# Appendix 7: Creating a library

## Contents

# Introduction

This guide will go over the steps to setup I/O modules in PLCnext Engineer.

# Objectives

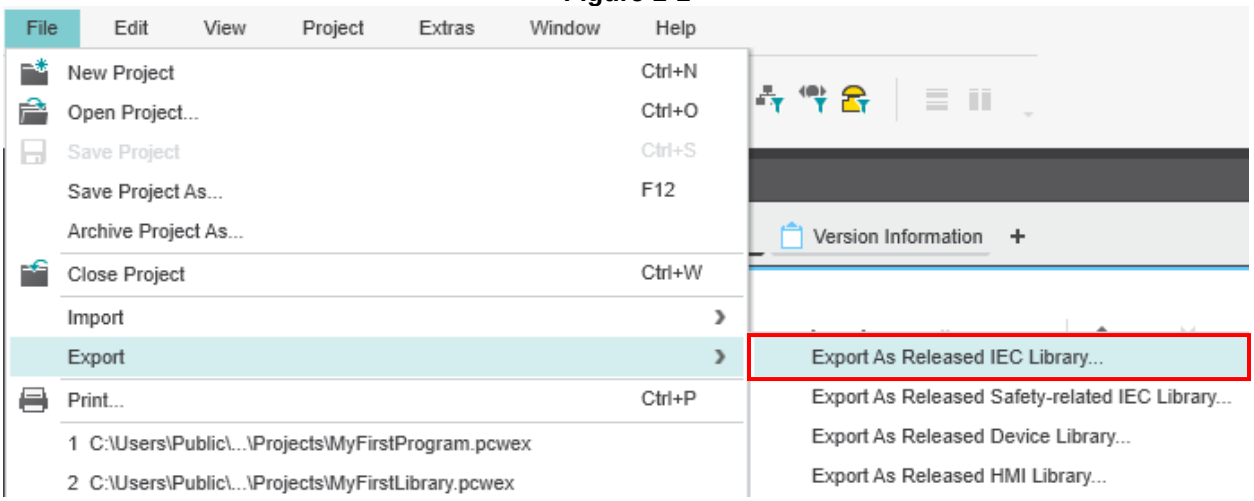
- Create a library

## 1 – Creating a library

1. Open the project you want to release as IEC 61131-3 library.

2. Select 'File > Export > Export as Released IEC Library' (a). See figure 1-1.

**Figure 1-1**




3. In the appearing dialog, enter a meaningful library name (a). See figure 1-2.

**NOTE:** If you do not enter/select a directory path for the new library file, the entered library name is automatically completed with the path to the default library directory. (This default path can be changed under 'Extras > Options', dialog area 'Tool | Directories'.)

4. Optionally, you can define a version number and enter a description (b). See figure 1-2.

5. To protect your know-how when distributing libraries, you can define the visibility of each user-defined POU and data type (c). See figure 1-2.

- Visible – The program/function/function block is available, and the code can be viewed in read-only mode.
- Restricted – The program/function/function block is available, and code is unviewable.
- Hidden – The program/function/function block is not available, and code is unviewable. This is for code that is not necessary for users of the library to have access to in their code.

**NOTE:** By default, each exported standard POU/data type is set to 'Visible'.

6. Set the redistribution of your library by selecting an entry from the 'Redistribution' drop-down list (d).

- Unlimited (cascaded) – Your library can be redistributed. This means a user can create a library with your library included in the release.
- One level only – Your library can be included in a project but cannot be redistributed within a new library.

**NOTE:** By default, the project is set to ‘Unlimited (cascaded)’.

7. If the same project has already been released as an IEC library, the checkbox 'Create new library ID' is active. If checked, the library ID is not overwritten by a new ID. Instead, the same ID is used again (e).

8. Optionally, you can add help files (*.chm) that provide help information on the library to be released. See the topic "Providing Help Files and Library Description Files" in the help documentation for details (f).

9. After setting the visibility for the POUs and data types, save the current settings to keep these settings for future exports by pressing the 'Save & Close' button (g).

10. Create the library by exporting the POUs and data types with the specified visibility by pressing the 'Release' button (h).

**Figure 1-2**