4.2.3 Relationship File Specification

The Relationship file holds one relationship per row. Each relationship is of a particular type, and has a source concept and a destination concept. An example of a relationship is given below: 371883000 |Outpatient procedure| 116680003 |Is a| 71388002 |Procedure|where:

- 371883000 |Outpatient procedure|is the source concept;
- 116680003 |Is a|is the relationship type concept and;
- 71388002 |Procedure|is the destination concept.

Table 4.2.3-1: Relationship file - Detailed specification

Field	Data type	Purpose	Mutable	Part of Primary Key
id	SCTID	Uniquely identifies the relationship.	NO	YES (Full/ Snapshot)
effectiveTime	Time	Specifies the inclusive date at which the component version's state became the then current valid state of the component. **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.	YES	YES (Full) Optional (Snapshot)
active	Boolean	Specifies whether the state of the relationship was active or inactive from the nominal release date specified by the effectiveTime field.	YES	NO
moduleId	SCTID	Identifies the relationship version's module. Set to a child of 900000000000443000 |Module|within the metadata hierarchy.	YES	NO
sourceId	SCTID	Identifies the source concept of the relationship version. That is the concept defined by this relationship. Set to the identifier of a concept.	NO	NO
destinationId	SCTID	Identifies the concept that is the destination of the relationship version. That is the concept representing the value of the attribute represented by the typeId column. Set to the identifier of a concept. Note that the values that can be applied to particular attributes are formally defined by the SNOMED CT Machine Readable Concept Model.	NO	NO
relationshipGroup	Integer	Groups together relationship versions that are part of a logically associated relationshipGroup. All active Relationship records with the same relationshipGroup number and sourceId are grouped in this way.	YES	NO
typeId	SCTID	Identifies the concept that represent the defining attribute (or relationship type) represented by this relationship version. That is the concept representing the value of the attribute represented by the typeId column. Set to the identifier of a concept. The concept identified must be either 116680003 |Is a|or a subtype of 410662002 |Concept model attribute|. The concepts that can be used as in the typeId column are formally defined as follows: 116680003 |is a| OR < 410662002 |concept model attribute| Note that the attributes that can be applied to particular concepts are formally defined by the SNOMED CT Machine Readable Concept Model.	NO	NO
characteristicTypeId	SCTID	A concept enumeration value that identifies the characteristic type of the relationship version (i.e. whether the relationship version is defining, qualifying, etc.) This field is set to a descendant of 900000000000449001 |Characteristic type|in the metadata hierarchy.	YES	NO
modifierId	SCTID	A concept enumeration value that identifies the type of Description Logic(DL) restriction (some, all, etc.). Set to a child of 900000000000450001 |Modifier|in the metadata hierarchy. Currently the only value used in this column is 900000000000451002 |Some|and thus in practical terms this column can be ignored. For further clarification please see Notes on modifierId.	YES	NO

Only one relationship record with the same id field will be current at any point in time. The current record will be the one with the most recent effectiveTime before or equal to the point in time under consideration.

If the active field of this record is false ('0'), then the relationship is inactive at that point in time. If the active field is true ('1'), then there is a relationship between the SNOMED CT concepts identified by sourceId and destinationId.

The sourceId, destinationId, relationshipGroup, typeId, characteristicTypeIdand modifierId will not change between two rows with the same id, in other words they are immutable. Where a change is required to one of these fields, then the current row will be de-activated (by appending a row with the same id and the active field set to false) and a new row with a new id will be appended.

The relationshipGroup field is used to group relationships with the same sourceId field into one or more logical sets. A relationship with a relationshipGroup field value of '0' is considered not to be grouped. All relationships with the same sourceId and non-zero relationshipGroup are considered to be logically grouped.

The relationshipGroup field will be an unsigned Integer, and will not be limited to a single digit value. There is no guarantee that they will be assigned sequentially, and the values will not be unique across concepts.

Related Links

- SNOMED CT Machine Readable Concept Model.
- 3.1.3. Relationships
- Appendix C. Unicode UTF-8 encoding
- Relationship