LexEVS 5.0 Loader Mapping Guide

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Introduction to this Guide

MAYO CLINIC DIVISION OF BIOMEDICAL INFORMATICS
LexGrid Ontology Loader Mapping
LexGrid Vocabulary Services for caBIG (LexBIG)
Authors: Scott Bauer, Craig Stancl

Revision History

Version Number	Revision Date	Author	Summary of Changes
1.0	None	Scott Bauer, Craig Stancl	Initial Draft for LexEVS v5.0
1.1	Nov 29, 2009	Marylyn King (NCI)	Updated related documents note regarding LexEVS v5. 1

Related Documents

Title	Description
LexEVS 5.x Loader Guide	New document for 5.1 that contains all loader-related information from several 5.0 documents plus the new the Loader Framework extension information and RRF enhancements in 5.1.

OWL Mapping - 4.2.1

OWL Mapping - Protégé (4.2.1)

OWL Element OWL: RDF Schema Features	LexGrid	Comments
owl:ontology	codingScheme	No comments
xml:lang	codingScheme.defaultLanguage	Default is 'en'
dc:title	codingScheme.formalName	No comments
rdfs:label	codingScheme.localName	No comments
URI	codingScheme.registeredName	No comments
owl:versionInfo	codingScheme. representsVersion	Default is 'UNASSIGNED'
dc:rights	codingScheme.copyright	No comments
owl:Class (Thing, Nothing)	concept	No comments
rdf:ID	concept.conceptCode	No comments
rdf:ID	concept.isActive	Hard coded as "Active"

rdf:ID	concept.isAnonymous	No comments
rsfs:label	concept.entityDescription	No comments
rdf:comment	concept.comment	No comments
rdfs:subClassOf	association	No comments
rdfs:subClassOf	association.id = "subClassOf"	No comments
rdfs:subClassOf	association.forwardName = "subClassOf"	No comments
rdfs:subClassOf	association.isFunctional = "false"	No comments
rdfs:subClassOf	association.isNavigable = "true"	No comments
rdfs:subClassOf	association.isReflexive="true"	No comments
rdfs:subClassOf	association.isSymmetric="false"	No comments
rdfs:subClassOf	association.isTransitive="true"	No comments
rdf:Property (ObjectProperty)	association	An association between two classes (hasDomain, hasRange)
rdf:Property (DatatypeProperty)	association concept.conceptProperty	An association between one class (domain) and one asscoication (hasDomain and hasDataProperty). The conceptProperty defines the range.
rdfs:subPropertyOf	association	No comments
rdfs:subPropertyOf	association.id = "subPropertyOf"	No comments
rdfs:subPropertyOf	association.forwardName = "subPropertyOf"	No comments
rdfs:subPropertyOf	association.isFunctional = "false"	No comments
rdfs:subPropertyOf	association.isNavigable = "true"	No comments
rdfs:subPropertyOf	association.isReflexive="true"	No comments
rdfs:subPropertyOf	association.isSymmetric="false"	No comments
rdfs:subPropertyOf	association.isTransitive="true"	No comments
rdfs:domain	association	No comments
rdfs:domain	association.id = "hasDomain"	No comments
rdfs:domain	association.forwardName = "hasDomain"	No comments
rdfs:domain	association.isNavigable = "true"	No comments
rdfs:domain	association.isReflexive="true"	No comments
rdfs:domain	association.isSymmetric="false"	No comments
rdfs:domain	association.isTransitive="true"	No comments
rdfs:range	association	No comments
rdfs:range	association.id = "hasRange"	No comments
rdfs:range	association.forwardName = "hasRange"	No comments
rdfs:range	association.isNavigable = "true"	No comments
rdfs:range	association.isReflexive="false"	No comments
rdfs:range	association.isSymmetric="false"	No comments
rdfs:range	association.isTransitive="false"	No comments
Individual	association	A 'hasInstance' association is created. (ie. sourceId = Country, targetId = America)
Individual	association.id = "hasInstance"	No comments

OWL Element OWL (In)Equality	**LexGrid**	**Comments**
owl:equivalentClass	association	No comments
owl:equivalentClass	association.id = "equivalentClass"	No comments

owl:equivalentClass	association.forwardName = "equivalentClass"	No comments
owl:equivalentClass	association.isFunctional = "false"	No comments
owl:equivalentClass	association.isNavigable = "true"	No comments
owl:equivalentClass	association.isReflexive="true"	No comments
owl:equivalentClass	association.isSymmetric="true"	No comments
owl:equivalentClass	association.isTransitive="true"	No comments
owl:equivalentClass	association.reverseName="equivalentClass"	No comments
owl: equivalentProperty	association	No comments
owl: equivalentProperty	association.id = "equivalentProperty"	No comments
owl: equivalentProperty	association.forwardName = "equivalentProperty"	No comments
owl: equivalentProperty	association.isFunctional = "false"	No comments
owl: equivalentProperty	association.isNavigable = "true"	No comments
owl: equivalentProperty	association.isReflexive="true"	No comments
owl: equivalentProperty	association.isSymmetric="true"	No comments
owl: equivalentProperty	association.isTransitive="true"	No comments
owl: equivalentProperty	association.reverseName="equivalentProperty"	No comments
owl:sameAs	association	No comments
owl:sameAs	association.id = "sameAs"	No comments
owl:sameAs	association.forwardName = "sameAs"	No comments
owl:sameAs	association.isFunctional = "false"	No comments
owl:sameAs	association.isNavigable = "true"	No comments
owl:sameAs	association.isReflexive="true"	No comments
owl:sameAs	association.isSymmetric="true"	No comments
owl:sameAs	association.isTransitive="true"	No comments
owl:sameAs	association.reverseName="sameAs"	No comments
differentFrom	association	No comments
differentFrom	association.id = "differentFrom"	No comments
differentFrom	association.forwardName = "differentFrom"	No comments
differentFrom	association.isFunctional = "false"	No comments
differentFrom	association.isNavigable = "true"	No comments
differentFrom	association.isReflexive="true"	No comments
differentFrom	association.isSymmetric="true"	No comments
differentFrom	association.isTransitive="true"	No comments
differentFrom	association.reverseName= "differentFrom"	No comments
owl:AllDifferent	association	No comments
owl:AllDifferent	association.id = "AllDifferent"	No comments
owl:AllDifferent	association.forwardName = "AllDifferent"	No comments
owl:AllDifferent	association.isFunctional = "false"	No comments
owl:AllDifferent	association.isNavigable = "true"	No comments
owl:AllDifferent	association.isReflexive="true"	No comments
owl:AllDifferent	association.isSymmetric="true"	No comments
owl:AllDifferent	association.isTransitive="true"	No comments

owl:AllDifferent	association.reverseName= "AllDifferent"	No comments

OWL Element OWL: Property Characteristics	LexGrid	Comments
owl:inverseOf	association	No comments
owl:inverseOf	association.id = "inverseOf"	No comments
owl:inverseOf	association.forwardName = "inverseOf"	No comments
owl:inverseOf	association.isFunctional = "false"	No comments
owl:inverseOf	association.isNavigable = "true"	No comments
owl:inverseOf	association.isReflexive="true"	No comments
owl:inverseOf	association.isSymmetric="true"	No comments
owl:inverseOf	association.isTransitive="true"	No comments
owl:inverseOf	association.reverseName="inverseOf"	No comments
owl:TransitiveProperty	association.isTransitive	association property 'isTransitive'
owl:SymmetricProperty	association.isSymmetric	association property 'isSymmetric'
owl:InverseFunctionalProperty	association.isReverseFunctional	association property 'isReverseFunctional'
owl:FunctionalProperty	association.isFunctional	association property 'isFunctional'

OWL: Property Restrictions	LexGrid	Comments
owl:Restriction	concept	Create an anonymous concept for the restriction
owl:Restriction	concept.id	System generated
owl:Restriction	concept.isActive = true	No comments
owl:Restriction	concept.isAnonymous = true	Hard coded "True"
owl:onProperty	association.id	No comments
owl: allValuesFrom	concept.entityDescription	String of allValuesFrom values
owl: allValuesFrom	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl: allValuesFrom	concept.presentation.propertyName	Hard coded "textualPresentation"
owl: allValuesFrom	concept.presentation.isPreferred = true	Hard coded "true"
owl: allValuesFrom	concept.presentation.text	String of allValuesFrom values
owl: allValuesFrom	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl: allValuesFrom	concept.conceptProperty.propertyName = type	Hard coded "type"
owl: allValuesFrom	concept.conceptProperty.text = "owl: unionOf"	No comments
owl: someValuesFrom	concept.entityDescription	String of someValuesFrom values
owl: someValuesFrom	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl: someValuesFrom	concept.presentation.propertyName	Hard coded "textualPresentation"
owl: someValuesFrom	concept.presentation.isPreferred = true	Hard coded "true"
owl: someValuesFrom	concept.presentation.text	String of someValuesFrom values
owl: someValuesFrom	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl: someValuesFrom	concept.conceptProperty.propertyName = type	Hard coded "type"

owl: someValuesFrom	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:intersectionOf	concept.entityDescription	String of intersectionOf values (ie. Pizza and not VegetarianPizza)
owl:intersectionOf	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:intersectionOf	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:intersectionOf	concept.presentation.isPreferred = true	Hard coded "true"
owl:intersectionOf	concept.presentation.text	String of intersectionOf values (ie. Pizza and not VegetarianPizza)
owl:intersectionOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:intersectionOf	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:intersectionOf	concept.conceptProperty.text = "owl: intersectionOf"	No comments
UnionOf	concept.conceptProperty.text = "owl: unionOf"	No comments
owl:complementOf	association	association.id = "subClassOf"
owl:oneOf	concept.entityDescription	String of oneOf values
owl:oneOf	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:oneOf	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:oneOf	concept.presentation.isPreferred = true	Hard coded "true"
owl:oneOf	concept.presentation.text	String of oneOf values
owl:oneOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:oneOf	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:oneOf	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:hasValue	associationQualification. nameAndValueList.content	No comments
owl:minCardinality	concept.entityDescription	String of minCardinality Values (ie. (hasTopping min 3) and Pizza)
owl:minCardinality	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:minCardinality	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:minCardinality	concept.presentation.isPreferred = true	Hard coded "true"
owl:minCardinality	concept.presentation.text	String of minCardinality Value (ie. (hasTopping min 3) and Pizza)
owl:minCardinality	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:minCardinality	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:minCardinality	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:maxCardinality	concept.entityDescription	String of maxCardinality Values (ie. (hasTopping max 2) and Pizza)
owl:maxCardinality	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:maxCardinality	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:maxCardinality	concept.presentation.isPreferred = true	Hard coded "true"
owl:maxCardinality	concept.presentation.text	String of maxCardinality Values (ie. (hasTopping max 2) and Pizza)
owl:maxCardinality	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:maxCardinality	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:maxCardinality	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:cardinality	concept.entityDescription	String of cardinality Values

owl:cardinality	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:cardinality	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:cardinality	concept.presentation.isPreferred = true	Hard coded "true"
owl:cardinality	concept.presentation.text	String of cardinality Values
owl:cardinality	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:cardinality	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:cardinality	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:disjointWith	association	association.id = "disjointWith"

OWL: Annotation Property	LexGrid	Comments
rdfs:label	Presentation	No comments
rdfs:label	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
rdfs:label	concept.presentation.propertyName = "textualPresentation"	Hard coded "textualPresentation"
rdfs:label	concept.presentation.isPreferred = true	Hard coded "true"
rdfs:label	concept.presentation.text	Value of rdfs:label
rdfs:comment	Comment	No comments
rdfs:comment	concept.comment.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
rdfs:comment	concept.comment.propertyName = "comment"	Hard coded "comment"
rdfs:comment	concept.presentation.text	Value of rdfs:comment
rdfs:seeAlso	conceptProperty	No comments
rdfs:isDefinedBy	conceptProperty	No comments

OWL Element OWL: Versioning	LexGrid	Comments
owl:versionInfo	codingScheme.representsVersion	No comments
priorVersion	Not mapped	No comments
backwardCompatibleWith	Not mapped	No comments
owl:incompatibleWith	association	No comments
owl:incompatibleWith	association.id = "incompatibleWith"	No comments
owl:incompatibleWith	association.forwardName = "incompatibleWith"	No comments
owl:incompatibleWith	association.isFunctional = "false"	No comments
owl:incompatibleWith	association.isNavigable = "true"	No comments
owl:incompatibleWith	association.isReflexive="true"	No comments
owl:incompatibleWith	association.isSymmetric="true"	No comments
owl:incompatibleWith	association.isTransitive="true"	No comments
owl:incompatibleWith	association.reverseName="incompatibleWith"	No comments
DeprecatedClass	Concept attribute setIsActive = false	Not mapped
DeprecatedProperty	Not mapped	No comments

OWL Mapping - 5.0

OWL Mapping - Protégé (5.0)

OWL Element OWL: RDF Schema Features	LexEVS	Comments
owl:ontology	codingScheme	No comments
xml:lang	codingScheme.defaultLanguage	Default is 'en'
dc:title	codingScheme.formalName	No comments
rdfs:label	codingScheme.localName	No comments
URI	codingScheme.registeredName	No comments
owl:versionInfo	codingScheme. representsVersion	Default is 'UNASSIGNED'
dc:rights	codingScheme.copyright	No comments
owl:Class (Thing, Nothing)	concept	No comments
rdf:ID	concept.conceptCode	No comments
rdf:ID	concept.isActive	Hard coded as "Active"
rdf:ID	concept.isAnonymous	No comments
rdf:ID	concept.isDefined	No comments
rsfs:label	concept.entityDescription	No comments
rdf:comment	concept.comment	No comments
rdfs:subClassOf	association	No comments
rdfs:subClassOf	association.id = "subClassOf"	No comments
rdfs:subClassOf	association.forwardName = "subClassOf"	No comments
rdfs:subClassOf	association.isFunctional = "false"	No comments
rdfs:subClassOf	association.isNavigable = "true"	No comments
rdfs:subClassOf	association.isReflexive="true"	No comments
rdfs:subClassOf	association.isSymmetric="false"	No comments
rdfs:subClassOf	association.isTransitive="true"	No comments
rdf:Property (ObjectProperty)	association	An association between two classes (domain, range)
rdf:Property (DatatypeProperty)	association concept.conceptProperty	An association between one class (domain) and one asscoication (domain and hasDataProperty). The conceptProperty defines the range.
rdfs:subPropertyOf	association	No comments
rdfs:subPropertyOf	association.id = "subPropertyOf"	No comments
rdfs:subPropertyOf	association.forwardName = "subPropertyOf"	No comments
rdfs:subPropertyOf	association.isFunctional = "false"	No comments
rdfs:subPropertyOf	association.isNavigable = "true"	No comments
rdfs:subPropertyOf	association.isReflexive="true"	No comments
rdfs:subPropertyOf	association.isSymmetric="false"	No comments
rdfs:subPropertyOf	association.isTransitive="true"	No comments
rdfs:domain	association	No comments
rdfs:domain	association.id = "domain"	No comments
rdfs:domain	association.forwardName = "domain"	No comments
rdfs:domain	association.isNavigable = "true"	No comments
rdfs:domain	association.isReflexive="false"	No comments
rdfs:domain	association.isSymmetric="false"	No comments
rdfs:domain	association.isTransitive="true"	No comments

rdfs:range	association	No comments
rdfs:domain	association.id = "range"	No comments
rdfs:domain	association.forwardName = "range"	No comments
rdfs:domain	association.isNavigable = "true"	No comments
rdfs:domain	association.isReflexive="false"	No comments
rdfs:domain	association.isSymmetric="false"	No comments
rdfs:domain	association.isTransitive="false"	No comments
Individual	association	An 'instance' association is created. (ie. sourceId = Country, targetId = America)
Individual	association.id = "instance"	No comments

OWL Element OWL (In)Equality	LexEVS	Comments
owl:equivalentClass	association	No comments
owl:equivalentClass	association.id = "equivalentClass"	No comments
owl:equivalentClass	association.forwardName = "equivalentClass"	No comments
owl:equivalentClass	association.isFunctional = "false"	No comments
owl:equivalentClass	association.isNavigable = "true"	No comments
owl:equivalentClass	association.isReflexive="true"	No comments
owl:equivalentClass	association.isSymmetric="true"	No comments
owl:equivalentClass	association.isTransitive="true"	No comments
owl:equivalentClass	association.reverseName="equivalentClass"	No comments
owl: equivalentProperty	association	No comments
owl: equivalentProperty	association.id = "equivalentProperty"	No comments
owl: equivalentProperty	association.forwardName = "equivalentProperty"	No comments
owl: equivalentProperty	association.isFunctional = "false"	No comments
owl: equivalentProperty	association.isNavigable = "true"	No comments
owl: equivalentProperty	association.isReflexive="true"	No comments
owl: equivalentProperty	association.isSymmetric="true"	No comments
owl: equivalentProperty	association.isTransitive="true"	No comments
owl: equivalentProperty	association.reverseName="equivalentProperty"	No comments
owl:sameAs	association	No comments
owl:sameAs	association.id = "sameAs"	No comments
owl:sameAs	association.forwardName = "sameAs"	No comments
owl:sameAs	association.isFunctional = "false"	No comments
owl:sameAs	association.isNavigable = "true"	No comments
owl:sameAs	association.isReflexive="true"	No comments
owl:sameAs	association.isSymmetric="true"	No comments
owl:sameAs	association.isTransitive="true"	No comments
owl:sameAs	association.reverseName="sameAs"	No comments
differentFrom	association	No comments
differentFrom	association.id = "differentFrom"	No comments

differentFrom	association.forwardName = "differentFrom"	No comments
differentFrom	association.isFunctional = "false"	No comments
differentFrom	association.isNavigable = "true"	No comments
differentFrom	association.isReflexive="true"	No comments
differentFrom	association.isSymmetric="true"	No comments
differentFrom	association.isTransitive="true"	No comments
differentFrom	association.reverseName= "differentFrom"	No comments
owl:AllDifferent	association	No comments
owl:AllDifferent	association.id = "AllDifferent"	No comments
owl:AllDifferent	association.forwardName = "AllDifferent"	No comments
owl:AllDifferent	association.isFunctional = "false"	No comments
owl:AllDifferent	association.isNavigable = "true"	No comments
owl:AllDifferent	association.isReflexive="true"	No comments
owl:AllDifferent	association.isSymmetric="true"	No comments
owl:AllDifferent	association.isTransitive="true"	No comments
owl:AllDifferent	association.reverseName= "AllDifferent"	No comments

OWL Element OWL: Property Characteristics	**LexEVS**	**Comments**
owl:inverseOf	association	No comments
owl:inverseOf	association.id = "inverseOf"	No comments
owl:inverseOf	association.forwardName = "inverseOf"	No comments
owl:inverseOf	association.isFunctional = "false"	No comments
owl:inverseOf	association.isNavigable = "true"	No comments
owl:inverseOf	association.isReflexive="true"	No comments
owl:inverseOf	association.isSymmetric="true"	No comments
owl:inverseOf	association.isTransitive="true"	No comments
owl:inverseOf	association.reverseName="inverseOf"	No comments
owl:TransitiveProperty	association.isTransitive	association property 'isTransitive'
owl:SymmetricProperty	association.isSymmetric	association property 'isSymmetric'
owl:InverseFunctionalProperty	association.isReverseFunctional	association property 'isReverseFunctional'
owl:FunctionalProperty	association.isFunctional	association property 'isFunctional'

OWL: Property Restrictions	**LexEVS**	**Comments**
owl:Restriction	concept	Create an anonymous concept for the restriction
owl:Restriction	concept.id	System generated
owl:Restriction	concept.isActive = true	No comments
owl:Restriction	concept.isAnonymous = true	Hard coded "True"
owl:onProperty	association.id	No comments
owl: allValuesFrom	concept.entityDescription	String of allValuesFrom values
owl: allValuesFrom	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl: allValuesFrom	concept.presentation.propertyName	Hard coded "textualPresentation"
owl: allValuesFrom	concept.presentation.isPreferred = true	Hard coded "true"

owl: allValuesFrom	concept.presentation.text	String of allValuesFrom values
owl: allValuesFrom	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl: allValuesFrom	concept.conceptProperty.propertyName = type	Hard coded "type"
owl: allValuesFrom	concept.conceptProperty.text = "owl: unionOf"	No comments
owl: someValuesFrom	concept.entityDescription	String of someValuesFrom values
owl: someValuesFrom	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl: someValuesFrom	concept.presentation.propertyName	Hard coded "textualPresentation"
owl: someValuesFrom	concept.presentation.isPreferred = true	Hard coded "true"
owl: someValuesFrom	concept.presentation.text	String of someValuesFrom values
owl: someValuesFrom	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl: someValuesFrom	concept.conceptProperty.propertyName = type	Hard coded "type"
owl: someValuesFrom	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:intersectionOf	concept.entityDescription	String of intersectionOf values (ie. Pizza and not VegetarianPizza)
owl:intersectionOf	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:intersectionOf	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:intersectionOf	concept.presentation.isPreferred = true	Hard coded "true"
owl:intersectionOf	concept.presentation.text	String of intersectionOf values (ie. Pizza and not VegetarianPizza)
owl:intersectionOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:intersectionOf	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:intersectionOf	concept.conceptProperty.text = "owl: intersectionOf"	No comments
UnionOf	concept.conceptProperty.text = "owl: unionOf"	No comments
owl:complementOf	association	association.id = "subClassOf"
owl:oneOf	concept.entityDescription	String of oneOf values
owl:oneOf	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:oneOf	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:oneOf	concept.presentation.isPreferred = true	Hard coded "true"
owl:oneOf	concept.presentation.text	String of oneOf values
owl:oneOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:oneOf	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:oneOf	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:hasValue	associationQualification. nameAndValueList.content	No comments
owl:minCardinality	concept.entityDescription	String of minCardinality Values (ie. (hasTopping min 3) and Pizza)
owl:minCardinality	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:minCardinality	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:minCardinality	concept.presentation.isPreferred = true	Hard coded "true"
owl:minCardinality	concept.presentation.text	String of minCardinality Value (ie. (hasTopping min 3) and Pizza)
owl:minCardinality	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.

owl:minCardinality	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:minCardinality	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:maxCardinality	concept.entityDescription	String of maxCardinality Values (ie. (hasTopping max 2) and Pizza)
owl:maxCardinality	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:maxCardinality	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:maxCardinality	concept.presentation.isPreferred = true	Hard coded "true"
owl:maxCardinality	concept.presentation.text	String of maxCardinality Values (ie. (hasTopping max 2) and Pizza)
owl:maxCardinality	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:maxCardinality	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:maxCardinality	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:cardinality	concept.entityDescription	String of cardinality Values
owl:cardinality	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:cardinality	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:cardinality	concept.presentation.isPreferred = true	Hard coded "true"
owl:cardinality	concept.presentation.text	String of cardinality Values
owl:cardinality	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:cardinality	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:cardinality	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:disjointWith	association	association.id = "disjointWith"

OWL: Annotation Property	**LexEVS**	**Comments**
rdfs:label	Presentation	No comments
rdfs:label	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
rdfs:label	concept.presentation.propertyName = "textualPresentation"	Hard coded "textualPresentation"
rdfs:label	concept.presentation.isPreferred = true	Hard coded "true"
rdfs:label	concept.presentation.text	Value of rdfs:label
rdfs:comment	Comment	No comments
rdfs:comment	concept.comment.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
rdfs:comment	concept.comment.propertyName = "comment"	Hard coded "comment"
rdfs:comment	concept.presentation.text	Value of rdfs:comment
rdfs:seeAlso	conceptProperty	No comments
rdfs:isDefinedBy	conceptProperty	No comments

OWL Element OWL: Versioning	**LexEVS**	**Comments**
owl:versionInfo	codingScheme.representsVersion	No comments
priorVersion	Not mapped	No comments

backwardCompatibleWith	Not mapped	No comments
owl:incompatibleWith	association	No comments
owl:incompatibleWith	association.id = "incompatibleWith"	No comments
owl:incompatibleWith	association.forwardName = "incompatibleWith"	No comments
owl:incompatibleWith	association.isFunctional = "false"	No comments
owl:incompatibleWith	association.isNavigable = "true"	No comments
owl:incompatibleWith	association.isReflexive="true"	No comments
owl:incompatibleWith	association.isSymmetric="true"	No comments
owl:incompatibleWith	association.isTransitive="true"	No comments
owl:incompatibleWith	association.reverseName="incompatibleWith"	No comments
DeprecatedClass	Concept attribute setIsActive = false	Not mapped
DeprecatedProperty	Not mapped	No comments

OWL Mapping - NCI OWL

OWL Element OWL: RDF Schema Features	**LexGrid**	**Comments**
owl:ontology	codingScheme	Hard coded "NCI_Thesaurus"
xml:lang	codingScheme.defaultLanguage	Hard coded "en"
dc:title	codingScheme.formalName	Hard coded "NCI Thesaurus"
rdfs:label	codingScheme.localName	Hard coded "NCI_Thesaurus"
rdfs:label	Hard coded "40010"	No comments
rdfs:label	Hard coded "urn:oid: 2.16.840.1.113883.3.26.1.1"	No comments
URI	codingScheme.registeredName	Hard coded "http://ncicb.nci.nih.gov/xml/owl/EVS/Thesaurus.owl#"
owl:versionInfo	codingScheme.representsVersion	No comments
dc:rights	codingScheme.copyright	Read from hard coded "Terms.txt" file .
rdfs:comment	codingScheme.entityDescription	No comments
rdfs:comment	codingScheme.isNative	Hard coded "true"
owl:Class (Thing, Nothing)	concept	No comments
code	concept.id	No comments
code	concept.isActive	Hard coded as "true" unless class "owl:DeprecatedClass", then 'false'
code	concept.isAnonymous	No comments
rsfs:label	concept.entityDescription	No comments
rdf:comment	concept.comment	No comments
rdf:comment	conceptProperty	Indicate whether the concept is primative (has no equavalent classes)
rdf:comment	concept.conceptProperty. propertyName	Hard coded as "primitive"
rdf:comment	concept.conceptProperty.text	"true"
rdf:comment	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
rdf:comment	presentation	Provide default presentation to match concept entity description if not provided as property
rdf:comment	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
rdf:comment	concept.presentation.propertyName	Hard coded "NCI_Preferred_Term"
rdfs:label	concept.presentation.text	concept.entityDescription
rdfs:label	conceptProperty	Property with designated concept name label (per NCI requirements and used in codeToName /nameToCode lookup).

rdfs:label	concept.conceptProperty. propertyName	Hard coded as "CONCEPT_NAME"
rdfs:label	concept.conceptProperty.text	concept.entityDescription
rdfs:label	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
rdfs:label	relation	Top-level container for associations (non-inheritable, non-defining relationships between concepts.
rdfs:label	relations.dc	Hard coded as "associations"
rdfs:label	relations.isNative	Hard coded as "true"
rdfs:label	relations.entityDescription	Hard coded as "Non-inheritable non-defining relations."
rdfs:label	relation	Top-level container for roles (inheritable relationships)
rdfs:label	relations.dc	Hard coded as "roles"
rdfs:label	relations.isNative	Hard coded as "true"
rdfs:label	relations.entityDescription	Hard coded as "Inheritable/defining relations."
rdfs:subClassOf	association	Association for subtype hierarchy.
rdfs:subClassOf	association.id = "hasSubtype"	No comments
rdfs:subClassOf	association.forwardName = "hasSubtype"	No comments
rdfs:subClassOf	association.reverseName = "isA"	No comments
rdfs:subClassOf	association.isNavigable = "true"	Hard coded as "true"
rdfs:subClassOf	Hard coded as "true"	No comments
rdfs:subClassOf	Hard coded as "false"	No comments
rdfs:subClassOf	Hard coded as "true"	No comments
hasElement	association	Association used to register component classes as elements of anonymous node representations.
hasElement	association.id = "hasElement"	No comments
hasElement	association.forwardName = "hasElement"	No comments
hasElement	association.isNavigable = "true"	Hard coded as "true"
hasElement	Hard coded as "false"	No comments
hasElement	Hard coded as "true"	No comments
rdfs:domain	association	Association for role_has_domain relations
rdfs:domain	association.id = "Role_Has_Domain"	No comments
rdfs:domain	association.forwardName = "roleHasDomain"	No comments
rdfs:domain	association.reverseName = "kindIsDomainOf"	No comments
rdfs:domain	association.isNavigable = "true"	Hard coded as "true"
rdfs:domain	Hard coded as "false"	No comments
rdfs:domain	Hard coded as "false"	No comments
rdfs:domain	Hard coded as "true"	No comments
rdfs:range	association	Association for range relations
rdfs:range	association.id = "Role_Has_Range"	No comments
rdfs:range	association.forwardName = "roleHasRange"	No comments
rdfs:range	association.reverseName = "kindIsRangeOf"	No comments
rdfs:range	association.isNavigable = "true"	Hard coded as "true"
rdfs:range	association.isReflexive="false"	Hard coded as "false"
rdfs:range	association.isSymmetric="false"	Hard coded as "false"
rdfs:range	association.isTransitive="false"	Hard coded as "false"

rdf:Property (ObjectProperty)	association	An association between two classes (hasDomain, hasRange)
rdfs:subPropertyOf	Not mapped	No comments

OWL Element OWL (In) Equality	LexGrid	Comments
owl:equivalentClass	association	Association for equivalent class.
owl:equivalentClass	association.id = "equivalentClass"	No comments
owl:equivalentClass	association.forwardName = "equivalentClass"	No comments
owl:equivalentClass	association.reverseName = "equivalentClass"	No comments
owl:equivalentClass	association.isNavigable = "true"	Hard coded as "true"
owl:equivalentClass	association.isReflexive="true"	Hard coded as "true"
owl:equivalentClass	association.isSymmetric="true"	Hard coded as "true"
owl:equivalentClass	association.isTransitive="true"	Hard coded as "true"

OWL Element OWL: Property Characteristics	LexGrid	Comments
owl:inverseOf	association	No comments
owl:inverseOf	association.id = "inverseOf"	No comments
owl:inverseOf	association.forwardName = "inverseOf"	No comments
owl:inverseOf	association.isFunctional = "false"	No comments
owl:inverseOf	association.isNavigable = "true"	No comments
owl:inverseOf	association.isReflexive="true"	No comments
owl:inverseOf	association.isSymmetric="true"	No comments
owl:inverseOf	association.isTransitive="true"	No comments
owl:inverseOf	association.reverseName="inverseOf"	No comments
owl:TransitiveProperty	association.isTransitive	association property 'isTransitive'
owl:SymmetricProperty	association.isSymmetric	association property 'isSymmetric'
owl:InverseFunctionalProperty	association.isReverseFunctional	association property 'isReverseFunctional'
owl:FunctionalProperty	association.isFunctional	association property 'isFunctional'

OWL Element OWL: Property Restrictions	LexGrid	Comments
owl:Restriction	concept	Anonymous concept created.
owl:Restriction	concept.entityDescription = "RestrictionOn: " + association name	Concatination of "Restriction On: " and assocation name
owl:Restriction	concept.isAnonymous = true	No comments
owl: allValuesFrom	associationQualification.association.Qualifier = "AllValuesFrom"	No comments
owl: someValuesFrom	associationQualification.association.Qualifier = "someValuesFrom"	No comments
owl:intersectionOf	concept.entityDescription	Concatination of "Restriction On: " and assocation name
owl:intersectionOf	concept.isAnonymous = true	No comments

owl:intersectionOf	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:intersectionOf	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:intersectionOf	concept.presentation.isPreferred = true	Hard coded "true"
owl:intersectionOf	concept.presentation.text	Set to concept.entityDescription
owl:intersectionOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:intersectionOf	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:intersectionOf	concept.conceptProperty.text = "owl: intersectionOf"	No comments
owl:unionOf	concept.entityDescription	Concatination of "Restriction On: " and assocation name
owl:unionOf	concept.isAnonymous = true	No comments
owl:unionOf	concept.presentation.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
owl:unionOf	concept.presentation.propertyName	Hard coded "textualPresentation"
owl:unionOf	concept.presentation.isPreferred = true	Hard coded "true"
owl:unionOf	concept.presentation.text	Set to concept.entityDescription
owl:unionOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:unionOf	concept.conceptProperty.propertyName = type	Hard coded "type"
owl:unionOf	concept.conceptProperty.text = "owl:unionOf"	No comments
owl:oneOf	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
owl:oneOf	concept.conceptProperty.propertyName = "owl: oneOf"	Hard coded "owl:oneOf"
owl:oneOf	concept.conceptProperty.text	String of oneOf values

OWL Element OWL: Annotation Property	**LexGrid**	**Comments**
rdfs:comment	Comment	No comments
rdfs:comment	concept.comment.propertyId	Generated value for property textual presentation using "P" concatenated with a steadily incremented numerical value.
rdfs:comment	concept.comment.propertyName = "comment"	Hard coded "comment"
rdfs:comment	concept.presentation.text	Value of rdfs:comment
rdfs:seeAlso	conceptProperty	No comments
rdfs:isDefinedBy	conceptProperty	No comments
OWL: Versioning	**LexGrid**	**Comments**
owl:versionInfo	codingScheme.representsVersion	No comments
priorVersion	Not mapped	No comments
backwardCompatibleWith	Not mapped	No comments
DeprecatedClass	Not mapped	No comments
DeprecatedProperty	Not mapped	No comments

Legacy Complex Properties Mapping

Tag	**Presentation**	**Source**	**Represenational Form**	**Qualifier**	**Model Element**	**Value Column Name**	**Model Element**
go-term	x	NA	NA	NA	None	propertyValue	None
go-id	NA	NA	NA	x	propertyQualifierId	val1	PropertyQualifier attribute content?
go-source	NA	NA	NA	x	propertyQualifierId	val1	PropertyQualifier attribute content?

source-date	NA	NA	NA	x	propertyQualifierId	val1	PropertyQualifier attribute content?
term-name	x	NA	NA	NA	None	propertyValue	None
term-group	NA	NA	x	NA	None	representationalForm	property attribute
term-source	NA	x	NA	NA	None	attributeValue	source
def-source	NA	x	NA	NA	None	attributeValue	source
def-definition	x	NA	NA	NA	propertyValue	definition	None
Definition_Review_Date	NA	NA	NA	x	propertyQualifierId	val1	PropertyQualifier attribute content?
Definition_Reviewer_Name	NA	NA	NA	x	propertyQualifierId	val1	PropertyQualifier attribute content?

UMLS SemNet Mapping

Coding Scheme RRF File Name	Coding Scheme RRF Column Name	Coding Scheme RRF Definition	Coding Scheme NCI Meta only	Coding Scheme LexGrid Model Element	Coding Scheme Comments
None	None	None	NA	codingScheme. representsVersion	No comments
None	None	None	NA	codingScheme. codingScheme	Hard coded in java file as "UMLS_SemNet"
None	None	None	NA	codingScheme. formalName	Hard coded in java file as "UMLS Semantic Network"
None	None	None	NA	codingScheme. defaultLanguage	Hard coded in java file as "en"
None	None	None	NA	codingScheme. approxNumConcepts	Hard coded in java file as
None	None	None	NA	codingScheme. entityDescription	hard coded in java file as "The UMLS Semantic Network is one of three UMLS Knowledge Sources developed as part of the Unified Medical Language System project. The network provides a consistent Hategorization of all concepts represented in the UMLS Metathesaurus."
license.txt	None	None	NA	codingScheme. copyright	Read from license.txt file or hard coded reference in java file
license.txt	None	None	NA	codingScheme. registeredName	Hard coded in java file as "urn:lsid:nlm.nih.gov:semnet"
license.txt	None	None	NA	codingScheme. concepts.dc	Hard coded in java file as "concepts"
license.txt	None	None	NA	codingScheme. relations.dc	Hard coded in java file as "relations"
license.txt	None	None	NA	codingScheme. mappings.dc	Hard coded in java file as "mappings"
license.txt	None	None	NA	codingScheme. localNameList	No comments
license.txt	None	None	NA	codingScheme. localNameList.	Hard coded in java file as "UMLS_SemNet"
license.txt	None	None	NA	codingScheme. localNameList	No comments
license.txt	None	None	NA	codingScheme. localNameList.	No comments
license.txt	None	None	NA	codingScheme.source	No comments
license.txt	None	None	NA	codingScheme.source. content	No comments
license.txt	None	None	NA	codingScheme. localNameList	No comments
license.txt	None	None	NA	codingScheme. localNameList.	No comments
license.txt	None	None	NA	codingScheme. localNameList	No comments
license.txt	None	None	NA	codingScheme. localNameList.	No comments
license.txt	None	None	NA	codingScheme. localNameList	No comments
license.txt	None	None	NA	codingScheme. localNameList.	No comments
license.txt	None	None	NA	codingScheme. localNameList	No comments
license.txt	None	None	NA	codingScheme. localNameList.	No comments
license.txt	None	None	NA	mappings. supportedFormat	No comments
license.txt	None	None	NA	mappings. supportedFormat. localId	Hard coded in java file as "text/plain"
license.txt	None	None	NA	mappings. supportedFormat.urn	Hard coded in java file as "urn:oid:2.16.840.1.113883.6.10:text_plain"
license.txt	None	None	NA	mappings. supportedAssociation	No comments
SRDEF	RL	None	NA	mappings. supportedAssociation. localId	No comments

SRDEF	RL	None	NA	mappings. supportedContext	No comments
SRDEF	RL	None	NA	mappings. supportedSource	No comments
SRDEF	RL	None	NA	mappings. supportedSource. localId	Hard coded in java file as "NLM"
SRDEF	RL	None	NA	mappings. supportedSource.urn	Hard coded in java file as "urn:lsid:nlm.nih.gov"
SRDEF	RL	None	NA	mappings. supportedHierarchy	No comments
SRDEF	RL	None	NA	mappings. supportedHierarchy. localId	Hard coded in java file as "is_a"
SRDEF	RL	None	NA	mappings. supportedHierarchy. isForwardNavigable	Hard coded as "true"
SRDEF	RL	None	NA	mappings. supportedHierarchy. rootCode	Hard coded as "@"
SRDEF	RL	None	NA	mappings. supportedHierarchy. associationList	Hard coded in java file as "hasSubtype"
SRDEF	RL	None	NA	mappings. supportedAssociation Qualifier	No comments
SRFLD	COL	None	NA	mappings. supportedProperty	No comments
SRFLD	COL	None	NA	mappings. supportedProperty. localId	If SRDEF appears in the FIL column then this is treated a potential supported property and is entered in supported properties as such.
SRFLD	COL	None	NA	mappings. supportedProperty. urn	Hard coded in java file as ""
SRFLD	COL	None	NA	mappings. supportedLanguage	No comments
SRFLD	COL	None	NA	mappings. supportedLanguage. localId	Hard coded in java file as "en"
SRFLD	COL	None	NA	mappings. supportedLanguage. urn	Hard coded in java file as "urn:oid:2.16.840.1.113883.6.84:en"
SRFLD	COL	None	NA	mappings. supportedCodingScheme	No comments
SRFLD	COL	None	NA	mappings. supportedCodingScheme.localId	Hard coded in java file as "UMLS_SemNet"
SRFLD	COL	None	NA	mappings. supportedCodingScheme.urn	Hard coded in java file as "urn:lsid:nlm.nih.gov:semnet"
SRFLD	COL	None	NA	mappings. supportedRepresentationalForm	No comments
SRFLD	COL	None	NA	mappings. supportedConceptStatus	No comments
SRFLD	COL	None	NA	mappings. supportedPropertyLink	No comments
SRFLD	COL	None	NA	mappings. supportedPropertyQualifier	No comments
SRFLD	COL	None	NA	mappings. supportedDataType	No comments

Concepts RRF File Name	**Concepts RRF Column Name**	**Concepts RRF Definition**	**Concepts NCI Meta Only**	**Concepts LexGrid Model Element**	**Concepts Comments**
SRDEF	UI	None	NA	concept.id(inherited from Entity)	No comments
SRDEF	STY/RL	None	NA	concept.enitityDescription(inheritance path Entity->versionableAndDescribable)	No comments
SRDEF	STY/RL	None	NA	concept.conceptProperty	No comments
SRDEF	NH	None	NA	concept.conceptProperty.text.content	No comments
SRDEF	NH	None	NA	concept.conceptProperty.format	Hard coded in java file as "text/plain"
SRDEF	NH	None	NA	concept.conceptProperty.propertyName	Hard coded in java file as "NH"
SRDEF	NH	None	NA	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
SRDEF	NH	None	NA	concept.presentation	No comments
SRDEF	NH	None	NA	concept.presentation.propertyName (inherited from Property)	Hard coded in java file as "STY/RL" or "ABR"
SRDEF	NH	None	NA	concept.presentation.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
SRDEF	STY/RL, ABR	None	NA	concept.presentation.text.content	No comments
SRDEF	STY/RL, ABR	None	NA	concept.presentation.format	Hard coded in java file as "text/plain"

SRDEF	STY/RL, ABR	None	NA	concept.presentation.isPreferred	Hard coded in java file as true.
SRDEF	STY/RL, ABR	None	NA	concept.definition.propertyName (inherited from Property)	Hard coded in java file as "DEF"
SRDEF	STY/RL, ABR	None	NA	concept.definition.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
SRDEF	DEF	None	NA	concept.definition.text.content	No comments
SRDEF	DEF	None	NA	concept.definition.format	Hard coded in java file as "text/plain"
SRDEF	DEF	None	NA	concept.definition.isPreferred	Hard coded in java file as true.
SRDEF	DEF	None	NA	concept.comment	No comments
SRDEF	EX	None	NA	concept.comment.propertyName (inherited from Property)	Hard coded in java file as "EX"
SRDEF	EX	None	NA	concept.comment.text.content	No comments
SRDEF	EX	None	NA	concept.comment.format	Hard coded in java file as "text/plain"
SRDEF	EX	None	NA	concept.comment.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
SRDEF	EX	None	NA	concept.instruction	No comments
SRDEF	EX	None	NA	concept.instruction.propertyName (inherited from Property)	Hard coded in java file as "UN"
SRDEF	UN	None	NA	concept.instruction.text.content	No comments
SRDEF	UN	None	NA	concept.instruction.format	Hard coded in java file as "text/plain"
SRDEF	UN	None	NA	concept.instruction.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.

Relations RRF File Name	Relations RRF Column Name	Relations RRF Definition	Relations NCI Meta Only	Relations LexGrid Model Element	Relations Comments
SRSTR	RL	None	NA	association.id (inherited from Entity)	In the case of RL value is "isa" the id is hard coded to hasSubtype. The direction of the association is also reversed
SRSTR	RL	None	NA	association.isTransitive	Hard coded to true if the value of RL is "isa"
SRSTR	RL	None	NA	association.forwardName	Reversed when value of RL is "isa"
SRSTR	STY/RL	None	NA	associationInstance.sourceId	Reversed when value of RL is "isa"
SRSTR	STY/RL	None	NA	associationTarget.targetId	No comments
SRDEF	RIN	None	NA	association.reverseName	No comments
SRDEF	DEF	None	NA	association.entityDescription.content (inheritance path for entityDescription is Entity->versionableAndDescribable)	When SRDEF value RT is "RL"
SRSTRE1	UI/STY(first argument)	None	NA	associationInstance.sourceId	Reversed when value of RL is "isa"
SRSTRE1	UI/STY(2nd argument)	None	NA	associationTarget.targetId	Reversed when value of RL is "isa"

UMLS Mapping

Coding Scheme RRF File Name	Coding Scheme RRF Column Name	Coding Scheme RRF Definition	Coding Scheme NCI Meta only	Coding Scheme LexGrid Model Element	Coding Scheme Comments
MRSAB.RRF	SVER	Release date or version number of a source	NA	codingScheme.representsVersion	No comments
MRSAB.RRF	SSN	Source short name	NA	codingScheme.codingScheme	No comments
MRSAB.RRF	SON	Source Official Name	NA	codingScheme.formalName	No comments
MRSAB.RRF	LAT	Language of Term(s)	NA	codingScheme.defaultLanguage	No comments
MRSAB.RRF	TRF	Term frequency for a source	NA	codingScheme.approxNumConcepts	No comments
MRSAB.RRF	SCIT	Source citation	NA	codingScheme.entityDescription	Inherits entityDescription from versionableAndDescribable
MRSAB.RRF	SCC	Content contact info for a source	NA	codingScheme.copyright	No comments
MRSAB.RRF	SCC	Content contact info for a source	NA	codingScheme.registeredName	Pulled from iso mapping configuration file using method getISOString(RSAB from MRSAB.RRF)
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.representsVersion	Where Dockey = "RELEASE" and value = "umls.release.name"

MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.codingScheme	Hard coded in java file as "NCI MetaThesaurus"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.formalName	Hard coded in java file as "NCI MetaThesaurus"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.defaultLanguage	Hard coded in java file as "ENG"
MRCONSO.RRF	None	None	x	codingScheme.approxNumConcepts	Count of CODE value in MRCONSO.RRF
MRCONSO.RRF	None	None	x	codingScheme.entityDescription	Hard coded in java file as "NCI MetaThesaurus loaded from RRF files."
MRCONSO.RRF	None	None	x	codingScheme.copyright	Hard coded in java file as "Some material in the NCI Metathesaurus is from copyrighted sources of the respective copyright claimants. All sources appearing in the NCI Metathesaurus are licensed or authorized for NCI use. Users of the NCI Metathesaurus are responsible for compliance with the terms of these licenses and with any copyright restrictions and are referred to NCI Center of Bioinformatics for license terms and to the copyright notices appearing in the original sources, all of which are obtainable online by reference at http://ncimeta.nci.nih.gov/."
MRCONSO.RRF	None	None	NA	codingScheme.localNameList	Hard coded as constant in java file as "localName"
MRSAB.RRF	SON	Source Official Name	NA	codingScheme.localNameList.	No comments
MRSAB.RRF	SON	Source Official Name	NA	codingScheme.localNameList	Hard coded as constant in java file as "localName"
MRSAB.RRF	SON	Source Official Name	NA	codingScheme.localNameList.	Pulled from iso mapping configuration file using method getISOString(RSAB from MRSAB.RRF)
MRSAB.RRF	SON	Source Official Name	NA	codingScheme.source	Hard coded as constant in java file as "source"
MRDOC.RRF	EXPL	Detailed explanation	NA	codingScheme.source.content	String concatenation of "UMLS-" and value of EXPL
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList	Hard coded as constant in java file as "localName"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList.	Hard coded in java file as "NCI Thesaurus"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList	Hard coded as constant in java file as "localName"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList.	Hard coded in java file as "NCI_Thesaurus"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList	Hard coded as constant in java file as "localName"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList.	Hard coded in java file as "10001"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList	Hard coded as constant in java file as "source"
MRDOC.RRF	EXPL	Detailed explanation	x	codingScheme.localNameList.	Hard coded in java file as "RRF Files"
MRDOC.RRF	EXPL	Detailed explanation	NA	mappings.supportedFormat	Hard coded as constant in java file as "Format"
MRDOC.RRF	EXPL	Detailed explanation	NA	mappings.supportedFormat.localId	Hard coded as one of several constants in a java file
MRDOC.RRF	EXPL	Detailed explanation	NA	mappings.supportedAssociation	Hard coded as constant in java file as "Association"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedAssociation.localId	No comments
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedContext	Hard coded as constant in java file as "Context" May not be used in individual RRF load
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedSource	Hard coded as constant in java file as "Source" May not be used in individual RRF load
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedHierarchy	Hard coded as constant in java file as "Hierarchy"

MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedAssociationQualifier	Hard coded as constant in java file as "AssociationQualifier"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedProperty	Hard coded as constant in java file as "Property"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedLanguage	Hard coded as constant in java file as "Language"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedCodingScheme	Hard coded as constant in java file as "CodingScheme"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedRepresentationalForm	Hard coded as constant in java file as "RepresentationalForm"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedConceptStatus	Hard coded as constant in java file as "ConceptStatus"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedPropertyLink	Hard coded as constant in java file as "PropertyLink"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedPropertyQualifier	Hard coded as constant in java file as "PropertyQualifier"
MRREL.RRF	REL, RELA	Relationship, Relationship attribute	NA	mappings.supportedDataType	Hard coded as constant in java file as "DataType"

Concepts RRF File Name	Concepts RRF Column Name	Concepts RRF Definition	Concepts NCI Meta Only	Concepts LexGrid Model Element	Concepts Comments
MRCONSO.RRF	CODE	Unique Identifier or code for string in source	NA	concept.conceptCode	No comments
MRCONSO.RRF	CUI	Unique identifier for concept	x	concept.conceptCode	No comments
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.isActive	Hard coded in parameter as true.
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.conceptStatus	Hard coded as constant in java file as "Active"
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.isAnonymous	Hard coded in parameter as false.
MRCONSO.RRF	STR	String	NA	concept.entityDescription	Non comments
MRCONSO.RRF	STR	String	NA	concept.conceptProperty.Format	Hard coded as constant in java file as "text/plain" or null
MRCONSO.RRF	STR	String	NA	concept.conceptProperty.propertyName	May be hard coded as constant in java file as one of several properties.
MRCONSO.RRF	STR	String	NA	concept.conceptProperty.usageContext	No comments
MRCONSO.RRF	STR	String	NA	concept.conceptProperty.propertyId	Generated value for property using "P" concatenated with a steadily incremented numerical value.
MRCONSO.RRF	STR	String	NA	concept.presentation.propertyId	Generated value for property textual presentation using "T" concatenated with a steadily incremented numerical value.
MRCONSO.RRF	STR	String	NA	concept.comment.propertyId	Generated value for property comment using "C" concatenated with a steadily incremented numerical value.
MRCONSO.RRF	STR	String	NA	concept.definition.propertyId	Generated value for property definition using "D" concatenated with a steadily incremented numerical value.
MRCONSO.RRF	STR	String	NA	concept.instruction.propertyId	Generated value for property instruction using "I" concatenated with a steadily incremented numerical value.
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.conceptProperty.text.content.	No comments
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.conceptProperty.propertyId	Generated value for property using "CUI" concatenated with a steadily incremented numerical value.
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.conceptProperty.propertyName	Hard coded as constant in java file as "UMLS_CUI"
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.conceptProperty.propertyType	Hard coded as constant in java file as "property"
MRCONSO.RRF	CUI	Unique identifier for concept	NA	concept.conceptProperty.format	Left as null
MRSTY.RRF	STY	Semantic type	NA	concept.conceptProperty.text.content	No comments

MRSTY.RRF	STY	Semantic type	NA	concept. conceptProperty. propertyId	Generated value for property using "SemType" concatenated with a steadily incremented numerical value.
MRSTY.RRF	STY	Semantic type	NA	concept. conceptProperty. propertyName	Hard coded as constant in java file as "Semantic_Type"
MRSTY.RRF	STY	Semantic type	NA	concept. conceptProperty. propertyType	Hard coded as constant in java file as "property"
MRSTY.RRF	STY	Semantic type	NA	concept. conceptProperty. format	Hard coded as constant in java file as "text/plain"
MRCONSO. RRF	LAT	Language of Term(s)	NA	concept. conceptProperty. language	Logic of code simply selects the first definition in the source as the preferred source
MRCONSO. RRF	TS	Term status	NA	concept. presentation. isPreferred	One or a combination of these RRF values determines whether a presentation is preferred: LAT, TS, STT, ISPREF, RANK.
MRCONSO. RRF	STT	String type	NA	concept. presentation. isPreferred	One or a combination of these RRF values determines whether a presentation is preferred: LAT, TS, STT, ISPREF, RANK.
MRCONSO. RRF	ISPREF	Indicates whether AUI is preferred	NA	concept. presentation. isPreferred	One or a combination of these RRF values determines whether a presentation is preferred: LAT, TS, STT, ISPREF, RANK.
MRRANK.RRF	RANK	Termgroup ranking	NA	concept. presentation. isPreferred	One or a combination of these RRF values determines whether a presentation is preferred: LAT, TS, STT, ISPREF, RANK.
MRRANK.RRF	RANK	Termgroup ranking	NA	concept. presentation. isPreferred	No comments
MRDEF.RRF	DEF	Definition	NA	concept.definition. text.content	No comments
			NA	concept.definition. isPreferred	Logic of code simply selects the first definition in the source as the preferred source
MRSAT.RRF	ATN	Attribute name	NA	concept. conceptProperty. propertyType	Translated to a LexGrid property type. For values AN, CX, HN this property is typed as a "COMMENT" in LexGrid. For value EV this property is typed "PRESENTATION" This only occurs when the STYPE points to the CODE, SCUI or SDUI columns in MRREL.RRF or MRCONSO.RRF. If the STYPE points to SAUI then the values are loaded as property qualifiers.
MRSAT.RRF	ATV	Attribute value	NA	concept. conceptProperty. propertyValue	No comments
MRSAT.RRF	ATN	Attribute name	NA	concept. conceptProperty. propertyQualifier. propertyQualifierId	If the STYPE points to SAUI then the value is loaded as a property qualifier attribute
MRSAT.RRF	ATV	Attribute value	NA	concept. conceptProperty. propertyQualifier. content	If the STYPE points to SAUI then the value is loaded as a property qualifier attribute
MRCONSO. RRF	SAB	None	x	concept. conceptProperty. source.content	No comments
MRCONSO. RRF	SAB	None	x	concept. conceptProperty. propertyQualifier. propertyQualifierId	Hard coded as constant in java file as "source-code"
MRCONSO. RRF	CODE	None	x	concept. conceptProperty. propertyQualifier. content	No comments
MRCONSO. RRF	CODE	None	x	concept. conceptProperty. propertyQualifier. propertyQualifierId	Hard coded as constant in java file as "AUI"
MRCONSO. RRF	AUI	None	x	concept. conceptProperty. propertyQualifier. content	No comments
MRCONSO. RRF	AUI	None	NA	concept. presentation. representationalFo rm	When ATN value is EV this presentation will be given a representationalForm of "Abbrev."
MRCONSO. RRF	TTY	Term type in source	NA	concept. presentation. representationFor m	When TTY value is FN then representationalForm is represented as "Full Form" Otherwise the representationalForm is the same as the TTY source (i.e. if TTY is PT then representationalForm is PT.) PT is one of the preferred presentations.
MRCONSO. RRF	TTY	Term type in source	NA	concept. conceptProperty. propertyQualifier. propertyQualifierId	Hard coded as "HCD"
MRHIER.RRF	HCD	Source asserted hierarchical number or code for this atom in this context	NA	concept. conceptProperty. propertyQualifier. content	This propertyQualifier is present when the HCD is populated in the the MRHIER file. The corresponding code and property for concept or code is qualified as a code or concept with a context derived heirarchy.

Relations RRF File Name	Relations RRF Column Name	Relations RRF Definition	Relations NCI Meta Only	Relations LexGrid Model Element	Relations Comments

MRREL.RRF	CUI1	Unique identifier for first concept	NA	None	No comments
MRREL.RRF	AUI1	Unique identifier for first atom	NA	None	No comments
MRCONSO.RRF	CODE	Unique Identifier or code for string in source	NA	ConceptReference.conceptCode	(Model element is a ResolvedConceptReference with the value sourceOf attached to the appropriate AssociationList containing this particular REL or RELA association name.) Mapping to the CODE depends upon the CUI or a combination of CUI and AUI values. If the CODE value is "NOCODE" then LexBIG concatenates "NOCODE" with a "-" and the CUI value. Target or source code value requires use of the DIR flag which indicates the directionality of the relationship in REL or RELA. CUI1 can be used as a pointer to the source CODE value if DIR equals Y, else CUI1 is the targetCode. Similarly, if an AUI exists AUI1 can be an indicator for CODE value to be either or source or target depending on the DIR flag.
MRREL.RRF	CUI2	Unique identifier for second concept	NA	None	No comments
MRREL.RRF	AUI2	Unique identifier for second atom	NA	None	No comments
MRCONSO.RRF	CODE	Unique Identifier or code for string in source	NA	ConceptReference.conceptCode	(Model element is a ResolvedConceptReference with the value targetOf attached to the appropriate AssociationList containing this particular REL or RELA association name.) Mapping to the CODE depends upon the CUI or a combination of CUI and AUI values. If the CODE value is "NOCODE" then LexBIG concatenates "NOCODE" with a "-" and the CUI value. Target or source code value requires use of the DIR flag which indicates the directionality of the relationship in REL or RELA. CUI2 can be used as a pointer to the source CODE value if DIR equals Y, else CUI1 is the targetCode. Similarly, if an AUI exists AUI2 can be an indicator for CODE value to be either or source or target depending on the DIR flag.
MRREL.RRF	DIR	Source asserted directionality flag	NA	None	The UMLS directional flag. Y indicates that this is the direction of the RELA relationship in its source; N indicates that it is not; otherwise indicates that it is not important or has not yet been determined. (If blank RELA, we interpret as 'N', based on empirical review of meta files).
MRREL.RRF	RELA	Relationship attribute	NA	association.id (id inherited from Entity)	Source defined associations. If RELA value is "inverse_isa" then it is changed to "hasSubtype." All others mapped as defined in source.
MRREL.RRF	REL	Relationship	NA	association.id (id inherited from Entity)	UMLS defined associations
MRSAT.RRF	METAUI	Metathesaurus asserted unique identifier	NA	None	Presence of RUI in MRSAT.RRF METAUI column indicates the association defined in MRREL has an association qualifier. Currently only MedDRA uses these.
MRSAT.RRF	ATN	None	NA	AssociatedConcept.nameAndValueList.name	No comments
MRSAT.RRF	ATV	None	NA	AssociationQualification.nameAndValueList.content	No comments
MRSAT.RRF	ATV	None	NA	AssociatedConcept.nameAndValueList.name	qualifier name is hard coded to "HCD" This association qualifier is attached to an association when the HCD field in MRHIER.RRF is populated. Associations are identified by evaluating a structured series of AUI's that describe the path to root (PTR field in MRHIER) Once these associations are identified they have and association qualifier attached to them with the value of the HCD loaded as the qualifier.
MRHIER.RRF	HCD	None	NA	AssociationQualification.nameAndValueList.content	No comments
MRSAB.RRF	SSN	Source short name	NA	association.codingSchemeId (Inherited from Entity)	No comments
MRREL.RR	REL or RELA	Relationship or Relationship attribute	NA	association.forwardName	Unqualified REL or RELA value (inverse_isa remains the same)
MRDOC.RRF	EXPL	Detailed explanation	NA	association.reverseName	Where DOCKEY in MRDOC equals REL or RELA and value is the association name and TYPE is REL or RELA name prepended to "_inverse".
MRDOC.RRF	EXPL	Detailed explanation	NA	association.inverse	Hard coded as a blank string.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isAntiReflexive	Hard coded to null.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isAntiSymmetric	Hard coded to null.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isAntiTransitive	Hard coded to null.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isAntiTransitive	Hard coded to null.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isNavigable	Hard coded as Boolean with value true.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isReflexive	Hard coded to null.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isReverseFunctional	Hard coded to null.
MRDOC.RRF	EXPL	Detailed explanation	NA	association.isSymmetric	Hard coded to null.
MRREL.RRF	SAB, REL, RELA	Source abbreviation	NA	association.isTransitive	True when the name of the association can be mapped to a source defined in the SAB attribute of MRREL.RRF. Not the SAB value itself, but extrapolated from it using SAB to REL, RELA relationship.
MRREL.RRF	SAB, REL, RELA	Source abbreviation	NA	association.isTranslationAssociation	Hard coded to null.
MRREL.RRF	SAB, REL, RELA	Source abbreviation	NA	association.targetCodingScheme	Hard coded to null.

MRREL.RRF	SAB, REL, RELA	Source abbreviation	NA	association. entityDescription. content (inheritance path for entityDescription is Entity->versionableAndDescribable)	Hard coded to: "UMLS-defined relationships"
MRREL.RRF	SAB, REL, RELA	Source abbreviation	NA	relations.dc	If REL, this is hard coded as "UMLS-Relations" if RELA then it is hard coded to "Relations"
MRREL.RRF	REL, RELA	None	x	propertyLink.link	This is a link established when the MRREL.RRF file contains a relationship where the CUI is related to itself. Under these conditions the relationship is mapped as a property link with the MRREL defined relationship mapped as the link value.
MRREL.RRF	REL, RELA	None	x	propertyLink. sourceProperty	Generated as a propertyId for concept, ex: "T-10" This is retrieved based on the AUI value in MRCONSO.RRF from the entityPropertyMultiAttrib table where the AUI equals the attributeValue column.
MRREL.RRF	REL, RELA	None	x	propertyLink. targetProperty	Generated as a propertyId for concept, ex: "T-10" This is retrieved based on the AUI value in MRCONSO.RRF from the entityPropertyMultiAttrib table where the AUI equals the attributeValue column.

SNOMED UMLS Mapping

RRF File Name	RRF Column Name	RRF Definition	LexGrid Model Element	Comments
RSAB.RRF	SVER	Release date or version number of a source	codingScheme. representsVersion	No comments
RSAB.RRF	SSN	Source short name	codingScheme.codingScheme?	No comments
RSAB.RRF	SON	Source Official Name	codingScheme.formalName	No comments
RSAB.RRF	SON	Hard coded to "en"	codingScheme.defaultLanguage	No comments
MRSAT.RRF	ATV	None	concept.presentation.language	Unique to snomed.

OBO Mapping

OBO Class	OBO Entity	LexGrid Model Element	Notes
Document Header	format-version	Not mapped	No comments
Document Header	data-version	CodingScheme.representsVersion	Creates a codingSchemeVersion and SystemRelease record. If not specified, then hard coded "UNASSIGNED"
Document Header	version	CodingScheme.representsVersion	Deprecated - use data-version if present.
Document Header	date	Not mapped	No comments
Document Header	saved-by	None	Ignored but included if contained in the remark entity.
Document Header	auto-generated-by	None	Ignored but included if contained in the remark entity.
Document Header	subsetdef	Not mapped	No comments
Document Header	import	None	Deprecated - Imports are used to assemble a larger document from smaller.
Document Header	typeref	None	Deprecated.
Document Header	synonymtypedef	Not mapped	No comments
Document Header	idspace	None	Not mapped. The idspace is a triple - localName, URN and description.
Document Header	default-relationship-id-prefix	Not mapped	No comments
Document Header	id-mapping	CodingScheme.supportedAssociation	This is more generalized than the LexGrid model, as it supports mapping between **any** id's. Note that its primary purpose, however, is to handle supportedAssociation.
Document Header	remark	CodingScheme.entityDescription	Will combine multiple remark entities into the entityDescription.
Document Header	default-namespace	codingScheme.codingScheme	Will use default-namespace if provided; otherwise will use filename without the extension.
Document Header	default-namespace	codingScheme.formalName	Will use default-namespace if provided; otherwise will use filename without the extension.
HeaderDocument	default-namespace	codingScheme.registeredName	Combination of "urn:lsid:bioontology.org:" and if provided, the value in "default-namespace"; but if not will use filename without the extension.
HeaderDocument	default-namespace	codingScheme.defaultLanguage	Hard coded "en"
HeaderDocument	default-namespace	codingScheme.isNative	Hard coded "true"

Stanza	id	CodedEntry.conceptCode	No notes
Stanza	name	CodedEntry.entityDescription	No notes
Stanza	name	CodedEntry.presentation ['textualPresentation'].text	No notes
Stanza	name	CodedEntry.presentation ['textualPresentation'].isPreferred = true	No notes
Stanza	alt_id	None	No notes
Stanza	alt_id	CodedEntry.property['alt_id'].propertyId	No notes
Stanza	alt_id	CodedEntry.property['alt_id'].text	No notes
Stanza	is_anonymous	CodedEntry.isAnonymous = true	No notes
Stanza	is_obsolete	CodedEntry.isActive = false	No notes
Stanza	def	CodedEntry.definition	No notes
Stanza	def	CodedEntry.definition.isPreferred = true	No notes
Stanza	def.dbxref	NA	See dbxref
Stanza	comment	CodedEntry.comment.text	No notes
Stanza	subset	property[subset tag]	See subsetdef
Stanza	synonym	presentation['textualPresentation'].text	No notes
Stanza	synonym.scope	presentation['textualPresentation']. degreeOfFidelity	No notes
Stanza	synonym.type	presentation['textualPresentation']. representationalForm	No notes
Stanza	synonym.dbxref	NA	See dbxref
Stanza	exact_synonym	NA	See synonym
Stanza	narrow_synonym	NA	See synonym
Stanza	broad_synonym	NA	See synonym
Stanza	xref	associations.['mapsTo']	No notes
Stanza	xref_analog	NA	See synonym
Stanza	xref_unk	None	No notes
Stanza	is_a	associations.['hasSubtype']	Reverse of the source and target.
Stanza	is_a.namespace	None	If present, the supplied namespace becomes the owning "codingScheme".
Stanza	is_a.derived	associations.hasSubtype. associationQualifier	If present, need to include derived in the supportedAssociationQualifiers section
Stanza	intersection_of	None	Processed the same way that OWL intersection operator is processed. This includes creation of anonymous sets.
Stanza	union_of	None	Same as OWL
Stanza	disjoint_from	None	Same as OWL
Stanza	relationship	associations.	No notes
Stanza	relationship. not_necessary	associations..associationQualifier	No notes
Stanza	relationship. inverse_necessary	associations..associationQualifier	No notes
Stanza	relationship. namespace	None	If present, the supplied namespace becomes the owning "codingScheme".
Stanza	relationship. derived	associations..associationQualifier	No notes
Stanza	relationship. cardinality	associations..associationQualifier	No notes
Stanza	relationship. maxCardinality	associations..associationQualifier	No notes
Stanza	relationship. minCardinality	associations..associationQualifier	No notes
Stanza	is_obsolete	codedEntry.isActive = false	No notes
Stanza	replaced_by	None	No notes
Stanza	consider	Not mapped	No comments
Stanza	use_term	None	Deprecated
dbxref	dbxref name	CodedEntry..source	No notes
dbxref	supportedSource	None	dbxref name format is inconsistent. In most cases, it can be the localName of supportedSource, but special processing may be necessary in the case of URL's, etc
dbxref	dbxref description	Not mapped	No comments
dbxref	trailing modifiers	Not mapped	No comments
typeDef Stanza	domain	associations.['has_domain']	No notes

typeDef Stanza	range	associations.['has_range']	No notes
typeDef Stanza	is_cyclic	property['is_cyclic']	No notes
typeDef Stanza	is_reflexive	property['is_reflexive']	No notes
typeDef Stanza	is_reflexive	association.isReflexive	No notes
typeDef Stanza	is_symmetric	property['is_symmetric']	No notes
typeDef Stanza	is_symmetric	association.isSymmetric	No notes
typeDef Stanza	is_transitive	property['is_transitive']	No notes
typeDef Stanza	is_transitive	association.isTransitive	No notes
typeDef Stanza	inverse_of	association.inverse	No notes
instance stanza	id	same rules as general stanza	Same rules as general stanza
instance stanza	name	same rules as general stanza	Same rules as general stanza
instance stanza	instance_of	association['has_instance']	No notes
instance stanza	instance_of	CodedEntry.property.property=""	Data type properties go in Coded Entry property section

HL7 RIM Mapping

HL7 Table	HL7 Column	LexGrid Model Element	Notes	Intentionally Not Mapped	Outstanding Issues
Model	<modelID>	<codingSchemeName>	No notes	None	None
Model	<name>	<formalName>	No notes	None	None
Model	<registeredName>	`http://www.hl7.org/Library/data-model/RIM *[1]`	No notes	None	None
Model	<defaultLanguage>	en*	No notes	None	None
Model	<versionNumber>	<representsVersion>	No notes	None	None
Model	<isNative>	0*	No notes	None	None
Model	<approximateNumberofConcepts>	Result of count on concept bearing table?	No notes	None	None
Model	<firstRelease>	MISSING	No notes	None	None
Model	<modifiedRelease>	MISSING	No notes	None	None
Model	<deprecated>	MISSING	No notes	None	None
Model	<description>	<entityDescription>	No notes	None	None
Model	<copyright>	MISSING	No notes	None	None
VCS_code_system	codeSystemId	codingScheme.registeredName	Moved to metadata file.	None	None
VCS_code_system	codeSystemType	commonTypes::Properties	This is an HL7 specific code system property to distinguish internal vs external code systems. Moved to metadata file.	None	None
VCS_code_system	codeSystemName	concept.conceptCode	Moved to metadata file.	None	None
VCS_code_system	codeSystemName	concept.presentation['textualPresentation'].text	No notes	None	None
VCS_code_system	fullName	codingScheme.formalName	No notes	None	None
VCS_code_system	description	codingScheme.entityDescription	Moved to metadata file.	None	None
VCS_code_system	releaseId	codingScheme.representsVersion	Moved to metadata file.	None	None
VCS_code_system	copyrightNotice	codingScheme.copyright	Moved to metadata file.	None	None
VCS_code_system	literal('en')	codingScheme.defaultLanguage	Moved to metadata file.	None	None
VCS_concept_code_xref	internalId	None	No notes	None	None
VCS_concept_code_xref	Concept Code	concept.conceptCode	No notes	RIM db column conceptCode2	None
VCS_concept_code_xref	Case Difference	commonTypes::Properties	Basically a property to outline whether there are case differences in the Concept Code or not (mainly used, but not restricted tor units of measure)	RIM db column codeInstance	None

VCS_concept_code_xref	Status	concept.isActive=(conceptStatus=='A'?)	No notes	RIM db column conceptStatus	None
VCS_concept_code_xref		concept.conceptStatus	Not used by HL7. A = isActive, R = retired	None	None
VCS_concept_designation	internalId	None	foreign key	None	None
VCS_concept_designation	designation	concept.presentation['textualPresentation'].text	No notes	None	None
VCS_concept_designation	designationSeq	None	No notes	None	None
VCS_concept_designation	language	concept.presentation['textualPresentation'].language	Can be omitted if language = default language	None	None
VCS_concept_designation	preferredForLanguage	concept.presentation['textualPresentation'].isPreferred	No notes	None	None
VCS_concept_description	internalId	with(codeSystem[deref(internalId)].concept[deref(internalId)]).definition	foreign key	None	None
VCS_concept_description	description	concept.presentation['textualPresentation'].text	No notes	None	None
VCS_concept_description	language	concept.presentation['textualPresentation'].language	No notes	None	None
VCS_concept_description	literal('true')	concept.presentation['textualPresentation'].isPreferred	No notes	None	None
VCS_concept_description	uniqueId()	concept.presentation['textualPresentation'].propertyId	No notes	None	None
VCS_concept_description	literal('definition')	concept.presentation['textualPresentation'].property	No notes	None	None
VCS_concept_property	internalId	None	foreign key	None	None
VCS_concept_property	propertyCode	concept.property.property	No notes	None	None
VCS_concept_property	propertySeq	None	Currently not used by HL7	None	None
VCS_concept_property	propertyValue	concept.property.text	No notes	None	None
VCS_concept_property	language	concept.property.language	No notes	None	None
VCS_concept_relationship	relationCode	association.association	No notes	None	None
VCS_concept_relationship	sourceInternalId	associationInstance.sourceConcept	No notes	None	None
VCS_concept_relationship	targetInternalId	associationTarget.targetConcept	No notes	None	None
Model	modelID	systemRelease.releaseId	No notes	None	None
Model	name	service.service	No notes	None	None
Model	versionNumber	service.version	No notes	None	None
Model	lastModifiedDate	systemRelease.releaseDate	No notes	None	None
Model	developingOrganization	systemRelease.releaseAgency	No notes	None	None
Model	committeeID	None	No notes	None	None
Model	description	systemRelease.entityDescription	No notes	None	None
Model	concat('urn:oid:2.16.840.1.113883:', systemRelease.releaseId)	systemRelease.releaseURN	No notes	None	None
Model	literal('true')	systemRelease.isLatest	Also have to set the prior release isLatest to false	None	None
Model	preceding-sibling /releaseOrder + 1	systemRelease.releaseOrder	No notes	None	None
Model	modelID	commonTypes::Properties	No notes	None	None
(Special mapping for NCI)	name	codingScheme.localName	No notes	None	None
(Special mapping for NCI)	versionNumber	codingScheme.representsVersion	No notes	None	None
(Special mapping for NCI)	lastModifiedDate	commonTypes::Properties	No notes	None	None
(Special mapping for NCI)	developingOrganization	commonTypes::Properties	No notes	None	None
(Special mapping for NCI)	committeeID	None	No notes	None	None
(Special mapping for NCI)	description	codingScheme.entityDescription	No notes	None	None
(Special mapping for NCI)	concat('urn:oid:2.16.840.1.113883:', systemRelease.releaseId)	codingScheme.registeredName	No notes	None	None
(Special mapping for NCI)	literal('true')	commonTypes::Properties	Also have to set the prior release isLatest to false	None	None

(Special mapping for NCI)	preceding-sibling /releaseOrder + 1	commonTypes::Properties	No notes	None	None
RIM_vocabulary_domain	vocDomain	codingscheme["VocabularyDomain"].concept.conceptCode	Vocabulary Domains are carried in a code system of vocabulary domains.	None	None
RIM_vocabulary_domain		codingscheme["VocabularyDomain"].concept.presentation ["textualPresentation"].text	preferredPresentation	None	None
RIM_vocabulary_domain	description	codingscheme["VocabularyDomain"].concept.definition.text	preferredDefinition for code	None	None
RIM_vocabulary_domain	restrictsDomain	`codingscheme ["VocabularyDomain"]. association["hasSubtype"]. sourceConcep`	*Should this be hasSubtype or something else?*	None	None
RIM_vocabulary_domain		codingscheme["VocabularyDomain"].association ["hasSubtype"].targetconcept = vocDomain	No notes	None	None
VOC_code_reference	usedToBuildValueSet	with(valueDomain[registeredName=current()/.])	No notes	None	None
VOC_code_reference	referencesConceptCode	...valueDomainEntry/conceptCode	1) id is synthesized 2) Only stored if isHeadCode h1. false or includeReferencedCode true	None	None
VOC_code_reference	referencesInternalId	None	Internal id's aren't exposed in lexGrid	None	None
VOC_code_reference	relationship	`..valueDomainEntry /includeChildren = (relationship == 'hasSubtype')`	Won't deal w/ non-hasSubtype relationships, but HL7 doesn't have any.	None	None
VOC_code_reference	includeReferencedCode	...valueDomainEntry/isSelectable	No notes	Not in current implementation	None
VOC_code_reference	leafOnly	None	Not used in HL7 Model	None	None
VOC_code_reference	directChildrenOnly	None	Not used in HL7 Model	None	None
VOC_code_reference	isHeadCode	None	Only used when referenced in VOC_value_set_constructor.	None	None
VOC_code_reference	referencesCodeSystem	.../valueDomainEntry.codingScheme	Shortcut in HL7 model. Must = VOC_value_set. basedOnCodeSystem	None	None
VOC_code_reference	arbitraryUniqueValue()	.../valueDomainEntry.id	Notes	None	None
VOC_registered_code_system	codeSystemId	None	VOC_registered_code_system isn't currently transferred to Lexgrid	None	None
VOC_registered_code_system	sponsor	None	No notes	None	None
VOC_registered_code_system	publisher	None	No notes	None	None
VOC_registered_code_system	versionReportingMethod	None	No notes	None	None
VOC_registered_code_system	licensingInformation	None	*This field should really be transfer to copyright?*	None	None
VOC_registered_code_system	inUMLS	None	No notes	None	None
VOC_registered_code_system	systemSpecificLocatorInfo	None	No notes	None	None
VOC_registered_code_system	uri	None	No notes	None	None
VOC_registered_code_system	isExternal	None	No notes	None	None
VOC_value_set	valueSetId	valueDomain.registeredName	No notes	None	None
VOC_value_set	valueSetName	valueDomain. valueDomain	*Name is the key in LexGrid, and is optional in HL7 - will need to be addressed.*	None	None
VOC_value_set	basedOnCodeSystem	valueDomain. defaultCodingScheme	*Optional in HL7, required in LexGrid.*	None	None
VOC_value_set	description	valueDomain.entityDescription	No notes	None	None
VOC_value_set	definingExpression	None	Not used.	None	None

VOC_value_set	allCodes	None	No notes	None	None
VOC_value_set	isTaxonomicSet	None	No mapping available	None	None
VOC_value_set	valueSetAuthority	None	Included in valueSetID	None	None
VOC_value_set	valueSetNumber	None	No notes	None	None
VOC_value_set_constructor	usedToBuildValueSet	new valueDomainEntry(parent = valueDomain [valueSetId=current()/.],id=unique())	No notes	None	None
VOC_value_set_constructor	includesOrExcludesSet	valueDomainEntry.includesValueDomain	No notes	None	None
VOC_value_set_constructor	includeHeadCode	valueDomainEntry.isSelectable	No notes	None	None
VOC_value_set_constructor		`valueDomainEntry. conceptCode = VOC_code_reference [usedToBuildValueSet=current () .usedToBuildValueSet and isHeadCode=true]. referencesConceptCode`	*Assumes that there always is a head code.*	None	None
VOC_vocabulary_domain_value_set	representsVocDomain	(selector)		None	None
VOC_vocabulary_domain_value_set	definedByValueSet	codingscheme['VocabularyDomain'].concept [representsVocDomain].property['definedByValueSet'].text	*have to get 'representsVocDomain' into supportedProperty header*	None	None
VOC_vocabulary_domain_value_set	appliesInContext	codingscheme['VocabularyDomain'].concept [representsVocDomain].property['definedByValueSet']. usageContext	*Have to get all the contexts in the VocabularyDomain supportedContext header*	None	None
VCS_release_version	releaseId	codingSchemeVersion.version	Note: this is not the way that things are done at the moment. At the moment, VCS_release_versions are loaded into systemRelease. Entered if one or more concept/relationship change.	None	None
VCS_release_version		valueDomainVersion.version	Set iff one or more value sets change	None	None
VCS_release_version	*literal("false")*	codingSchemeVersion.isComplete	All versions are delta's in this model	None	None
VCS_release_version	releaseAgency	None	No notes	None	None
VCS_release_version	releaseDate	codingSchemeVersion.versionDate	No notes	None	None
VCS_release_version	valueDomainVersion. versionDate	None	No notes	None	None
VCS_release_version	description	codingSchemeVersion.entityDescription	No notes	None	None
VCS_release_version	valueDomainVersion. entityDescription	None	No notes	None	None
VCS_release_version	editorID	None	There is no place for these currently.	None	None
VCS_release_version	forWhomID	None	There is no place for these currently.	None	None
VCS_release_version	*concat('urn:oid: 2.16.840.1.113883:', systemRelease. releaseId)*	None	This corresponds to the containing system release when the sytem release occurs. It is empty until then.	None	None

LexGrid Text Mapping

The following table lists Source Definition column contents.

Line	Source Definition Column 1	Source Definition Column 2	Source Definition Column 3	Source Definition Column 4	Source Definition Column 5	Source Definition Column 6	Source Definition Column 7	Source Definition Column 8	Comments
1	<codingSchemeName>	<codingSchemeId>	<defaultLanguage>	<formalName>	[<version>]	[<source>]	[<description>]	[<copyright>]	This must be the first line. It contains the coding scheme metadata.
2	[<code>]	<name>	[<description>]	None	None	None	None	None	Beginning of concepts in coding scheme.
3	[<code>]	<name>	[<description>]	None	None	None	None	None	Represent hierarchical 'hasSubtype' relationship nesting (name hasSubtype name)

Text Element - Coding Scheme	LexGrid	Comments
codingSchemeName	codingScheme. codingSchemeName	None
codingSchemeId	codingScheme.codingSchemeId	None
defaultLanguage	codingScheme.defaultLanguage	None
formalName	codingScheme.formalName	None
version	codingScheme.representsVersion	Optional
source	codingScheme.source	Optional
description	codingScheme.entityDescription	Optional
copyright	codingScheme.copyright	Optional

Text Element - Concepts	LexGrid	Comments
code	concept.conceptCode	Optional
name	concept.conceptName	None
description	concept. entityDescription	None