5.2.1.7 Query Specification Reference Set

Purpose

A 900000000000512005 | Query specification type reference set| allows a serialised query to represent the membership of a subset of SNOMED CT components. A query contained in the reference set is run against the content of SNOMED CT to produce a subset of concepts, descriptions or relationships. The query is referred to an intensional definition of the subset. It can be run against future releases of SNOMED CT to generate an updated set of subset members.

The members of the resulting subset may also be represented in an enumerated form as a Simple reference set . An enumerated representation of a subset is referred to as an extensional definition.

Data structure

A Query specification reference set is a String reference set containing query that represent intensional definitions of subsets of components. The result of running the query is an extensional representation of the subset of components which can be represented as a Simple reference set. Its structure is shown in the following table.

Table 5.2.1.7-1: Query specification reference set - Data structure

Field	Data type	Purpose	Mutable	Part of Primary Key
id	UUID	A 128 bit unsigned Integer, uniquely identifying this reference set member. Different versions of a *reference set member* share the same id but have different effectiveTime. This allows a *reference set member* to be modified or made inactive (i.e. removed from the active set) at a specified time.	NO	YES (Full /Snapshot)
effectiveTime	Time	The inclusive date or time at which this version of the identified reference set member became the current version. **Note**: In distribution files the effectiveTime should follow the short ISO date format (*YYYYMMDD*) and should not include the hours, minutes, seconds or timezone indicator. The current version of this reference set member at time *T* is the version with the most recent effectiveTime prior to or equal to time *T* .	YES	YES (Full) Optional (Snapshot)
active	Boolean	The state of the identified reference set member as at the specified effectiveTime . If active = 1 (true) the reference set member is part of the current version of the set, if active = 0 (false) the reference set member is not part of the current version of the set.	YES	NO
moduleId	SCTID	Identifies the SNOMED CT module that contains this reference set member as at the specified effectiveTime . The value must be a subtype of 900000000000443000	Module (core metadata concept)| within the metadata hierarchy.	YES	NO
refsetId	SCTID	Identifies the reference set to which this reference set member belongs. In this case, a subtype descendant of: 900000000000512005	Query specification type|	NO	NO
referencedComponentId	SCTID	A reference to the SNOMED CT component to be included in the reference set.	NO	NO
query	String	The serialised query that can be used to (re-)generate the reference set members. • The syntax for specifying the intensional definitions of concept subsets is specified in the Expression Constraint Language - Specification and Guide.	YES	NO

Metadata

The following metadata in the "Foundation metadata concept " hierarchy supports this reference set :

Table 5.2.1.7-2: Hierarchy of Foundation metadata concept

```
900000000000454005 |Foundation metadata concept|
    900000000000455006 |Reference set|
        900000000000512005 |Query specification type|
            900000000000513000 |Simple query specification|
```

Reference Set Descriptor and Example Data

> ⓘ **Notes on the tables used to show descriptors and examples**
>
> The reference set example tables on this page have been revised as follows to aid clarity and understanding:
>
> - The first four columns which are present in all release files are not shown. The omitted columns (id, effectiveTime, active, moduleId) are used in the same way in all referenced sets to support identification, versioning and packaging. They do not directly affect the specific features of a particular reference set or reference set type.
> - Reference set columns that contain SNOMED CT identifiers are expanded to show details of the concept or description referenced by that identifier. In some cases, the term is shown in the same column using the expression syntax, in other cases an additional column with a name suffix '_term' has been added. In the standard reference set files only the identifier is present in the column and there is no added column for the term. When using reference sets, the term and other details of the component are looked up from the relevant component release files.

Descriptor Template

The table below shows the descriptor that defines the structure of the 900000000000512005 | Query specification type reference set| pattern.

Table 5.2.1.7-3: Descriptor Template for Query Specification Reference Sets

refsetId	referencedComponentId	attributeDescription	attributeType	attributeOrder
900000000000456007	Reference set descriptor|	900000000000512005	Query specification type reference set|	900000000000514006	Generated reference set|	900000000000461009	Concept type component|	0
900000000000456007	Reference set descriptor|	900000000000512005	Query specification type reference set|	900000000000515007	Query|	900000000000465000	String|	1

Example Data

In the example below, "serialised query 1" is a text string that can be used to generate members for *Reference set*1, which is a simple member reference set (without any additional fields within its member records).

Table 5.2.1.7-4: Example rows from Query Specification Reference Set

refsetId	referencedComponentId	query
900000000000513000	Simple query specification|		Target reference set|	< 19829001 |disorder of lung| : 116676008 |associated morphology| = << 79654002 |edema|

References

- See Expression Constraint Language - Specification and Guide for details of the language used to specify intensional definitions of concept subsets.