



Siemens
Industry
Online
Support

Creating and Managing Code Snippets for WinCC Unified with the SnippetCreator

SIMATIC WinCC Unified / V19 / Runtime System / Openness / Code Snippets /
Java Script

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1. Introduction

1.1. Overview

Code snippets are an essential feature of TIA Portal that help simplify and accelerate programming with JavaScript, such as when configuring events. TIA Portal already includes a wide range of useful snippets. However, since use cases can vary, there may not always be a suitable snippet available. With the "SnippetCreator" tool, you can expand the snippet library in TIA Portal with your own custom snippets.

This can be particularly helpful if you frequently use certain pieces of code and want quick access to them. Additionally, you can share your custom snippets with other users via import/export. For instance, a programmer can create a selection of snippets and then provide them to a project designer for further use.

1.2. Feature of the SnippetCreator

The SnippetCreator offers the following features:

- Creating new catalogs ("collections" for snippets)
- Creating new snippets
- Editing and transferring the code within a snippet
- Renaming catalogs and snippets
- Exporting the current structure to an XML file
- Importing a structure from an XML file
- Deleting catalogs and snippets Löschen von Katalogen und Snippets

1.3. Components used

This application example has been created with the following hard- and software components:

Component	Number	Article Number	Note
TIA Portal V19	1	6AV2102-0AA02-3AA7	Every version from V17 is compatible

You can purchase these components from the [Siemens Industry Mall](#).

This application example consists of the following components:

Component	File name	Note
Tool „SnippetCreator“	109813399_Unified_SnippetCreator_V2_0	
This document	109813399_Unified_SnippetCreator_en_V2_0.docx	

2. Engineering

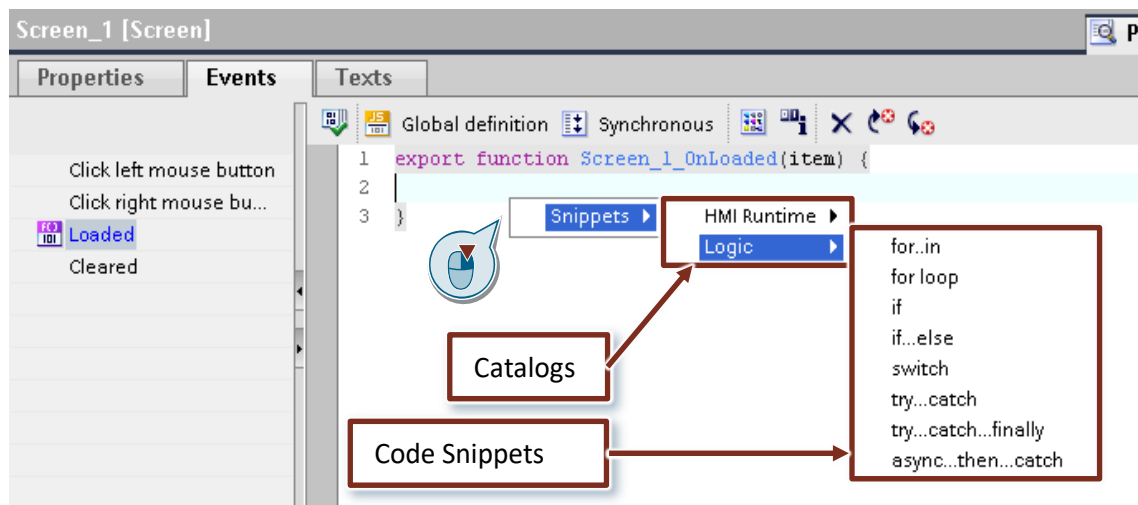
2.1. Using Snippets in TIA Portal

To use code snippets in a JavaScript editor, right-click within the editor to open the snippet selection menu. Hover over the "Snippets" entry with your mouse, and the catalog view will appear. Inside the catalogs, you will find the individual snippets.

A left-click on the desired snippet inserts the stored code at the location in the editor where the cursor was positioned when the selection menu was opened.

Note Depending on the editor and object where the JavaScript editor is used, the type and number of listed catalogs and their contained snippets may vary.

Figure 2-1



2.2. First Start of the SnippetCreator

To use the SnippetCreator for the first time, follow these steps:

1. Download the archive "109813399_Unified_SnippetCreator_V2_0" from the Siemens Industry Online Support page.
2. Extract the archive and place the contained files "SnippetCreator.exe" and "xsdFormat.xsd" on the computer where you are using TIA Portal.

Note

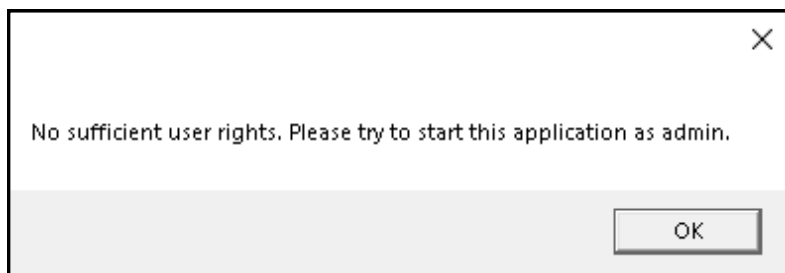
You can store the two files in any directory. However, it is important that both files are placed together, in the same directory. Otherwise, the SnippetCreator will not function properly.

3. Start the SnippetCreator by executing the "SnippetCreator.exe" file.

Note

To run the SnippetCreator, you need administrator privileges. If you do not have administrator rights, an error message will appear (see Figure 2-2 below). In this case, open the file from the context menu (right-click) using the "Run as Administrator" option.

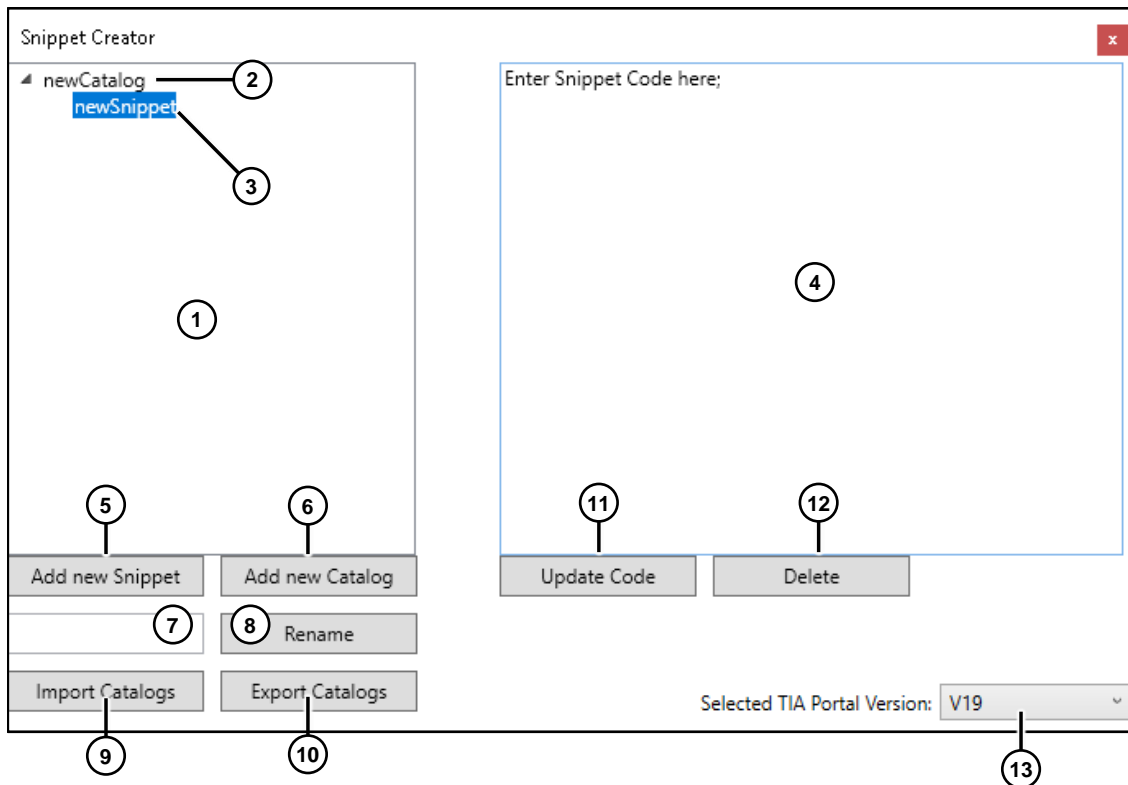
Figure 2-2



4. The SnippetCreator will open and automatically create a catalog and a snippet. These can immediately be edited in the SnippetCreator and used in TIA Portal. To run the SnippetCreator again after closing it, repeat step 3.

2.3. Structure of the SnippetCreator

Figure 2-3



1. Display and selection area for the current configuration
2. Catalog
3. Snippet
4. Code editor
5. Button to create a new snippet
6. Button to create a new catalog
7. Input field for renaming catalogs and snippets
8. Button to rename catalogs and snippets
9. Button for importing a configuration
10. Button for exporting a configuration
11. Button to apply the entered code
12. Button to delete catalogs and snippets
13. Selection for adjusting the TIA version

2.4. Operation

Selecting the TIA Portal Version

If multiple TIA Portal versions are installed on your system, you can select the desired TIA Portal version to be accessed in the lower-right corner (13).

Creating Catalogs and Snippets

To create a new catalog, click the **"Add new Catalog"** button (6).

To create a new snippet, select the catalog (or an existing snippet within it) where you want to assign the new snippet and then click the **"Add new Snippet"** button (5).

The naming of new objects is done automatically and cannot be influenced. However, you can rename a catalog or snippet at any time.

Note

New catalogs and snippets are typically added at the bottom of the tree structure. If you want to insert a catalog or snippet at a specific location in the tree structure, select a catalog or snippet before clicking the corresponding button. The new object will then be inserted directly beneath it.

Renaming Catalogs and Snippets

You can rename catalogs and snippets using the **"Rename"** button. Select the entry you want to rename, enter a new name in the input field (7), and click **"Rename"** (8).

Editing the Content of a Snippet

To adjust the content (code) of a snippet, select the desired snippet in the selection window (1). The current content of the selected snippet will be displayed in the code editor (4). Modify the code in the code editor (4) and then click the **"Update Code"** button (11). This saves the changes and applies them to the snippet.

Note

It is not possible to undo changes to a snippet. Therefore, make sure to verify your input before applying or save the content in a text file before editing. Additionally, the SnippetCreator does not provide a syntax check. Verify the correct syntax and functionality of your code in TIA Portal before applying changes in the SnippetCreator.

Deleting a Catalog or Snippet

To delete a snippet or catalog, select the entry to be deleted in the selection area (1) and click the **"Delete"** button (12). Deleting a catalog will also delete all snippets contained within it.

Note

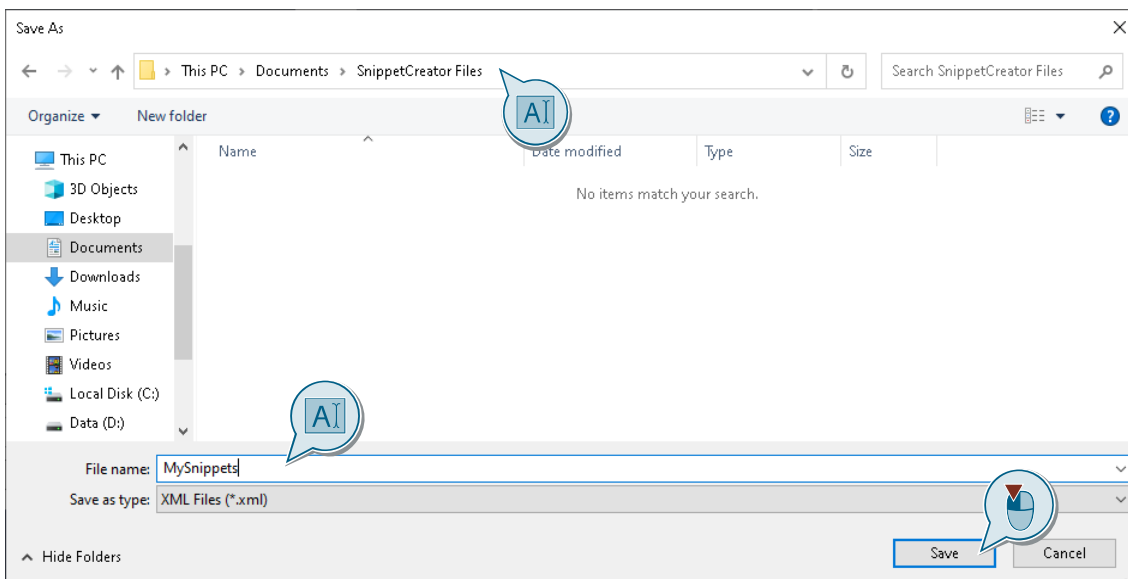
The deletion process cannot be undone. Therefore, make sure the correct entry is selected before clicking the **"Delete"** button.

Import/Export of Configurations

Export:

You can save your custom configurations (catalogs and snippets). To do so, click the **"Export Catalogs"** button (10). Choose a storage path and provide a name in the dialog window that opens. To complete the export process, click **"Save"**.

Figure 2-4

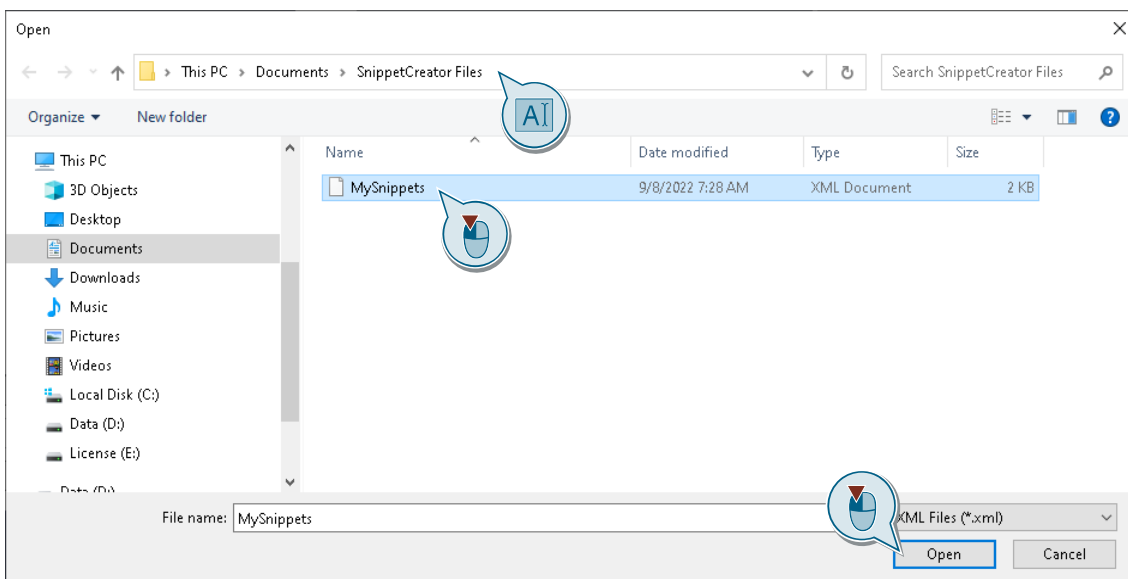


The exported files can be shared with other users and can be imported for further use.

Import:

To load a saved (exported) configuration, use the import function. Click the **"Import Catalogs"** button (9). In the dialog window that opens, navigate to the location of the desired file, select it, and click **"Open"**.

Figure 2-5



Hint Importing a configuration will overwrite the currently opened configuration. If you want to save your work, perform an export before importing.

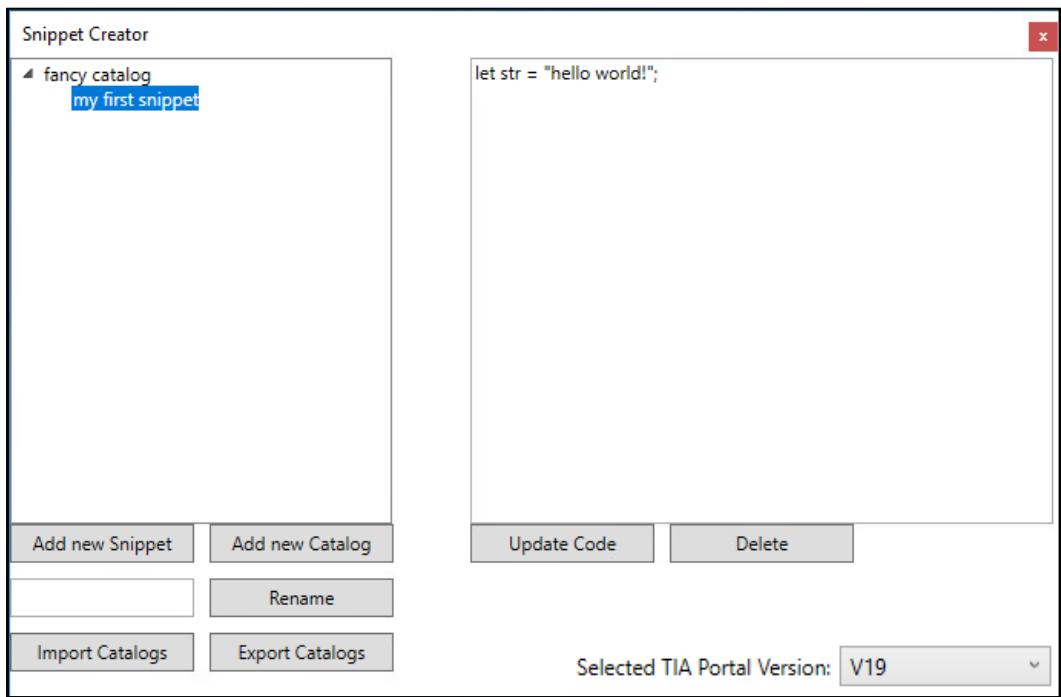
Updating Snippets in TIA Portal

The changes you make in the SnippetCreator are continuously synchronized with TIA Portal and "anchored" within it. This means the snippets are available for all existing and future projects. No further action is required. For example, you can create a new catalog or snippet and use it immediately in TIA Portal. The last active configuration in the SnippetCreator will remain in TIA Portal even after you close the SnippetCreator. When you reopen the SnippetCreator, the last configuration injected into TIA Portal will be read and displayed in the SnippetCreator.

Hint

If you are in a JavaScript editor in TIA Portal at the time of a change in the SnippetCreator, you must exit and reopen the JavaScript editor to see the latest changes in the snippet selection. For example, switching to another event and then returning to the previous JavaScript editor will suffice.

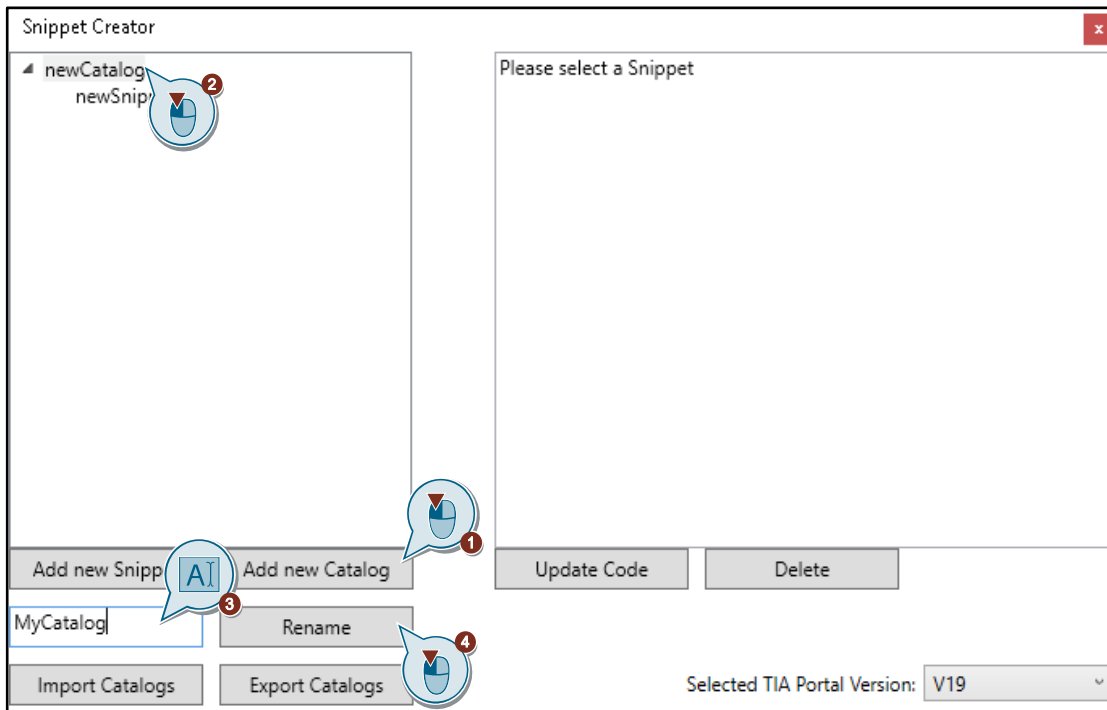
Figure 2-6



2.5. Example

1. Open the SnippetCreator. To improve clarity, you may want to delete any existing content. To do this, select an entry and then click the **"Delete"** button. Repeat this process for all existing catalogs.
2. Click the **"Add new Catalog"** button (1). A new catalog with a new, subordinated snippet will be created.
3. Select the catalog (2), enter a new name (e.g., "MyCatalog") in the input field (3), and click **"Rename"** (4).
4. Repeat step 3 for the snippet within the catalog (e.g., "MySnippet").

Figure 2-7



5. Select the new snippet (5).
6. Clear the content in the code editor and enter your new code, for example:

```
let str = „hello world!“;
```

7. Apply the changes to the snippet by clicking the **"Update Code"** button.

Note

The SnippetCreator does not notify you in any way that the changes from the code editor have been transferred to the snippet when you click the **"Update Code"** button.

Result in TIA Portal

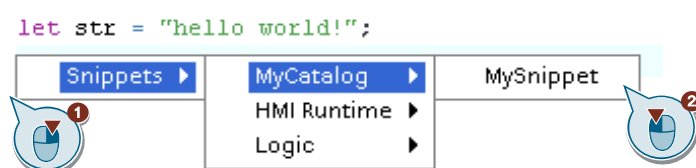
If applicable, open TIA Portal and navigate to a JavaScript editor.

Right-click in the JavaScript editor to open the snippet library (1) and navigate to your newly created snippet.

Select it with a left-click (2).

The content of the snippet will now be inserted into the JavaScript editor.

Figure 2-8



3. Appendix

3.1. Service and support

SiePortal

The integrated platform for product selection, purchasing and support - and connection of Industry Mall and Online support. The SiePortal home page replaces the previous home pages of the Industry Mall and the Online Support Portal (SIOS) and combines them.

- Products & Services
In Products & Services, you can find all our offerings as previously available in Mall Catalog.
- Support
In Support, you can find all information helpful for resolving technical issues with our products.
- mySieportal
mySiePortal collects all your personal data and processes, from your account to current orders, service requests and more. You can only see the full range of functions here after you have logged in.

You can access SiePortal via this address: sieportal.siemens.com

Technical Support

The Technical Support of Siemens Industry provides you fast and competent support regarding all technical queries with numerous tailor-made offers – ranging from basic support to individual support contracts.

Please send queries to Technical Support via Web form: support.industry.siemens.com/cs/my/src

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For more information on our offered trainings and courses, as well as their locations and dates, refer to our web page: siemens.com/sitrain

Industry Online Support app

You will receive optimum support wherever you are with the "Industry Online Support" app. The app is available for iOS and Android:



3.2. Links und literature

No.	Topic
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11	Siemens Industry Online Support https://support.industry.siemens.com
12	Link to the entry page of this application example https://support.industry.siemens.com/cs/ww/en/view/109813399

3.3. Change documentation

Version	Date	Modification
V1.0	10/2022	First version
V2.0	01/2025	Adjustment for V19 and Selection of the TIA Portal Version