SKOSEd plugin for Protégé 4

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This poster presents SKOSEd, a Protégé 4 plugin for editing and working with the Simple Knowledge Organisation System (SKOS). SKOS is an emerging standard and specification for representing and publishing classification schemes, thesauri, taxonomies and subject heading systems[1]. In order to support adoption and use of SKOS there is now a need for tools that can support its use in the form of APIs, editors, browsers and validators.

We chose to take advantage of existing OWL infrastructure in the form of the OWL API [1] and the OWL ontology editor Protégé 4 [2] to build a SKOS API [2] and SKOS editor. Building a SKOS implementation using the OWL API provides many benefits including the ability to manipulate and extend the SKOS data model, which is itself an OWL ontology. One of the major issues with this approach is the SKOS data model has components that take a SKOS vocabulary into OWL Full whilst the OWL API and Protégé 4 is restricted to the OWL 2 [3] sub language. To handle this we propose an OWL 2 model for SKOS that covers all the major functionalities of SKOS and has the benefit of safe interoperation of SKOS with OWL 2 ontologies.

The decision to use the Protégé environment as a platform for SKOSEd follows on from our decisions to exploit as much of the existing infrastructure for OWL in order to rapidly provide software tools for working with SKOS. As SKOS has an OWL T-box, a standard installation of Protégé is already a capable SKOS editor, however, the interface is not necessarily suitable or intuitive to KOS authors. SKOSEd provides a suite of *Views*, that expose the structure of SKOS, along with some support for editing and authoring.

We have currently developed a set of Protégé *views* and some menu items that offer additional support to Protégé users wishing to work with SKOS. Central to the plugin is a SKOSEd *tab* which is used to contain the main *views* available. The main *view* is the *Asserted Hierarchy View*, this is used to expose the SKOS broader/narrower hierarchy, this view also has drag-and-drop capabilities and a set of convenience buttons for manipulating the hierarchy.

By adopting the Protégé framework we hope that the existing plugin will be extended with additional plugins provided by the community, to improve the way we work with not only SKOS, but combinations of both the SKOS and OWL languages. SKOSEd is available as open source[4]. We encourage the reader to

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[1] `http://www.w3.org/2006/07/SWD/`
[2] `http://skosapi.sourceforge.net`
[3] `http://www.w3.org/TR/owl2-syntax/`
[4] `http://code.google.com/p/skoseditor/`

download and use the application and welcome further comments or suggestions for enhancements.

References

1. M. Horridge, S. Bechhofer, and O. Noppens. Igniting the OWL 1.1 Touch Paper: The OWL API. In *Proceedings of OWLEd 2007: Third International Workshop on OWL Experiences and Directions*, 2007.
2. M. Horridge, D. Tsarkov, and T. Redmond. Supporting early adoption of owl 1.1 with protégé-owl and FaCT++. In *OWLED 2006 OWL: Experiences and Directions 2006*, 2006.