

# Collaborative modeling

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Team members can individually develop separate parts of a single model and then merge them together to form a complete model. In comparison to individual modeling, collaborative modeling is more effective and produces better results because each member employs his/her best skills and experience.

No Magic offers you two servers for your team's collaboration:

- [Teamwork Cloud](#)
- [MagicDraw Teamwork Server](#)

Both servers provide a repository for storing projects and users. They also support the management of users' permissions as well as sharing and versioning projects.

Projects stored in the server repository can be accessed through the network from multiple clients who have MagicDraw or any Cameo Suite product installed. Different users, depending on their role in a team or enterprise, can have different permissions to the projects.

The same model or even the same diagram can be accessed and modified in parallel. Every user may instantly obtain the newest version of the model as well as commit his/her own changes.

## Basic concepts

For better understanding further material, get acquainted with basic concepts of collaborative modeling.

Concept	Description
<b>Repository</b>	A place for storing projects and users managed by Teamwork Cloud (TWCloud) or MagicDraw Teamwork Server.
<b>User</b>	A collaboration team member, who has credentials to log into TWCloud or Teamwork Server and holds permissions to access one or more server projects.
<b>TWCloud project</b>	A project stored in TWCloud repository.
<b>Teamwork Server project</b>	A project stored in MagicDraw Teamwork Server repository.
<b>Server project</b>	A common name for TWCloud and Teamwork Server projects.
<b>Version</b>	A snapshot of a project at a particular point in time. A new version of a project is created after successful commit of changes made in this project. All versions of the same project have unique numbers.
<b>Comment</b>	An optional description about changes in a project version.
<b>Tag</b>	Information about the status of a project version (for example, <i>approved</i> or <i>initially tested</i> ) or other.
<b>Commit</b>	A process of sending the changes made in the project to the server. Each commit creates a new project version.

<b>Author</b>	A user who has committed a particular project version.
<b>Update</b>	A process of getting from the server the latest version of a project you are working with.
<b>Category</b>	A concept for grouping projects in both TWCloud and MagicDraw Teamwork Server repositories.
<b>Locked item</b>	A part of the model that can be edited by the user, who has locked it. Other users cannot edit locked items. The locks can be released during the commit of a new version.
<b>Server project usage</b>	Another server project used in the project you are working with. It can be a library, profile or regular project.
<b>Branch</b>	A duplicate of a server project version. Branching allows the users to work in parallel on the same project version.
<b>Trunk</b>	A permanent branch of a server project that is a base for all other branches. It cannot be deleted.

## Scenario to get started

Independent of what server your team or enterprise uses, we offer you to follow these steps to get started with collaborative modelling:

1. Obtain user's credentials.



Creating users and deciding the access rights of the users against projects is an administrative task. For more information, see [Teamwork Cloud User Guide](#).

2. Log into a server.
3. Add a project to the server and/or open it.
4. Lock the elements you want to edit (to prevent other users could not change the elements you are working with) and edit them.



You can skip this step if you are working in the [Lock-Free Editing mode](#).

5. Edit these elements and/or create new ones.
6. Commit the changes to the server so that other users could see these modifications.

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- Linking an embedded project with relevant server project
    - Configure used projects
    - Troubleshooting used project version conflicts
  - Moving elements to other projects
  - Hiding packages
  - Managing Teamwork Cloud users
  - Used Project Switch Impact Analysis
    - Used project switch impact analysis window
    - Understanding changes
    - Accept Changes or Reject Changes
  - Used Projects Auto Update Plugin
    - Using Used Projects Auto Update Wizard
    - Manually configuring properties file
    - Updating a used project with a command line
  - Troubleshooting
- Using Teamwork Server
  - Adding projects to Teamwork Server
  - Locking a model for editing in Teamwork Server
  - Committing changes to Teamwork Server
  - Updating changes from Teamwork Server
  - Branching projects in Teamwork Server
    - Creating project branches
    - Opening project branches
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  - Creating Server Projects
  - Opening Recently Used Server Projects
  - Migrating server projects to MagicDraw Teamwork Server 17.0.1 or later
  - Unlocking Model Elements and Diagrams After Editing
  - Saving Server Projects Locally
  - Converting Server Projects to Local
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  - Code Engineering in Server Projects
  - Project Usage Map
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