

# LexEVS 6.0 Design Document - Detailed Design - Logical Model

## Document Information

**Author:** Craig Stancl  
**Email:** Stancl.craig@mayo.edu  
**Team:** LexEVS  
**Contract:** CBITT BOA Subcontract# 29XS223  
**Client:** NCI CBITT  
National Institutes of Health  
US Department of Health and Human Services

## Revision History

Version	Date	Description of Changes	Author
1.0	5/14/10	Initial Version Approved via Design Review	Team

The following describes the Logical Model Changes.

Changes Made to LexGrid Logical Model for 2010/01:

- Package ValueSets :
  - Renamed element ValueDomainDefinition to ValueSetDefinition and container ValueDomains to ValueSets. GForge # 27021.
  - Added attribute 'conceptDomain' of type 'conceptDomain' to class 'valueSetDefinition' to support CTS 2 SFM.
  - Added class 'propertyReference' and 'propertyMatchValue' to support CTS 2 SFM.
    - propertyReference contains : 'codingScheme'(Required), 'propertyName', 'propertyMatchValue'
    - propertyMatchValue extends from 'text' and contains attribute 'matchAlgorithm'
  - Made 'definitionEntry' versionable to support CTS 2 SFM.
  - Made class 'valueSetDefinition' and 'pickListDefinition' as entry point. This change allows to load and export Value Set Definition and Pick List Definition individually.
- Package Naming:
  - Added 'supportedConceptDomain' to support CTS 2 SFM.
  - Added attributes 'codingScheme', 'entityCodeNamespace' and 'entityCode' to 'SupportedAssociation'. This was added to make it easier to get an AssociationEntity instance for a given associationPredicate.
  - Added attribute 'propertyType' to 'SupportedProperty'. This provides an easy way to find all supportedProperties information by propertyType which are 'presentation','definition','comment' and 'property'. NCI requirement Gforge # 24699.
- Package CommonTypes:
  - Added 'conceptDomain' in localIds. Since ConceptDomain has been added to the model, we will need to maintain all the ConceptDomain used in the system in our SupportedAttributes mappings.
  - Changed 'owner' in 'versionable' from 'source' to 'tsCaseIgnoreIA5String'. This was changed since other attributes of Source were never used.
- Package Concept:
  - Removed elements 'Concept' and 'Instance'. These first class elements are not required anymore as an 'Entity' can represent either 'concept' or 'instance' or any other type by specifying it in its EntityType.
- Package Relations:
  - Made class 'relation' versionable to Support CTS 2 SFM.
  - Added 'isMapping', 'sourceCodingScheme', 'sourceCodingSchemeVersion', 'targetCodingScheme', 'targetCodingSchemeVersion' to class 'relation' to support loading of MRMAP RRF file.
  - Added 'properties' container to 'relation' container to supported loading of MRMAP RRF file.
  - Removed 'isNative' and 'source' from 'relation' as they were never used.
  - Added new class 'associationPredicate' with required attribute 'associationName' to supported loading of MRMAP RRF file.
  - Renamed class 'association' to 'associationEntity'. Removed all Booleans except 'isTransitive', and 'isNavigable'. And made 'associationEntity' subclass of 'Entity'. This change was also made to supported loading of MRMAP RRF file.
- Package Versions:
  - Changed 'changeAgent' in class 'revision' from 'source' to 'tsCaseIgnoreIA5String' as none of the 'Source' attributes were used.