Publishing from command-line interface

On this page

Cameo Collaborator for TWC allows you to publish your models using the command-line interface. This option is useful if you want to publish them periodically, e.g., once a day or during non-business hours to save time.

> ⚠ **Publishing prerequisites**
> To be able to publish models to Cameo Collaborator for Teamwork Cloud:
>
> - The Cameo Collaborator Publisher plugin must be installed in your modeling tool.

> ⓘ **Project permissions**
> When you publish a new document, it inherits [Teamwork Cloud project permissions](#). When you update a document, project permissions are not affected.

- If you intend to publish a large model, [increase the default JVM heap size](#) of your modeling tool (**Maximum Heap Size** or **Xmx** property).

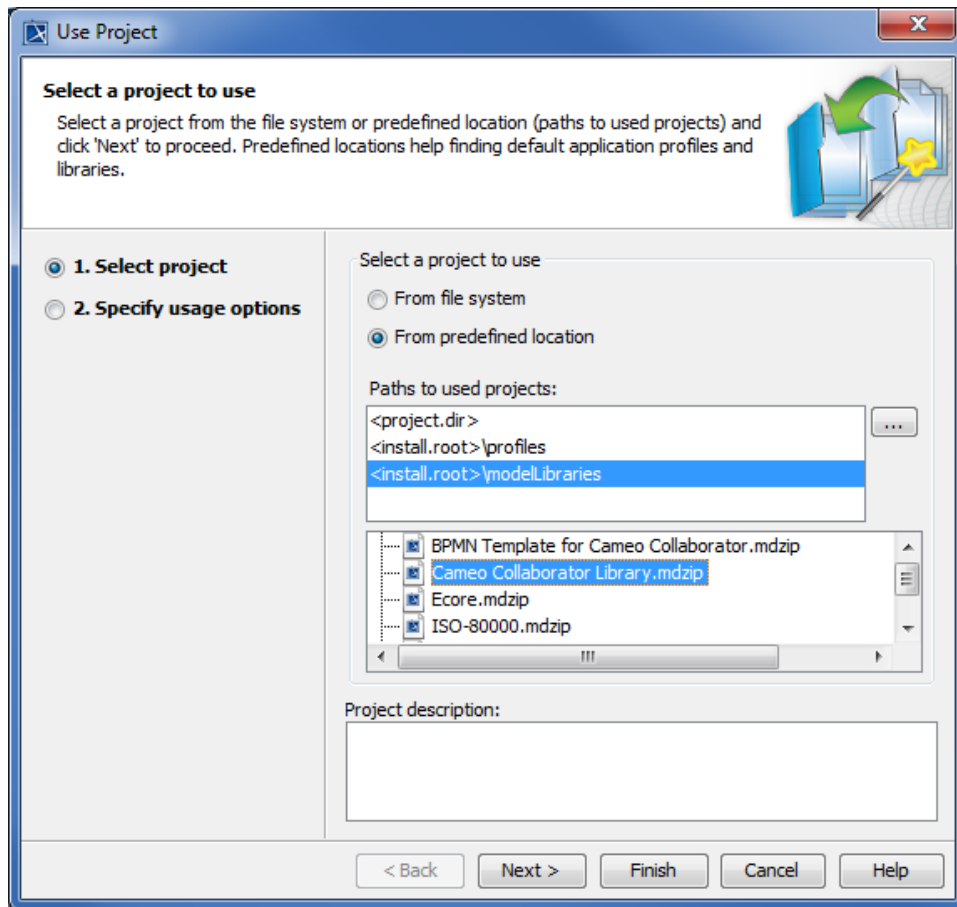Publishing from the command-line interface consists of three main steps:

1. [Preparing a model for publishing](#)
2. [Configuring publishing properties](#)
3. [Publishing](#) or [scheduling publishing as a background task](#)

Preparing a model for publishing

Before publishing a model using the command-line interface, ensure that it is ready to be published by checking the following:

- If your model is large, make sure the default JVM heap size of Cameo Collaborator Publisher is big enough. It is recommended to keep the heap size value larger than the value defined for your modeling tool. You can find it in the properties file located in the *<modeling tool installation directory>\bin* directory (e.g, *magicdraw.properties*).

  1. In the *<modeling tool installation directory>/plugins/com.nomagic.collaborator.publisher* directory, open to edit:
     - The *publish.bat* file on Windows.
     - The *publish.sh* file on OS X or Linux.
  2. Increase the *-Xmx* value, e.g., *-Xmx4000M.*
  3. Save and close the file.
- If you do not intend to specify the **template_location** property described in the [Configuring publishing properties](#) section, make sure the [library](#) containing the template you want to apply for publishing is used in the model.

  1. Open the model you intend to publish.
  2. From the **Options** menu, select **Project Usages,** and click the **Use Project** button. The **Use Project** dialog opens.

3. In the **Select project** step displayed below, select the library you want to use.

> **Tip**
> Predefined Cameo Collaborator templates, such as *Entire Model*, are stored in the *<modeling tool installation directory>\modelLibraries* directory.

4. Click the **Next** button, and, if required, specify usage options.
5. In the **Load Mode** area of the wizard, ensure that you select the **Always load** check box if it is not already selected.
6. Click the **Finish** button to close the dialog.
7. Save the model and close the modeling tool.

Now that your model is prepared for publishing, configure the publishing properties as described in the next section.

Configuring publishing properties

Before publishing a project from the command-line interface, specify publishing properties by modifying a properties file. You can modify the file for every model you publish, or reuse it for several models if you do not need to change the values of publishing properties.

To configure the properties for publishing to Cameo Collaborator

1. In the *<modeling tool installation directory>/plugins/com.nomagic.collaborator.publisher* directory, open the *template.properties* file.
2. Read the comments in the file describing the properties listed below, and specify their values (or leave the default values if they do not need to be changed):
   - **publish_to** - Specify the **Alfresco** value, since Cameo Collaborator allows publishing to the Alfresco server only.
   - **project** - If your project is local, specify the full file path. If you store your project in Teamwork Cloud or Teamwork Server, specify the project name.
   - **scope** - Specify the full qualified name of the model element that owns the model data you want to publish. For example, specify the name of the root package of a model if you want to publish the entire model. For multiple scope elements, separate entries with a semicolon (;).
   - **scope_by_server_element_id** - Specify the **Element Server ID** of the model element that owns the model data you want to publish. You can find this poroperty in the Specification window of the element.
   - **template_document_name** - The value of this property is the name of the Document element displayed in the Collaborator View Diagram of the template you intend to use for publishing.

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<tr><td>⚠️ Updating projects</td></tr>
</table>

If you update a published model, specify the same template that you used before. Otherwise, the navigation between comments and commented items will be corrupted. To restore corrupted navigation, update the document again using the initial template.

- **template_location** - Specify the full file path to the template you intend to apply for publishing. Predefined Cameo Collaborator templates are stored in the *<modeling tool installation directory>\modelLibraries* directory. If you use the template you want to apply for publishing in your model, you can leave this property unspecified.
- **document_name** - If you are going to publish your project to a folder in the selected location root, specify the full path to the document.
- **overwrite_existing_document** - Set to *true* if you want to update the existing document with the same name.

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<tr><td>⚠️ Projects reverted to an earlier version</td></tr>
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When publishing, the selected template is automatically used in your model and then committed to Teamwork Cloud. If you update a model that has been reverted to an earlier version (without the template used in it), you will corrupt the navigation between existing comments and commented items. Afterwards the navigation cannot be restored.

- **comments_enabled** - Set to *true* to enable commenting in a published document.
- **server_username** - Specify the user name of the server where you store the project you want to publish.
- **server_password** - Specify the password of the server where you store the project you want to publish.
- **server_url** - Specify the address of the server where you store the project to be published. If the connection between the server and your modeling tool is encrypted, type *https* in front of the server address.
- **server_use_ssl** - Set to *true* if the server where you store the project to be published is configured to use SSL certificates.
- **require_update_module** - Set to *true* if you want to update used projects to the newest versions when publishing.
- **project_version*** - If you want to publish a specific version of the project, specify the version number.
- **branch_name*** - If you want to publish a specific branch of the project, specify the branch name.
- **project_password** - If the project you want to publish is password-protected, specify the project password.
3. Save and close the file.

*There are four possible outcomes, depending on which of the **project_version** and **branch_name** properties you specify:

- If both properties have default values, the latest available version of the model is published (either the Trunk version, or the Branch version).
- If you specify only the version number (the **branch_name** property has the default value), the specified Trunk version of the model is published.
- If you specify only the branch name (the **project_version** property has the default value), the latest version of the specified branch of the model is published.
- If both properties are specified, the specified version of the specified branch of the model is published.

Publishing a model to Cameo Collaborator for TWC

To publish a model from the command-line interface, you need to execute a specific command, outlined below.

To publish a model to Cameo Collaborator from the command-line interface

1. Open the command-line interface.
2. Go to the *<modeling tool installation directory>/plugins/com.nomagic.collaborator.publisher* directory containing the executive file for model publishing. The executive file is the corresponding .sh or .bat file depending on your operating system and the version of your modeling tool.
3. In the command line, type the following command:

    - On Windows:

    ```
    publish.bat –properties template.properties
    ```

    - On OS X or Linux:

    ```
    ./publish.sh –properties template.properties
    ```

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<tr><td>⚠️ Important</td></tr>
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These commands are valid only if the name of the actual executive file matches the name included in the command, e.g., *publish.bat*. Before executing the command, check the executive file name, and, if needed, change it to match the name in the command.

After completing the steps above, your model is published to Cameo Collaborator. If you want to publish the same model frequently, you do not need to do it manually every time. Instead, schedule publishing as a background task to save time.
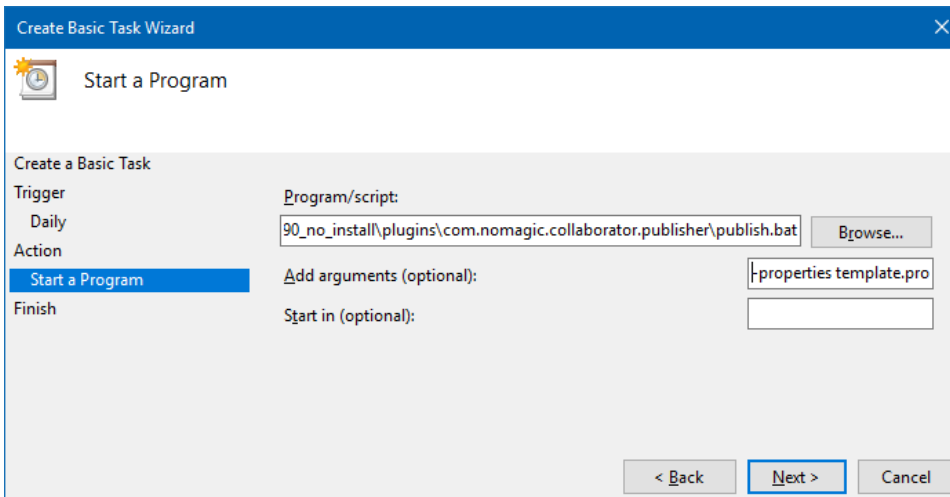
Scheduling a model to be published

If you need to publish your models periodically and/or during non-business hours, you can schedule them to be published automatically. The following procedures describe the scheduling process on Windows and Linux operating systems.

To schedule a publishing task on Windows

1. Open the **Task Scheduler** from the **Start** menu of your Windows computer and select the option to create a basic task.
2. Type the task name, an optional description and click **Next**.
3. Select how often you want the task to reoccur and click **Next**.
4. Specify when you want the task to start and click **Next**.
5. To schedule the publishing to start automatically, select the **Start a program** radio button and click **Next**.
6. Click the **Browse** button, go to the *<modeling tool installation directory>/plugins/com.nomagic.collaborator.publisher* directory, and open the *publish.bat* file.
7. In the **Add Arguments (optional)** box, type *-properties template.properties* and click **Next**.

8. Click **Finish**.

To schedule a publishing task on Linux

1. Connect to the remote server using SSH, or open the terminal directly.
2. Type the following command to open the *crontab* file with the default text editor:

```
# crontab -e
```

3. Using the Cron synax create a *cronjob* to run the model publishing task once a day at midnight:

```
0 0 * * * <modeling tool installation directory>/plugins/com.nomagic.collaborator.publisher/publish.sh -
properties template.properties
```

4. Save the *crontab* file.

After completing the procedure for your operating system, as described above, your model is published automatically on a regular basis at a specified time.
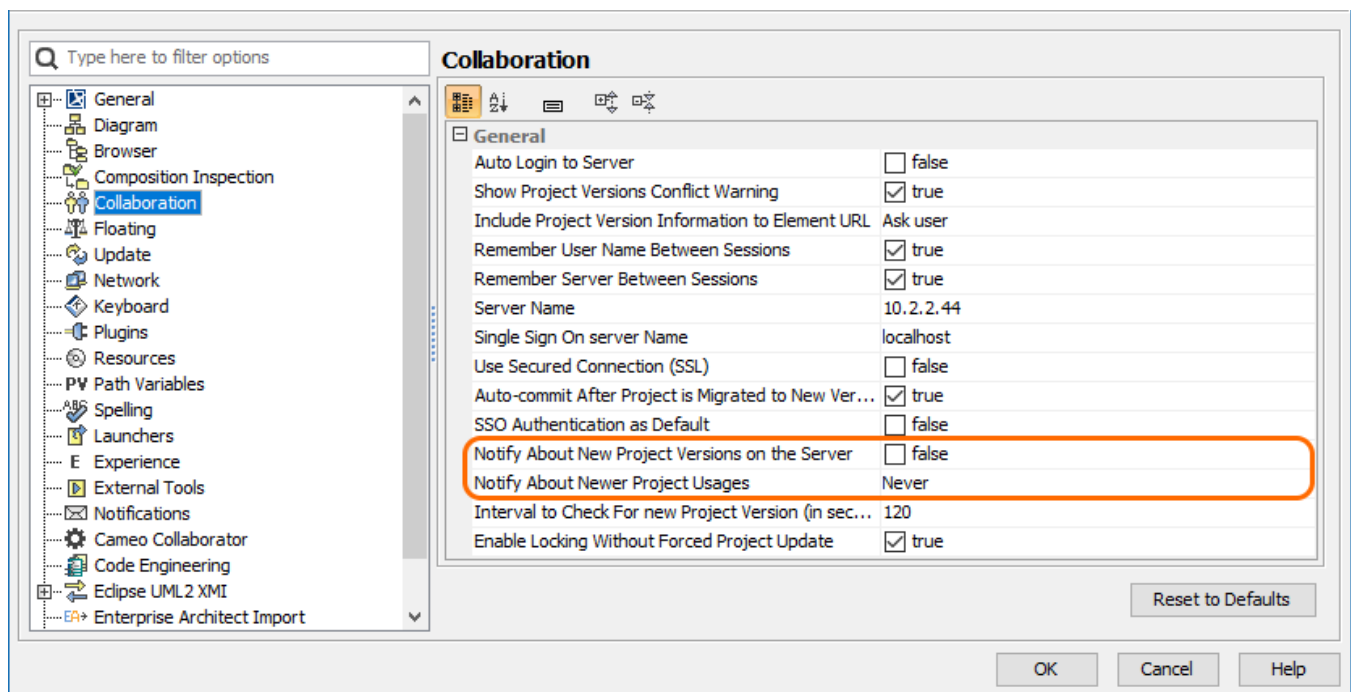
Improving publishing performance

You can improve publishing performance by changing environment options in your modeling tool, as described below.

To improve publishing performance

1. In the main menu of your modeling tool, select **Options** > **Environment**.
2. On the left side of the **Environment Options** dialog, select the **Collaboration** option group.
3. On the right side of the dialog, set the **Notify About New Project Versions on the Server** option to *false*.
4. On the right side of the dialog, set the **Notify About Newer Project Usages** option to **Never**.
5. Click **OK**.

Now Teamwork Cloud will use less connections when publishing, so the publishing performance will improve.

Changing the highlighted environment options improves publishing performance.

Related pages

- Publishing models to Cameo Collaborator for TWC
    - Publishing from graphical user interface