Cameo Concept Modeler Documentation

Cameo Concept Modeler (Concept Modeler) is a plugin for MagicDraw, the award-winning software modeling tool. It is designed to model real-world concepts, import/export a model from/to an OWL ontology, and generate glossaries in plain English for clearer and more informative source of knowledge for any domain.

19.0 LTR SP1 Version News

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Cameo Concept Modeler (CCM) Quick Start Guide

Introduction

- MDA
- Concept modeling purpose
- The role of ontologies and reasoners
- Open-world assumption vs. closed-world assumption
- Information modeling purpose

Concept Modeler Capabilities

Concept Modeling Semantics

- Classes
- · Property ownership
- Global properties
- Subproperty
- Generalization
 - Overlapping and incomplete subclasses
 - Disjoint subclasses
 - Complete subclasses
 - Disjoint and complete subclasses
- Anonymous union classes
- Inverse properties
- Property restrictions
 - Existential quantification constraint
 - Universal quantification constraint
 - Cascading restrictions
- Annotation and annotation properties
- Preferred Annotation Property
- Property chain
- Equivalent properties
- Equivalent classes
- Multiplicities
- IRI tagged value
 - Effective IRI meta-property
 - Synchronize UML Package URI and Resource IRI
- Cardinality restrictions
- Complement Of
- Concept model export URI style
- OWL export folder
- Conditions
- Importing OWL

UML to Equivalent OWL in OWL Functional Syntax

- Class
- Class generalization
- Generalization with disjoint subclasses
- Generalization with subclass completeness
- Anonymous union class
- Class with Datatype property
- Class with Self-Referential Object Property
- Class with object property
- Property holder with datatype property
- Property holder with self-referential object property
- Property holder with object property
- Class with object property without range
- Class with subproperty
- Class with universal quantification constraint on property I
- Class with universal quantification constraint on property II
- Class with existential quantification constraint on property
- Property holder with self-referential subproperty

- Property holder with subproperty
- Class with subproperty without a range
- Class with necessary and sufficient property
- Class with property having unspecified multiplicity
- Class with inverse property
- Annotation and annotation property
- Asymmetrical inverse property
- Disjoint classes
- Property chains
- Equivalent property
- Equivalent class
- Class with Asymmetric Object Property
- Class with Functional Object Property
- Class with Inverse Functional Object Property
- Class with Irreflexive Object Property
- Class with Reflexive Object Property
- Class with Transitive Object Property
- Property with a maximum but no minimum cardinality
- Property with multiple domains and ranges
- Property restriction from a different namespace
- Necessary and sufficient conditions of anonymous subclasses
 - Intersection subset of Union
 - Intersection equivalent to Union
 - Intersection subset of a Restriction
 - Intersection equivalent to a Restriction Intersection disjoint with a Restriction
 - Intersection subset of an Intersection
 - Intersection equivalent to an Intersection
 - Intersection subset of Complement
 - Intersection equivalent to Complement
 - o Intersection disjoint with Complement
 - Intersection subclass of Class
 - Union subset of Union
 - Union equivalent to Union
 - Union subset of Restriction
 - Union equivalent to Restriction

 - Union disjoint with Restriction O Union subset of Intersection
 - Union subset of Complement
 - Union equivalent to Complement
 - Union has member Complement
 - Union disjoint with Complement
 - Union subset of Class
 - Complement subset of Union
 - Complement disjoint with Union
 - Complement subset of Restriction
 - Complement subset of Intersection
 - Complement disjoint with Restriction
 - Complement has member Restriction Complement equivalent to Restriction

 - Complement disjoint with Intersection Complement subset of Complement
 - Complement equivalent to Complement
 - Complement has member Complement
 - Complement subset of Class
 - Restriction subset of Union
 - Restriction disjoint with Union
 - Restriction subset of Restriction
 - Restriction equivalent Restriction
 - Restriction disjoint with Restriction
 - Restriction subset of Intersection Restriction disjoint with Class
 - Restriction subset of Class
 - Restriction disjoint with Complement
 - Restriction subset of Complement
 - Restriction disjoint with Intersection
 - Class subset of Union
 - Class subset of Restriction
 - Class equivalent to Restriction
 - Class disjoint with Restriction Class subset of Complement

 - Class disjoint with Class
 - Class disjoint with Complement
 - Class disjoint with Intersection
 - Class disjoint with Union
 - Class equivalent to Class
 - Class subset of Class
 - O Class subset of Intersection
 - Complement disjoint with Class

- Complement disjoint with Complement
- Complement equivalent to Class
- Complement has member Class
- Complement has member Intersection
- Complement has member Union
- Intersection disjoint with Class
- Intersection disjoint with Intersection
- Intersection disjoint with Union
- Intersection equivalent to Class
- Intersection has member Class
- Intersection has member Complement
- Intersection has member Intersection
- Intersection has member Restriction
- Intersection has member Union
- Restriction has member Class
- Restriction has member Complement
- Restriction has member Intersection
- Restriction has member Restriction
- Restriction has member Union
- Union disjoint with Class
- O Union disjoint with Intersection
- Union disjoint with Union
- Union equivalent to Class
- Union has member Class
- Union has member Restriction
- Union has member Union
- Union has member Intersection

Natural Language Glossary

· Equivalent classes in NLG

Usage

- Creating a concept modeling project
- Creating a concept model
 - Converting a UML model into a concept model
- Creating an XML catalog file
- Importing an OWL ontology to a concept model
 - Updating the XML catalog file

 - Setting the OWL import catalog in MagicDraw
 Setting a path variable to share OWL import catalog files
 - Using a path variable to share OWL import catalog files

 - Importing an OWL ontology file
 Importing annotations on an OWL ontology to a concept model
 - Displaying and hiding IRI
- Exporting your concept model to an OWL ontology
 - Setting destination for the OWL export folder
 - Setting the concept model export syntax
 - Setting the concept model export URI style
 - Setting the concept model URI
 - Specifying file export paths
 - Specifying IRI ontology versions
 - Use Path Variables to Export a Concept Model to an OWL Ontology
 - Exporting your concept model
 - Exporting models and concept models at any level in package hierarchy
 - View the CCM watermark in an exported OWL
- Logging during OWL importing and exporting
- Adding a concept model to Teamwork Cloud and export it as an OWL ontology
 - Adding a concept model to Teamwork Cloud
 - Exporting a concept model from TWCloud to an OWL ontology
- Using Concept Modeling Capabilities with non-CCM projects
 - Importing an OWL ontology into a non-CCM project
- Existing Project Migration
 - Migrate Older Models to Use Relative IRIs
 - Updating symbol styles in older projects
 - Sufficient constraint
- Experimental Features
- Working with Complement Of
- Creating a property chain
 - O Deleting a property chain
 - Editing a property chain
- Creating equivalent properties
 - Deleting an equivalent property
 - Editing an equivalent property
- Creating equivalent classes
- Creating a property holder
- **Automatically Generating Glossaries**
- Creating a glossary table

- Rebuilding a glossary table
- Viewing a glossary
- Restriction
 - Creating Restrictions
 - Removing Restrictions
- Working with subpropertiesRedefined property
- Subsetted property
- Adding property subsettingRemoving property subsetting
- Creating a necessary and sufficient condition
- Working with subclasses

 - Making subclasses disjointMaking subclasses complete
 - Making subclasses overlapping
- Making subclasses incomplete
 Working with annotations
- - Creating annotations
 - Showing annotations on the diagram
 - Showing an annotation in the Documentation pane
 - Working with annotation properties

 - Applying an annotation stereotype to a comment
 Associating an annotation property with an annotation
 Defining an annotation property

 - Importing an ontology that defines annotation properties
- Selecting a Preferred Annotation Property for a UML Comment or Annotation
 Working with the Natural Language Glossary
- - Generating a natural language glossary
 - Exploring the Natural Language Glossary

 - Customizing your Natural Language Glossary
 Including property definitions in the Natural Language Glossary
 - Selecting an ordered list of annotation properties
 - Variables of the natural language glossary
- Using the log file to track changes during import
- Creating a datatype property

References