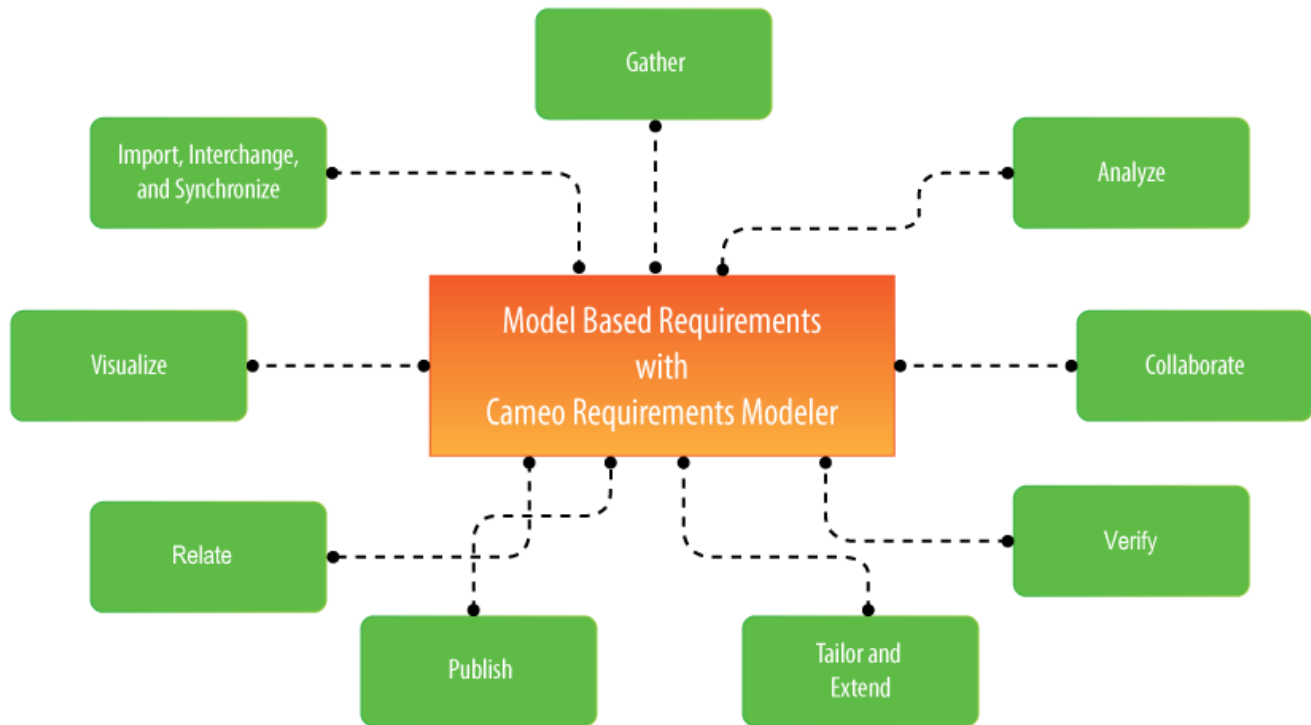


# Requirements management

You can manage your systems Requirements by identifying, describing them, and then organizing in your project. The purpose of requirements management is to ensure that text-based requirements verify and meet the needs of stakeholders. The following figure illustrates the abilities of modeling Requirements in the modeling tool.



The main features of model based Requirements.

## Gather

Capture requirements in the Requirement Diagram and Requirements Table by creating or importing them in the modeling tool. The [Requirement Diagram](#) provides modeling constructs to represent text-based requirements and relate them to other modeling elements. A [Requirement Table](#) is used to type a requirements into a spreadsheet-like table.

## Import, interchange and synchronize

Once requirements are gathered you can support them as follows:

- [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.
- Importing and syncing requirements from the most commonly used formats as Comma Separated Values (CSV) and Microsoft Excel.
- Keep data synchronized in real time with IBM DOORS or Cameo Requirements+ via No Magic's Cameo DataHub.

## Relate

The relationships among requirements and design elements (such as SysML Blocks, Test Cases, Use Cases, etc.) creates a great value in your model. You can [create relationships](#) such as derive, refine, satisfy, or verify directly in the [Requirement Diagram](#) or the [Requirement Matrices](#).

## Visualize and analyze

Requirements can be visualized in multiple predefined views:

- [Requirement Table](#).
- [Requirement Diagram](#).
- [Predefined Relation Maps](#).
- [Matrices](#).
- [Metric Tables](#).

The requirements analysis encompasses those tasks that determine the needs or conditions a new or altered product or project must meet. It considers the possibly conflicting requirements of the various stakeholders by analyzing, documenting, validating and managing software or system requirements. 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.

## 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. Use [Suspect links](#) to track changes in requirements, that are linked to design elements by satisfy, derive, refine or verify relationships, as well as allow tracking unlinked requirements and deprecated requirements.

## Verify

Having the system parameter calculated, you can verify the system requirement and give the verdict on whether it is satisfied or not. The modeling tool enables to perform this [verification automatically](#).

## 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.

## 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.

In the following pages you can learn about:

- [Creating requirements](#)
- [Importing text-based requirements](#)
- [Requirements decomposition](#)
- [Requirements numbering](#)
- [Requirements gap and coverage analysis](#)
- [Tracing requirement changes in Teamwork Cloud](#)
- [Requirements verification](#)
- [Generating requirement document](#)

## White paper

- [Requirements\\_Writing\\_in\\_SysML.pdf](#)

## Webinar

- [Model-Based Requirements Engineering](#)