

2.3. Content for the OWL Ontology Refset

The OWL ontology refset should represent essential information about an ontology, such as the namespaces, ontology URI, ontology version URI, and import statement.

Apart from the standard information for all OWL ontologies, any specific information of an ontology can be included. The OWL ontology refset enables the use of prefixes in the OWL axiom refset.

Namespaces

The namespace declarations cover the standard and SNOMED CT specific prefix names, for all ontologies. The prefix name "sct:" is for SNOMED CT concept identifiers and the namespace URI is <http://snomed.info/id/>.

The prefix names are associated with SNOMED CT concept [734146004 | OWL ontology namespace \(metadata\)](#) as referencedComponentId and examples can be found in table 4-2 OWL Ontology Reference Set example.

The URIs can be represented in full form or using the prefix names. For example, The URI for [64572001 | Disease \(disorder\)](#) can be one of the following format.

- <http://snomed.info/id/64572001>
- [:64572001](#)

It is recommended to use the default prefix ":" to minimize the size and improve readability in the OWL refset. The prefix name "sct:" should be declared and used when <http://snomed.info/id/> is not the default namespace.

Ontology URI and Version URI

The ontology URI and the version URI together identify a particular version of ontology. According to the convention, an ontology document should be accessible via the ontology URI if it is the current version. Since a release edition contains the current version ontology, the ontology URI alone is sufficient for the OWL ontology refset. The version should be determined from the SNOMED CT release package. The version URI does not need to be included in the OWL ontology refset. For example:

Ontology(<<http://snomed.info/sct/900000000000207008>>)

SNOMED CT International Edition	http://snomed.info/sct/900000000000207008
---------------------------------	---

However, the version URI should always be included for a standalone ontology file of SNOMED CT to provide accurate version information. The [SNOMED CT URI Standard](#) describes how to unambiguously reference a particular version of a SNOMED CT edition. It is also a trivial task to generate the Ontology version URI by the transformation process for a standalone ontology file. For example,

Ontology(<<http://snomed.info/sct/900000000000207008>> <<http://snomed.info/sct/900000000000207008/version/20180731>>)

Edition, Modules and Ontology Import Statement

Each SNOMED CT Edition should be represented as a separate ontology based on the identifier of the most dependent module. The international release is represented by a single ontology and identified by the SNOMED CT core module id as the ontology URI. It includes two modules for terminology content excluding modules for derivatives:

- [900000000000207008 | SNOMED CT core module \(core metadata concept\)](#)
- [90000000000012004 | SNOMED CT model component module \(core metadata concept\)](#)

The module dependency has specified that [900000000000207008 | SNOMED CT core module \(core metadata concept\)](#) depends on [90000000000012004 | SNOMED CT model component module \(core metadata concept\)](#).

The OWL ontology reference set should only have one single active entry of [| OWL ontology header](#) for the ontology declaration. This entry represents the identity of an ontology and the identifier for the ontology URI should be the most dependent module for that particular edition.

A new entry for OWL ontology header should be added with the extension module id and effective time for an extension edition of SNOMED CT. The OWL ontology header for SNOMED CT international release should be inactivated.

The OWL ontology header represents the identity of an ontology. It needs to be updated when the OWL expression refset represents a different ontology, e.g. ontology of a national extension. Note, the changes to the content, version, and module dependency of an ontology do not require to update the ontology header.

It is possible that modules in SNOMED CT can be directly translated into OWL ontologies, with the module dependency reference set describing how these ontologies are imported. Extensions can import the ontology of SNOMED CT core module since the content in the model component module has already been included. The new OWL ontology header should include the extension module identifier and import statement(s). This approach could avoid accidental changes to the imported ontology. However, the implementation could be more complicated than the representation of an entire edition as a single ontology. Therefore, it is not recommended to use an ontology import statement at the current stage. Instead, each edition will be rendered as one OWL ontology, without any ontology import statement.