1] <http://www.w3.org/2001/sw/wiki/SKOS/Issues/ConceptEvolution>, Retrieved 04/07/2014
- [2] <http://www.w3.org/TR/prov-o/>, Retrieved 04/07/2014