

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 SP2 Version News

19.0 LTR SP1 Version News

19.0 LTR Version News

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
- Advanced Modeling Patterns
 - Association Class
 - Facets
 - Role
 - Phase
- 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
- Intersection
- UPCM library in CCM
- Conditions
- Importing OWL
- Working with superclass intersection

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
 - 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
 - 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
- 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
- Union disjoint with Intersection
- Union disjoint with Union
- Union equivalent to Class
- Union has member Class
- Union has member Intersection
- Union has member Restriction
- Union has member Union
- Association classes

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 a property chain
 - Deleting a property chain
 - Editing a property chain
 - Creating equivalent properties
 - Deleting an equivalent property
 - Editing an equivalent property
 - Creating equivalent classes
- 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
 - Creating a path variable to share OWL import catalog files
 - Using a path variable to share OWL import catalog files
 - Importing an OWL ontology file
- 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
- Automatically Generating Glossaries

- Creating a glossary table
- Rebuilding a glossary table
- Viewing a glossary
- Creating a property holder
- Restriction
 - Creating Restrictions
 - Removing Restrictions
- Working with subproperties
- Redefined property
- Subsetted property
- Creating a necessary and sufficient condition
- Working with subclasses
 - Making subclasses disjoint
 - Making subclasses complete
 - Making subclasses overlapping
 - Making subclasses incomplete
- Working with the natural language glossary
 - Generating a natural language glossary
 - Exploring the natural language glossary
 - Customizing your natural language glossary
 - Variables of the natural language glossary
 - Selecting an ordered list of annotation properties
 - Including property definitions in the Natural Language Glossary
- Existing Project Migration
 - Migrate Older Models to Use Relative IRIs
 - Sufficient constraint
 - Updating symbol styles in older projects
- Adding property subsetting
- Removing property subsetting
- Using Concept Modeling Capabilities with non-CCM projects
- Working with Complement Of
- Importing an OWL ontology into a non-CCM project
- Generalizations with read-only subclasses
- 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
- Experimental Features
- Working with association classes
- Working with roles
- Working with phases
- Creating a datatype property
- Using the log file to track changes during import
- Working with intersection

References