

# Support for SKOS-XL

The ARDC Vocabulary Service includes special support for vocabularies encoded using the SKOS data model. See [The benefits of working with RDF and SKOS](#) for details.

The service provides end-to-end support for vocabularies that have labels encoded using SKOS-XL properties, as long as certain steps are followed. Therefore, before you use the service to create, manage, or publish a vocabulary that uses SKOS-XL labels, please take a moment to read the rest of this page, which explains what is and is not currently supported.

## What is SKOS-XL?

SKOS-XL is an extension of the SKOS data model which "provides more support for identifying, describing and linking lexical entities" (SKOS Reference). SKOS-XL adds an additional class (`skosxl:Label`) and a set of additional properties (`skosxl:prefLabel`, etc.) that allow specification of concept labels in such a way that those labels can themselves be the subjects of RDF triples.

The SKOS Reference (<https://www.w3.org/TR/skos-reference/>) includes (in Appendix B) a description and details of the SKOS-XL classes and properties; the SKOS Primer (<https://www.w3.org/TR/skos-primer/>) includes a helpful introductory discussion and an example of their use.

## Editing support (PoolParty)

ARDC's licence arrangements for the PoolParty editor include access to a plugin that provides support for SKOS-XL labels. The setting which enables SKOS-XL labels is configured on a per-project basis.

## Configuring SKOS-XL for a project

When you create a project, you can specify that you want to use SKOS-XL labels. You do this on the "Advanced" tab of the "New Project" dialog: check the "Enable SKOS-XL" checkbox. However, you can also enable this setting later (e.g., within an existing project), using the "ADVANCED" menu's "SKOS-XL Settings Enable SKOS-XL" option.

*Please note this very important point:* even if you have enabled the SKOS-XL option during project creation, a SKOS-XL label is *not* created automatically when you create a new concept. Similarly, merely enabling the SKOS-XL option in an existing project does not add any SKOS-XL labels to the existing concepts. The following section explains the process of creating a SKOS-XL label.

## Creating and editing a SKOS-XL label

Within a project that has the SKOS-XL option enabled, when you create a concept, you specify a preferred label as usual, and this label is added as a normal SKOS label (using the `skos:prefLabel` predicate). You must then manually indicate that you wish to have a SKOS-XL label created for the concept. To do this, click the pencil icon next to the label. The dialog that appears has a button "Convert to SKOS-XL Label"; click this button. Observe that the pencil icon is now a delete icon: you can undo the effect of the "Convert to SKOS-XL Label" button by clicking that delete icon.

Once you have converted a label to SKOS-XL, the following applies to that concept:

- The original triple for the label, with the `skos:prefLabel` predicate, remains; it is *not* deleted from the project.
- Three new triples are created for the SKOS-XL label:
  - A "type" triple that defines a new (label) resource as being of type `skosxl:Label`.
  - A triple that specifies that new resource's `skosxl:literalForm`.
  - A triple that specifies that the concept has this resource as a `skosxl:prefLabel`.
- You can no longer *directly* edit the `skos:prefLabel` of the concept. However (and this is the key point):
- You can edit the "literal form" of the SKOS-XL label. This modifies the object of the `skosxl:literalForm` predicate of the label, *and also* updates the object of the `skos:prefLabel` predicate of the concept, so that the values of both predicates match up.

To edit the "literal form" of the SKOS-XL label, click the text of the label itself. This will take you to the details of the label. The right-hand side of the right-hand panel contains a "Literal Form" pane, and this *does* have a pencil icon, and this is what you click to edit the text of the label.

If you go back to the concept display (e.g., by clicking on the concept in the left-hand-side tree view), and click the delete icon next to the label, this serves to undo the conversion to SKOS-XL for that label: the three SKOS-XL triples for the label are deleted, and you are left with only the "plain" SKOS form of the label. The delete icon will be replaced with the original pencil icon.

Please note that the tree display of the section "SKOS-XL Label" that appears in the left-hand side of the user interface does not include *all* SKOS-XL labels, but only the ones you have explicitly clicked on while the project has been open. Click the "SKOS-XL Label" label itself to get a list of all SKOS-XL labels in the project.

## Converting an existing project to use SKOS-XL labels

The PoolParty user interface does not have a feature that converts *all* existing SKOS labels into SKOS-XL labels. If you wish to convert one of your projects in this way, please contact ARDC Services for assistance. Also, there is no feature that lists which labels have been converted into SKOS-XL labels, or which have not.

## Quality reports

The Quality Management tab can be used to generate reports of apparent errors in your project. However, this functionality is not customized for SKOS-XL: it assumes that labels are encoded only using the "plain" SKOS label properties. As a consequence, if you have SKOS-XL labels, these labels will be interpreted as duplicates: for each SKOS-XL `prefLabel`, you will receive both a "Non-Disjoint Labels" error and an "Inconsistent Preferred Labels" error.

## Disabling SKOS-XL for a project

Subject to the restrictions explained in this section, you can disable and enable the SKOS-XL setting for a project at any time.

If SKOS-XL is enabled for a project, the "ADVANCED" menu will have a "SKOS-XL Settings Disable SKOS-XL" option. If you use this, you will *not* then be able to edit existing labels which have been converted to SKOS-XL. Although each such label will have a pencil icon next to it (i.e., as though you had never enabled the SKOS-XL setting), if you use it to attempt to edit the text of the label and click "OK", you will see an error message "Cannot modify SKOS Label while SKOS-XL Label is attached".

If you are sure you want to disable SKOS-XL and edit such a label, use the "ADVANCED" menu to re-enable the SKOS-XL setting, then select the concept in question, and use the delete icon next to the label, as explained in "Creating and editing a SKOS-XL label" above; then disable the SKOS-XL setting again.

## Further information

The PoolParty web site has details about how to use the plugin:

- There is a full description of the SKOS-XL functionality and the user interface: <https://help.poolparty.biz/doc/user-guide-for-knowledge-engineers/enterprise-features/skos-xl-with-poolparty-overview>
- A webinar that includes discussion of the SKOS-XL features: <https://www.poolparty.biz/news-events/webinar-poolparty-5-3-from-skos-over-skos-xl-to-custom-ontologies/>
- Advanced project settings: <https://help.poolparty.biz/doc/user-guide-for-knowledge-engineers/basic-features/working-with-poolparty-projects/creating-projects/create-a-new-project/advanced-project-settings>

## Publication support (Research Vocabularies Australia)

The publication system within RVA has support for concepts that have labels specified using the "plain" SKOS properties (`skos:prefLabel`, etc.) This support is evident in the following places:

- the portal page's "browse tree" display (that shows the hierarchy of concepts based on the SKOS broader/narrower relations)
- the Linked Data API (SISSVoc) endpoints
- the Vocabulary Widget.

If you have created your vocabulary in PoolParty using the SKOS-XL feature, your vocabulary will have *both* "plain" SKOS and SKOS-XL labels, and the content of those labels will be consistent. In this case, if you publish your vocabulary through RVA, the "plain" SKOS labels will be used in the browse tree, Linked Data API, and the Vocabulary Widget.

However, RVA does not support vocabularies that have labels *only* encoded using SKOS-XL properties, for example, vocabularies that you have created yourself using a different editor, for which you have not added "plain" SKOS labels (using `skos:prefLabel`). Such vocabularies can be published, but their appearance in the portal will be degraded, and other features will not work correctly:

- The portal page's "browse tree" display will show "No Title" for every concept label.
- The Linked Data API (SISSVoc) endpoints for concept schemes, collections, and concepts will not work well: the IRI of a concept will be shown in some places where you would normally see the concept's label.
- The Vocabulary Widget will not work correctly.