RPA Design and Development

v4.0

UiPath

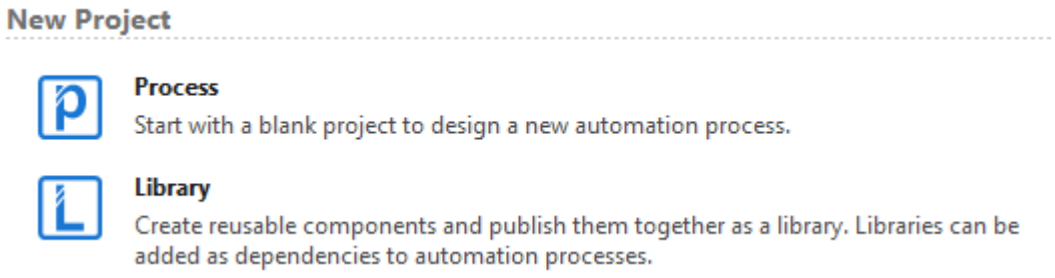
Lesson 17 | Libraries and Templates

Libraries and Templates – Exam Topics

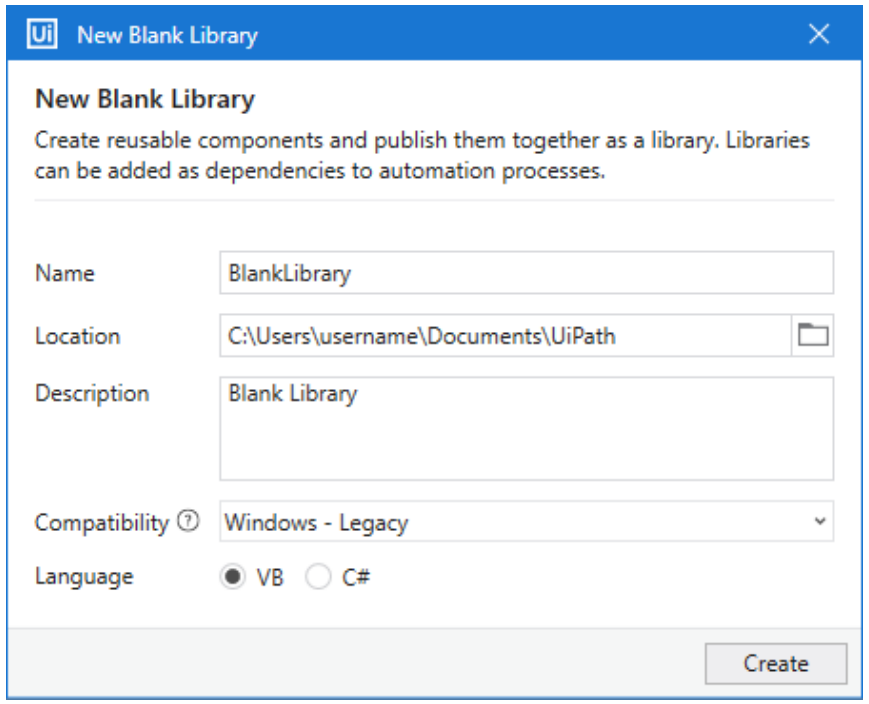
1. Create, publish, and consume a process library

2. Create, share, and access a template

Creating a Library



In the HOME **Backstage view, click Library** to create a new library project. The New Blank Library window is displayed.



Enter a name for the new project and a description that summaries what you are aiming to do with this automation. For this example, you can use the name QuickLibrary.

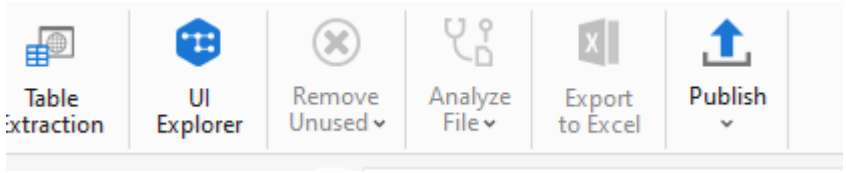
Note: The project name cannot exceed 128 characters, and the description cannot exceed 500 characters.

Select the location where to create the project.

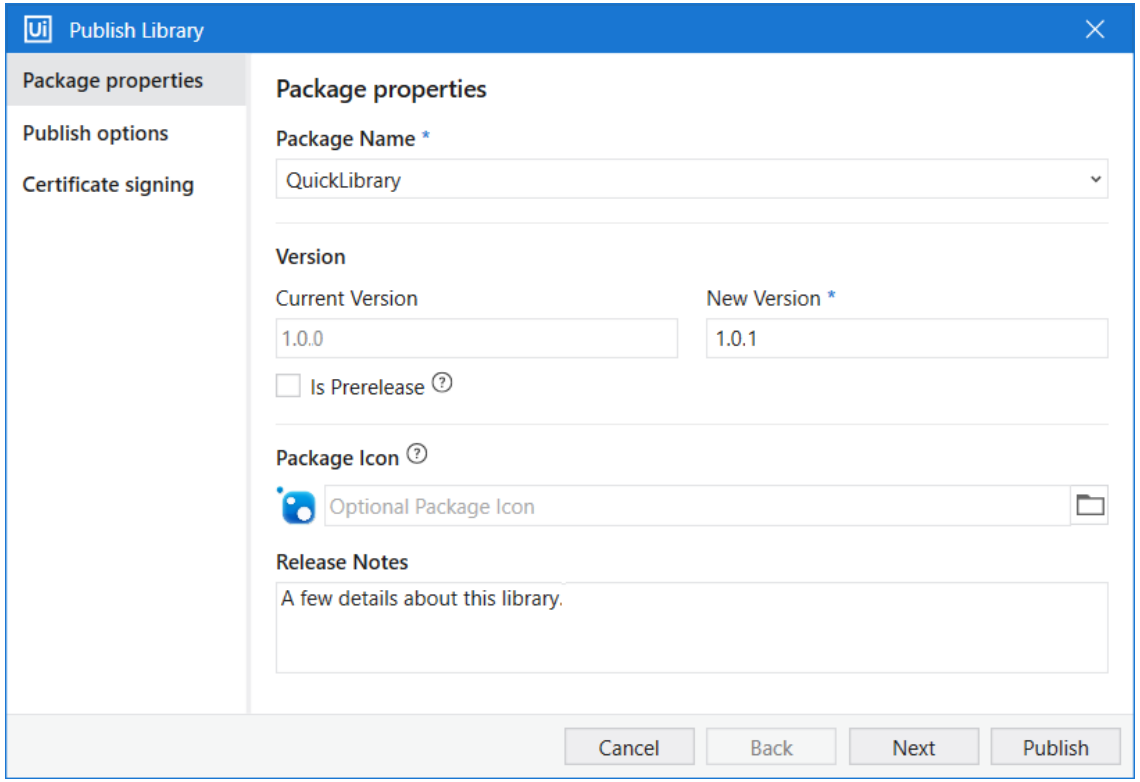
Select Windows - Legacy for the Compatibility option and VB for Language.

Click Create. The new library is opened in Studio.

Packaging a Library



From the ribbon, click the Publish button. The Publish Library window opens.



In the Package properties tab, **enter a package name**.

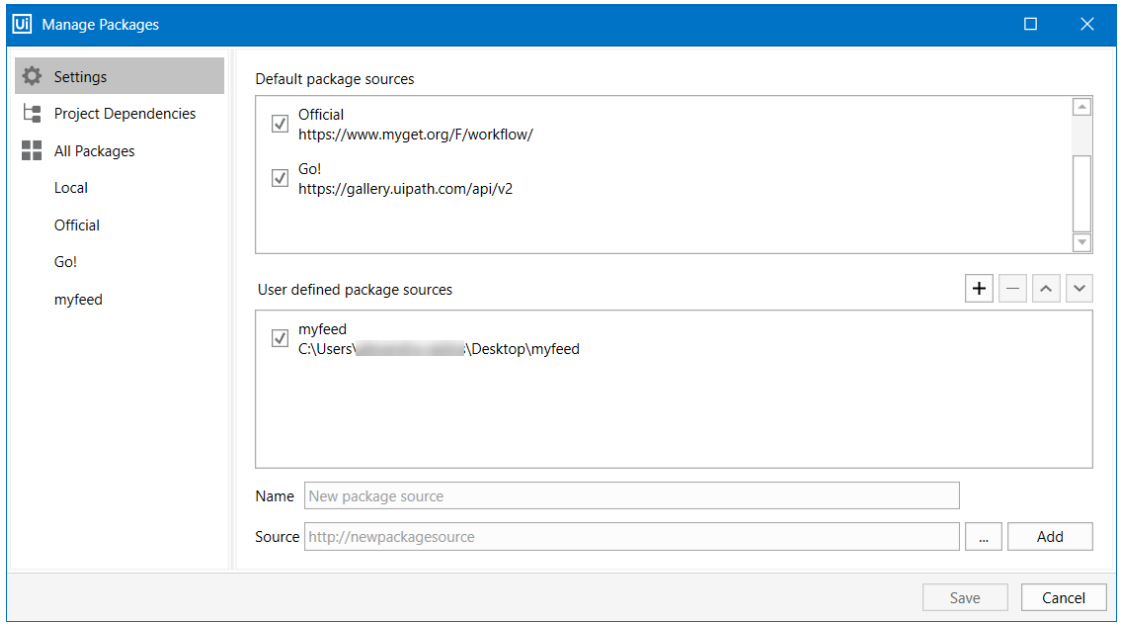
In the **Release Notes** field, add a few details about the library. This is useful for tracking the changes made to the library in each new published version

In the Publish options tab, select Publish to > Custom, and then, in the Custom URL field, add the path to a local folder. For example, you can create a myfeed folder on your Desktop.

Click Publish.

The package is now available in the local folder as a .nupkg file.

Installing Reusable Components – Adding a Custom Feed



To use the package in another project, you first need to add it as a project dependency.
To get started, create a new Process in Studio.

Adding a Custom Feed

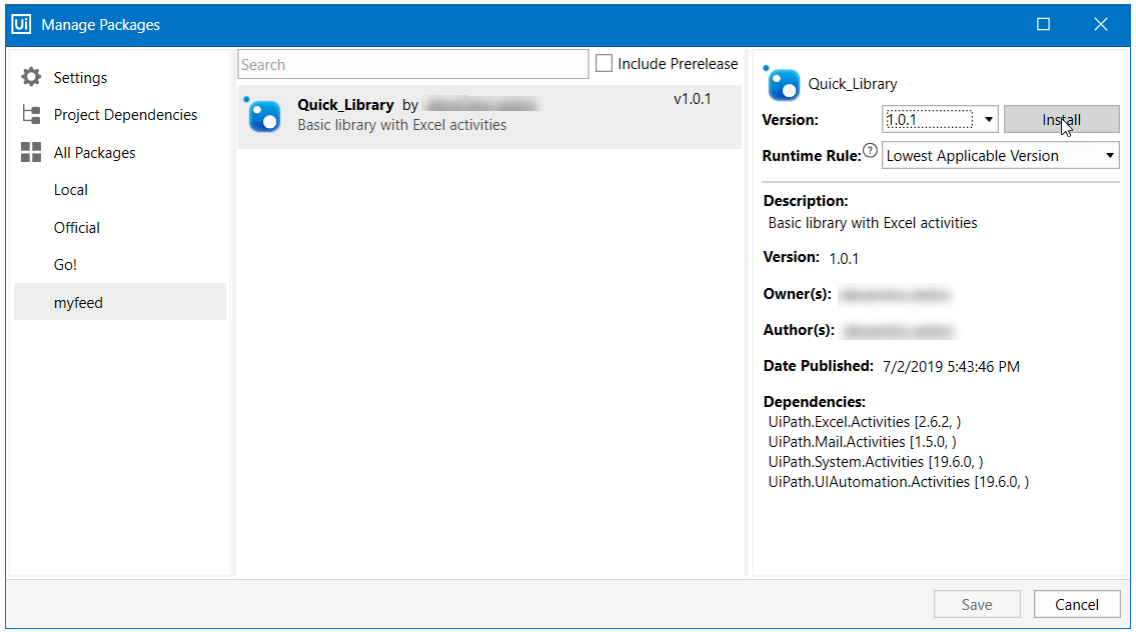
1. In the Studio ribbon, click **Manage Packages > Settings**. The default and user-defined feeds are displayed

2. In the **User defined packages sources** container, add a name for your feed in the **Name** field. In the **Source** field, add the path to the folder where you published your library to

3. Click **Add**.

Your new feed is added to the section.

Installing Reusable Components – Installing the Package



In the Manage Packages window, go to the previously added feed under the All Packages tab on the left.

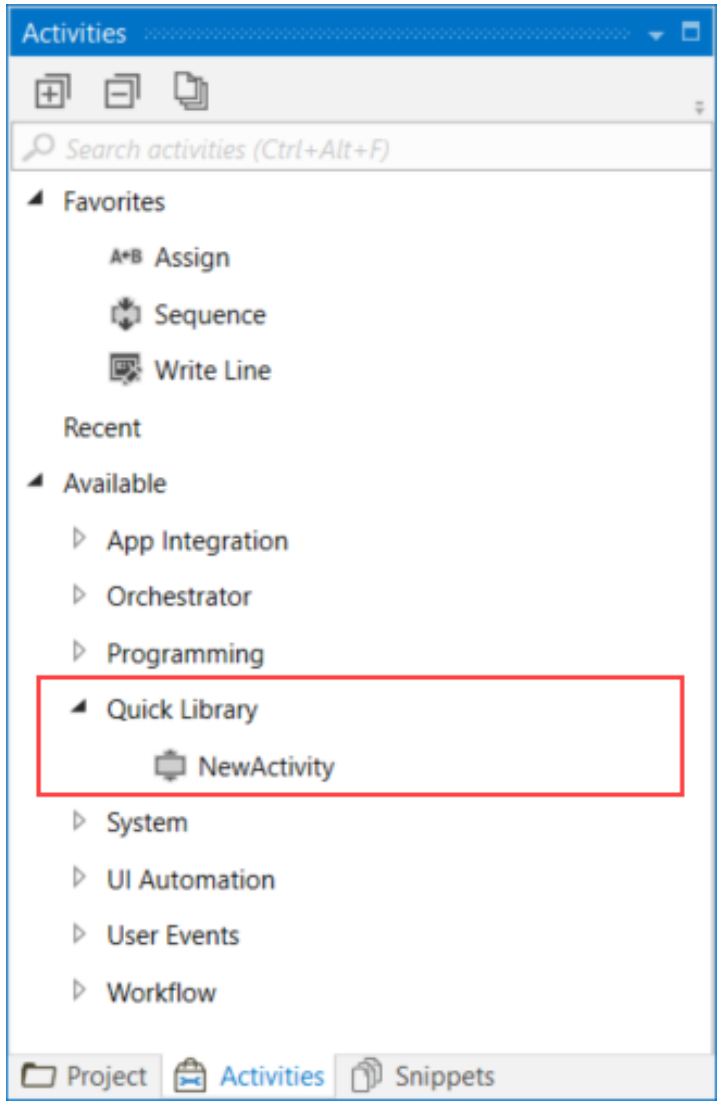
The list of packages available on the feed is displayed.

Search for the package and select it. In our example, the package name is QuickLibrary.

Click Install, then Save.

The package is now installed in your project, and visible in the Project panel, under Dependencies.

Installing Reusable Components – Adding Activities From the Library



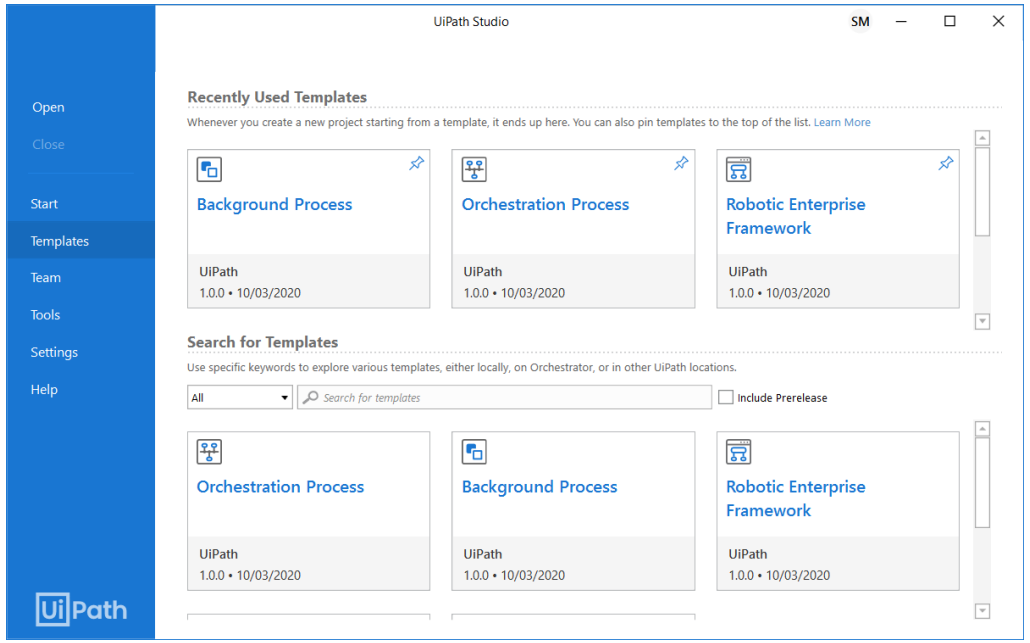
In the Activities panel, search for the name of the package, in our case Quick Library.

Drop the activity in the Designer panel.

In the Studio ribbon, click Run File or use Ctrl + F6 to execute the activity

The advantage of reusable components is that they reduce repetition.
You create them once and reuse them in other projects.

Project Templates



A template is a **preconfigured project that helps speed up automation design** when used as a starting point for new automation projects.

You can use one of the built-in templates or use custom templates from other sources, such as the organization-wide template feed.

In addition, you can create and publish your own custom templates.

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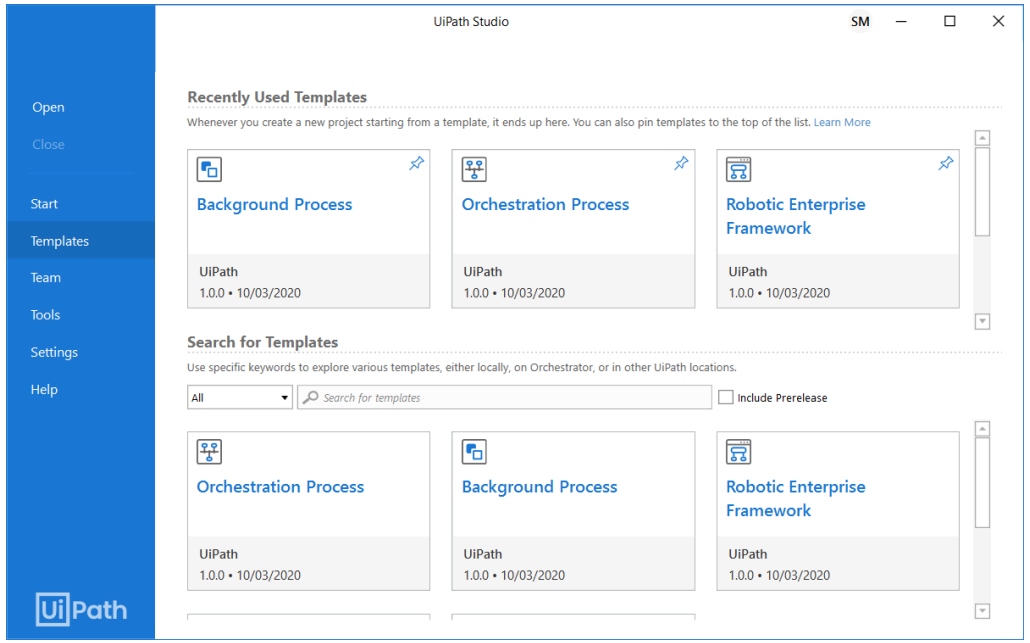
Custom Templates



User-defined processes, or test automation projects can be saved as templates to be used in other automation projects.

Such templates may contain a particular set of dependencies and built-in workflows with already defined variables and arguments that can later be used in various projects.

Studio offers **two ways to create your own custom templates**, either by

1. using the Template project type in the Home tab
2. by exporting a process, or test automation project as a template

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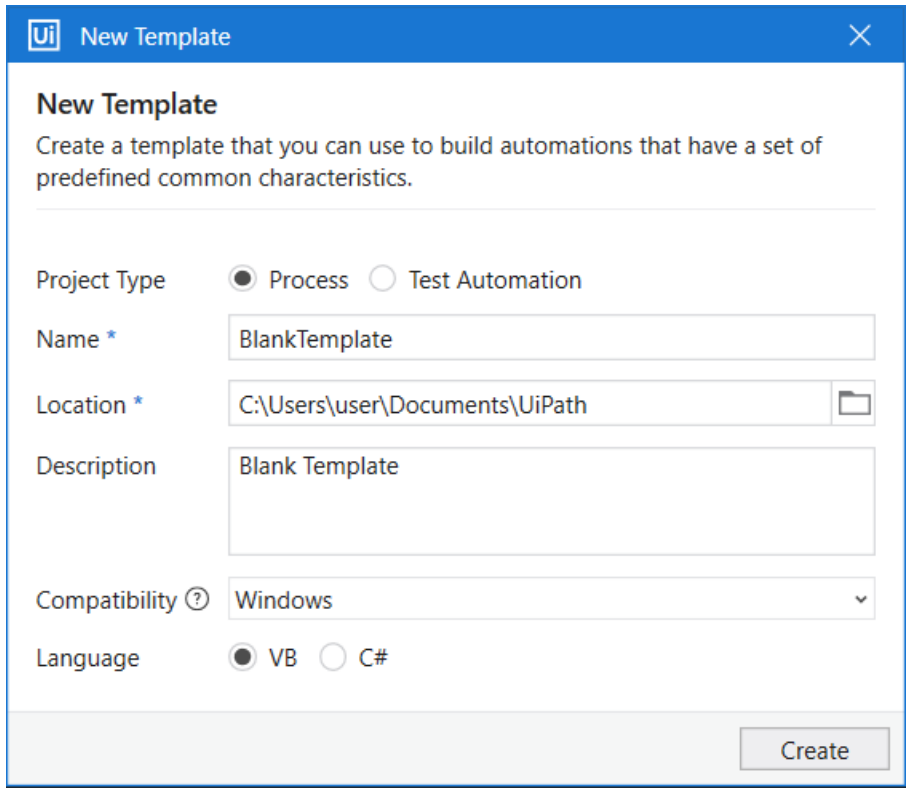
Creating a Template – New Project



1. In the Studio Backstage view, under New Project, click Template

2. In the new template window, configure the following:

   - Choose between a Process and a Test Automation type of template
   - Enter a name for the new project (up to 128 characters) and a description that summaries what you are aiming to do with this automation project (up to 500 characters)
   - Select the location where to create the project. The default location where projects are created is %USERPROFILE%\Documents\UiPath.
   - Select the compatibility and language

3. Click Create and your template opens in Studio.

4. A pop-up is displayed with information about customizable fields. Click Continue and optionally, select Don't show again.

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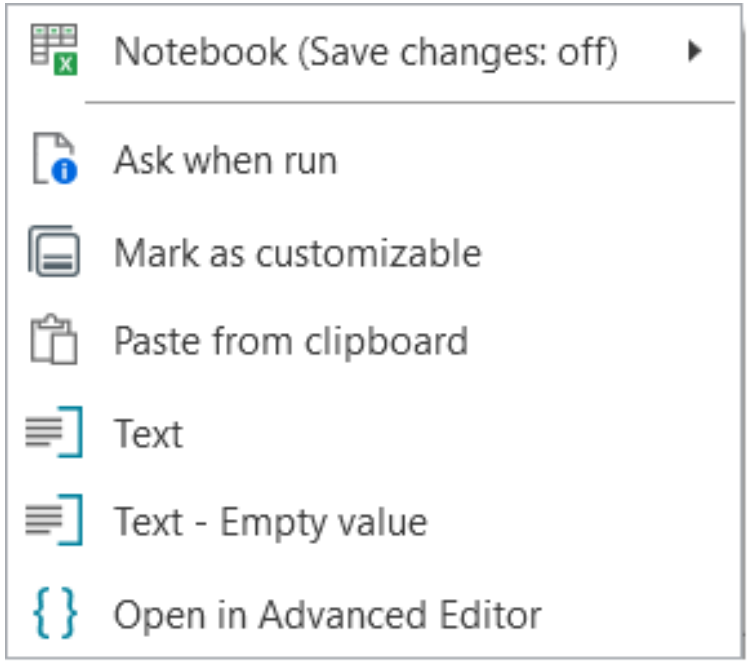
Customizable Fields



Customizable fields allow you to create a template with sample data that is cleared when the template is published. This makes it easier to then create tasks with your own data from that template.

When creating a template, you may have fields that should become configurable once the template is published. As an example, this can be useful when creating a template using Excel activities where the file used and the range selected can change according to what is being automated.

For those instances, you can mark fields as customizable by clicking Plus on the right side of the field, then selecting **Mark as Customizable**.

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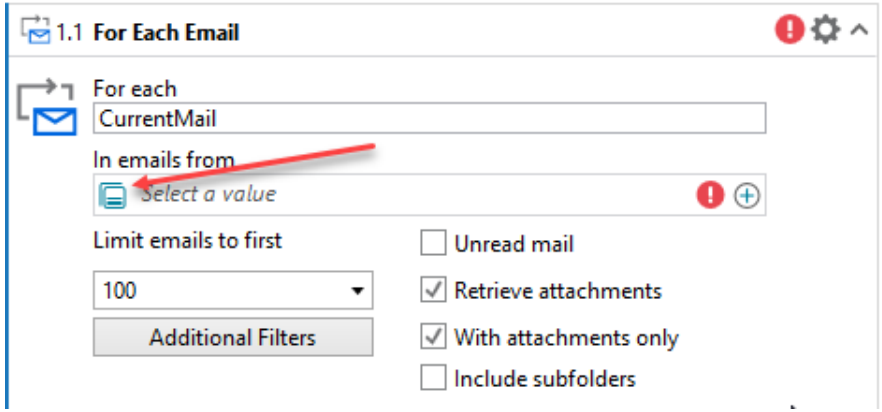
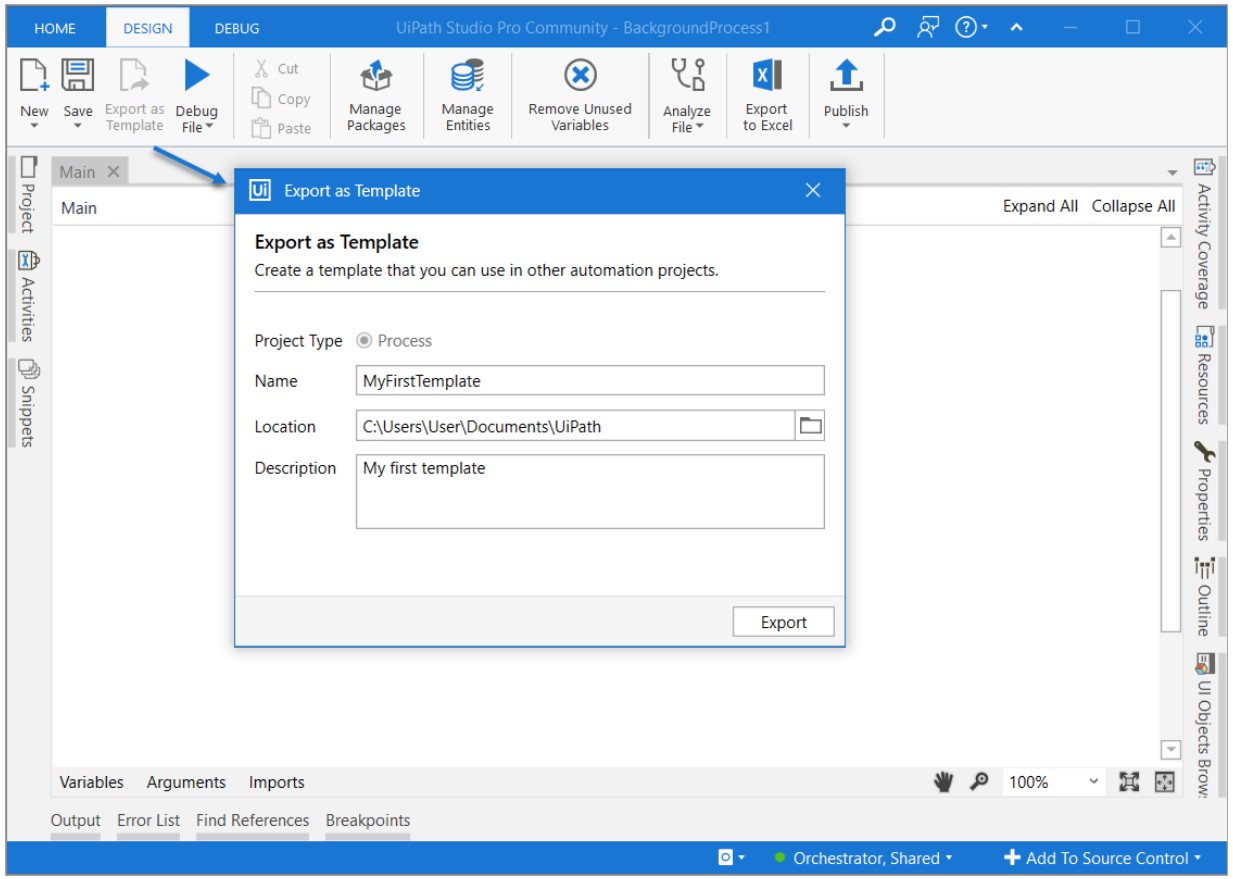


This marks the field with an icon. You can still use fields marked as customizable as any other field, so you can run and test the project with your own values.

Once the template is published, the value in this field is cleared. If you reopen the template after saving it, your test values are kept and you can continue editing.

If you decide you'd like this field not to be configurable and maintain the values, select Plus > Unmark as customizable.

Exporting a Project as a Template



Processes and test automation projects can be exported as templates, published to a certain location, and then made available in the Templates tab in Studio's Backstage view.

A process, test automation, or modified built-in template opened in Studio can be exported using **the Export as Template ribbon button**

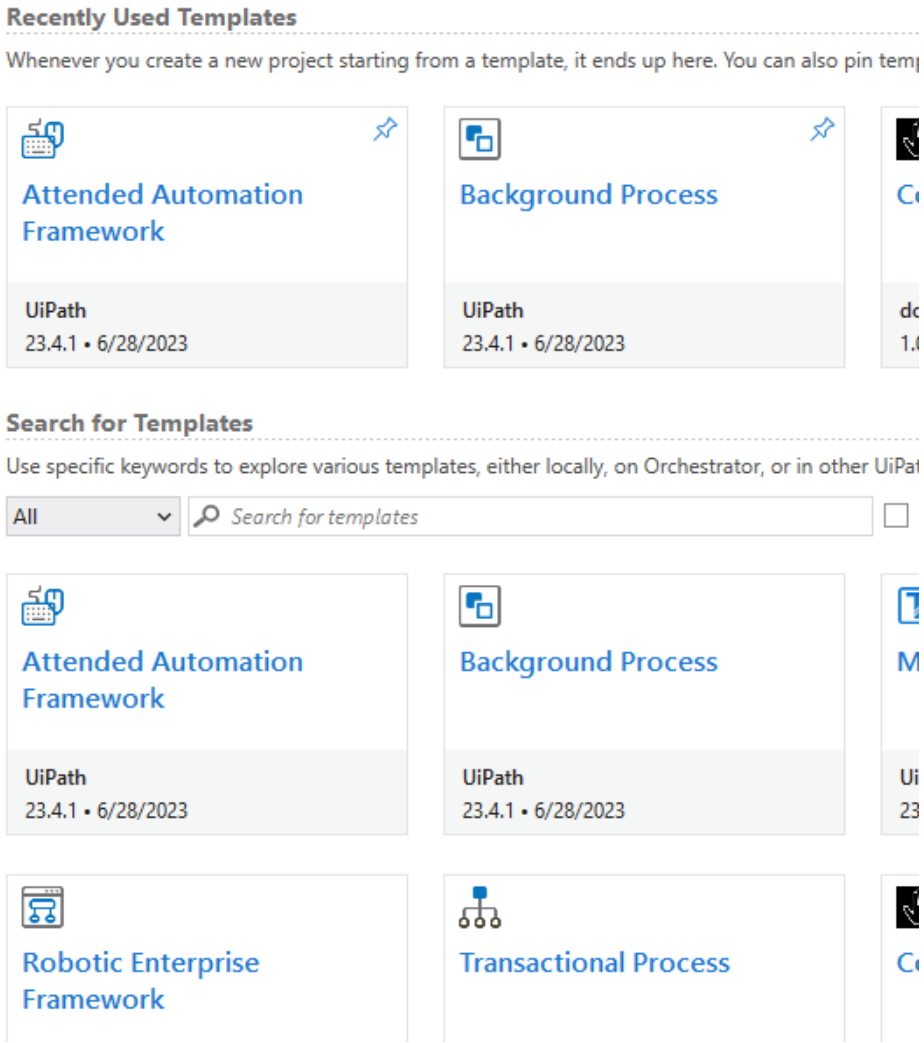
When exported, the template is saved under the path in the **Location** field.

Note: Unsaved changes made in files are automatically saved in the project before the template is created.

Publishing a Template

Publishing templates is similar to publishing processes and libraries, with the exception that the **wizard contains an additional step where to enter template information.**

Browsing and Using Templates



You can view all available project templates in the Templates tab in Studio Backstage View.

Recently used templates are listed at the top. You can search for templates by name and description, select whether to include prerelease versions, or filter templates by location.

The following template locations are available:

- All - All locations
- Built-in - Templates that come installed with Studio
- Official - Templates from the official UiPath feed
- Orchestrator - Organization-wide templates feed, available when connected to Orchestrator
- Local - The local user feed, by default: C:\Users\User\Documents\UiPath\.templates. The location can be defined by selecting Settings > Locations in Studio Backstage view
- Marketplace - Templates published to the UiPath Marketplace

Creating a Project Based on a Template

- Click the template. A window with details about the template opens
- Select the version to use from the lower-left corner of the window, and then click Use Template
- If the template uses any packages that require accepting license terms, click View License to read the terms, and then I Accept to agree and continue
- In the new project window, edit the details of the project (name, location, description). Some templates also give you the option to select the compatibility and language