


Versioning guidelines

Last updated by | Nils Johansen | Jul 5, 2024 at 8:37 AM GMT+2

TwinCAT uses **Semantic Versioning**, following [Semantic Versioning 2.0.0](#) .

Versioning: <major>.<minor>.<patch>

- Each repository is versioned independently from each other
- Every repository starts after initial review with version 1.0.0 (Tag: "1.0.0")
- With every change in the `main` branch, the version of a repository shall be increased
- Which number of the version must be increased depends on the changes (see `Changing Rules`)
- Optionally a suffix could be added: <major>.<minor>.<patch>.<suffix>

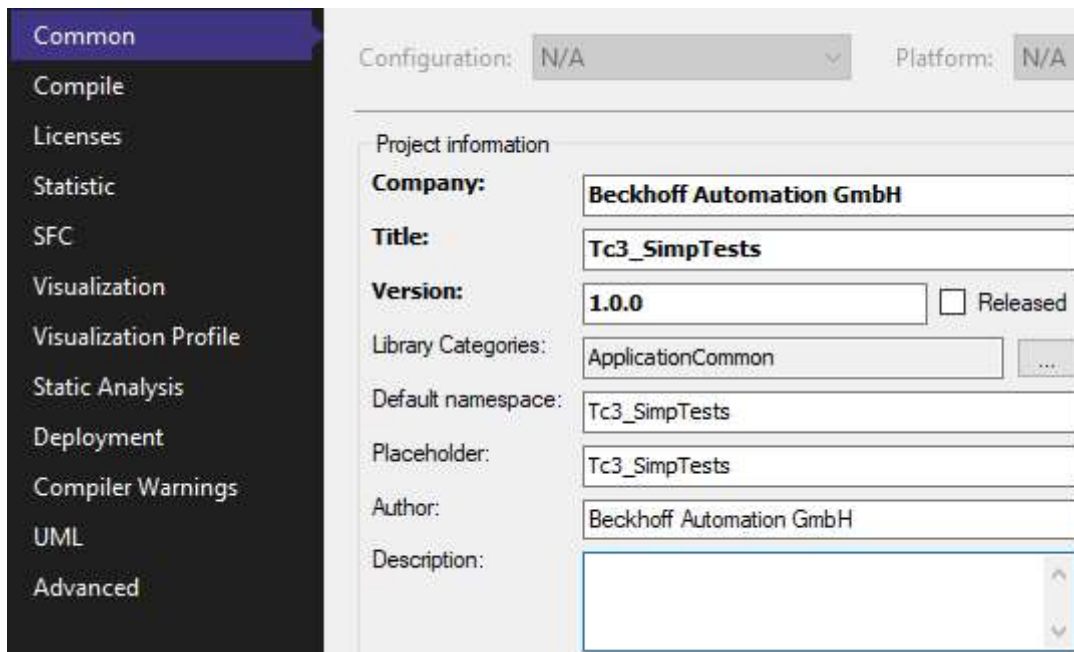
Changing Rules

- Major is incremented when the new version is incompatible to the prior version of the component
- Minor is incremented when the new version includes an extension of functionality
- Patch is incremented when the new version includes fixes only
- Suffix is optionally incremented for multiple builds or development states (should be 0 for release versions)


PLC Libraries

For every provided PLC Library, the project information should be filled out with

- Company and Author are "Beckhoff Automation GmbH"
- Title, Namespace and Placeholder are equal to the name of the library
- Library Categories should be "ApplicationCommon" (see `ApplicationCommon.libcat.xml`)
- Library Version as defined above



The screenshot shows the 'Common' tab of a project configuration window. The left sidebar lists various settings: Common, Compile, Licenses, Statistic, SFC, Visualization, Visualization Profile, Static Analysis, Deployment, Compiler Warnings, UML, and Advanced. The main area is titled 'Configuration: N/A Platform: N/A' and contains a 'Project information' section with the following fields:

- Company:** Beckhoff Automation GmbH
- Title:** Tc3_SimpTests
- Version:** 1.0.0 ☐ Released
- Library Categories:** ApplicationCommon 
- Default namespace:** Tc3_SimpTests
- Placeholder:** Tc3_SimpTests
- Author:** Beckhoff Automation GmbH
- Description:**

ApplicationCommon.libcat.xml

[Download the full ApplicationCommon.libcat.xml here](#)

```
<?xml version='1.0' encoding='UTF-8'?>
<LibraryCategories xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="Librar
  <LibraryCategory>
    <Id>460ee22e-7736-4c09-a31b-671fe22861fa</Id>
    <Version>1.0.0.0</Version>
    <DefaultName>ApplicationCommon</DefaultName>
  </LibraryCategory>
<!-- ... -->
```

TMC Drivers

For every provided TMC driver, the vendor and group should be filled out with

- Vendor/Name "Beckhoff Automation GmbH"
- Group/Name "AppCom" with Group/DisplayName of "ApplicationCommon"
- SortOrder defined as 10000
- Every Module should be added to the Group "AppCom"

ApplicationCommon.tmc

```
<?xml version="1.0" encoding="utf-8"?>
<TcModuleClass xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="http://www
  <Vendor>
    <Name>Beckhoff Automation GmbH</Name>
  </Vendor>
  <Groups>
    <Group SortOrder="10000">
      <Name>AppCom</Name>
      <DisplayName>ApplicationCommon</DisplayName>
    </Group>
  </Groups>
  <Modules>
    <Module GUID="{d05c9e71-ed8e-4ece-8ab0-71151c4175f4}" Group="AppCom">
      <Name>TcModuleWithMultiContext</Name>
      <CLSID ClassFactory="TcModuleWithMultiContext">{d05c9e71-ed8e-4ece-8ab0-71151c4175f4}</CLSID>
    </Module>
  </Modules>
<!-- ... --->
```