

# Cameo Requirements Modeler Plugin

## On this page

- [Introduction](#)
  - [Problem solved](#)
  - [Project sample](#)
- [Features](#)
  - [Requirements Management](#)
    - [Gather](#)
    - [Import, interchange and synchronize](#)
    - [Visualize](#)
    - [Link](#)
    - [Publish](#)
    - [Analyze](#)
    - [Collaborate](#)
    - [Simulate](#)
    - [Tailor and Extend](#)
  - [Other Features](#)
- [Resources](#)






## Introduction

The Cameo Requirements Modeler plugin integrates with other products to work with requirements no matter whether you are gathering them, importing from other tools, managing, publishing, analyzing or linking to other models as needed by your business processes, designs or test cases. All of this is available out of the box with this plugin for full **model-based requirements engineering** support.

The plugin implements the requirements part of the OMG SysML standard and provides a means to import and manage requirements in the model. **Requirements Interchange Format (ReqIF)** makes the plugin open for requirements interchange among different requirements management tools, including IBM DOORS, PTC Integrity, Polarion, and Siemens Teamcenter.

This product is designed for software engineers, business analysts and business architects, and other users, who need requirement support to ensure traceability from requirements to other model parts. This product is bundled as a part of the solution for systems engineers (Cameo Systems Modeler) and enterprise architects (Cameo Enterprise Architecture) and is available as a plugin for MagicDraw.

**Model-based requirements engineering** stands in the heart of any software or system modeling project bringing **values**:

				
Seamless traceability to designs and test cases and easy change impact analysis	Improved your team communication with simple and standard notation, clear diagrams, web portal, live requirements coverage metrics and generated requirements reports	Increased quality of your requirements due to the automatic validation and better structuring of your requirements	Saved time and resources by working with single integrated product for requirements, processes, and design	Easy extensibility to fit your needs

## Problem solved



GAP between text based requirements and architecture in the model is the major problem this plugin and model-based requirements solves. This GAP solves the following problems:

1. Complicated workflow working with few products and synchronizing results
2. Unclear how and which requirements are implemented
3. Unclear impact of requirements change

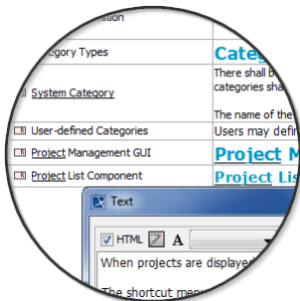
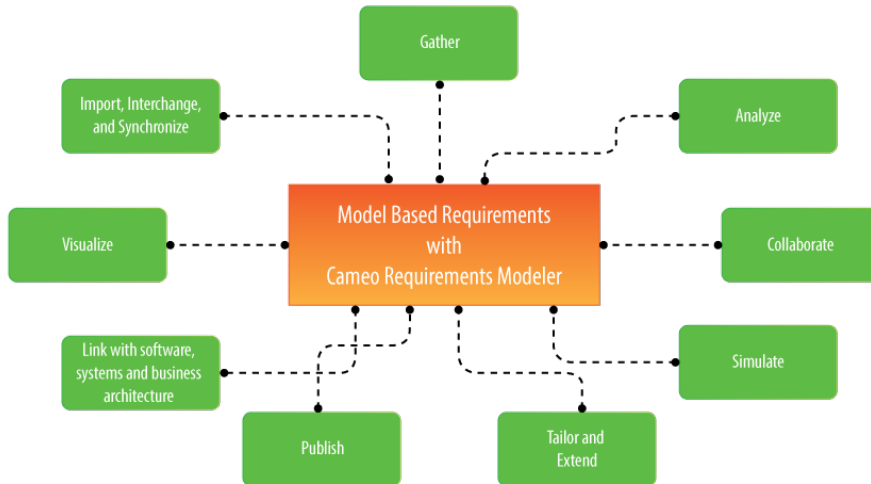
## Project sample



[Categorization software project](#)  
More resources are available on **Resource tab**

## Features

## Requirements Management



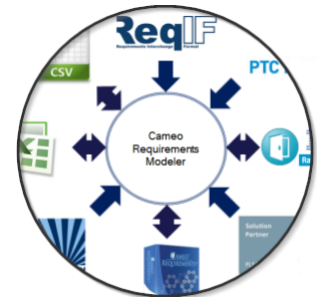
### Gather

- Capture requirements in dedicated diagrams, matrixes, and tables, create glossaries and use them consistently in your requirements
- Use for requirements: domain model based glossary , use cases, UI sketch diagrams

### Import, interchange and synchronize

Once imported, requirements become first class citizens in the modeling world. Here is how support that:

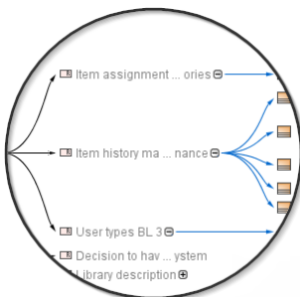
- Importing requirements in ReqIF format from requirement management tools, like IBM DOORS 9.4 and 9.5, IBM DOORS Next Generation, PTC Integrity, Polarion, Siemens Teamcenter, and other tools
- Import requirements from the most commonly used formats as Comma Separated Values (CSV) and Microsoft Excel
- Keep data synchronized in real time with IBM DOORS and IBM DOORS NG via No Magic's Cameo DataHub



### Visualize

Once requirements are imported into model or captured they can be visualized in multiple predefined views:

- Requirement table and diagram
- Relation Maps: -
  - Structure map – showing requirements hierarchy
  - Derivation map – showing requirements derivation
- Matrices:
  - Satisfy – showing requirements coverage with design
  - Verify – showing requirements coverage with test cases
  - Derive – showing requirement supplier - client relation
  - Refine - showing further refinement of requirements



### Link

Align requirements with your model:

- Link and trace from requirements to other model elements of business, software, or systems architecture
- Link with artifacts imported from other tool chain products: PLM tools (e.g. Teamcenter), CAD tools (e.g. Catia), and others



## Publish

- Built-in Microsoft Word Requirements report for publishing full requirements documentation for communicating to non-model users, reviewing or signing
- Web portal for requirements projects review by stakeholders. No product installation is required to read requirements - automated publishing to web server makes up to date requirements available for wide audience
- Fully customizable report templates to fit your organization requirements for document appearance and contents

	Application server	Core	Database	Notification
Concrete requirements	2	25	2	6
TOS-1 Training organization system	1			
TOS-1.1 User Interface requirements	1			
TOS-1.1.1 Available dialog	1			
TOS-1.1.1.3 UI Requirements	10		1	
TOS-1.1.4 General requirements	1			
TOS-1.2 Non-functional requirements				
Performance requirements	1			

## Analyze

- Traceability - visualizing, navigating, and analyzing traces from requirements to architecture, business processes or other models related to requirements. Manage Changes with powerful traceability functionality.
- Validation - a facility for evaluating completeness and correctness of the models using built-in and custom validation suites. E.g. you will find not covered requirements, and it will be faster to communicate issues to other team members or fix them.
- Metrics – a new generation of model-based customizable metrics allows tracking of required project parameters and coverage with design or test cases. Metrics results are tracked over time and allows trends discovery
- Relation Maps show relations in dynamic and compact way:
  - Containment Map - shows requirements hierarchy map
  - Derivation Map – show requirements origination map
- Matrices:
  - Satisfy – shows requirements coverage with design
  - Verify – shows requirements coverage with test cases
  - Derive – shows requirement supplier - client relation
  - Refine - shows further refinement of requirements

	Covered By Design Percentage	Covered By Test Cases	Covered By Test Cases Percentage
6	6	10.17	
6	6	10.17	
6	6	10.17	

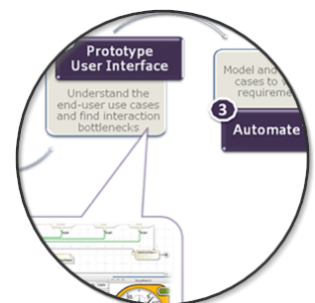


## Collaborate

Work on requirements in teams by using MagicDraw Teamwork Server repository which enables effective team collaboration, change and configuration management, allows for restricting access to the project, and multisite support

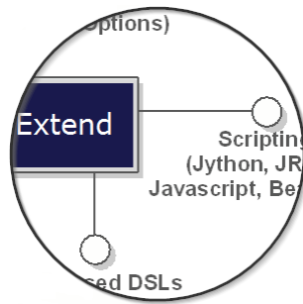
## Simulate

Integration with OMG standard-based model execution, debugging, animation, and user interface prototypes supporting framework – [Cameo Simulation Toolkit](#). It allows simulating future capability based on requirements parameters or imitate live user interface of future system



## Tailor and Extend

- Support for custom requirement types and adding custom properties for requirements
- Validation of custom rules



- Ability to customize existing metric suites and introduce your own
- Customizable report templates for generating Microsoft Word, Excel, PowerPoint, or other types of documents tailored according to the requirements in your specific organization
- Ability to customize the product so that only the frequently used functionality is visible to end user
- Use OpenAPI or scripts to add additional functionality or automate repeatable modeling tasks

## Other Features

- OMG standard requirements notation – requirements part of SysML standard
- Requirement diagram
- Requirements table
- Relation Maps:
  - Structure map – showing requirements hierarchy map
  - Derivation map – showing requirements origination map
- Matrices:
  - Satisfy – showing requirements coverage with design
  - Verify – showing requirements coverage with test cases
  - Derive – showing requirement supplier - client relation
  - Refine - showing further refinement of requirements
- OMG Requirements Interchange Format (ReqIF) files import from IBM Rational DOORS 9.4, 9.5, Next Generation, Polarion, PTC Integrity, Siemens TC, and other ReqIF 1.0 compatible data sources
- Predefined reports
  - Requirements model report for whole model overview
  - Web portal for software (coming together with MagicDraw) and system engineering (coming together with SysML plugin or Cameo Requirements Modeler).
- Validation suites: Completeness and correctness
- Traceability schema
- Coverage metrics for requirements coverage with design and testcases. Model-based metrics engine gives easy custom metrics creation ability
- Model-based glossary, and much more available from [MagicDraw](#) products as a platform

## Resources

- [Cameo Requirements Modeler Plugin documentation](#)
- [Requirements Interchange Format ReqIF Importer](#)
- [Requirements Writing Guide](#)
- [System Engineering Architectural Framework](#)
- [Information System for Training Organization](#)