Sealing/Unsealing a project

The system provides the possibility to seal an exisiting project. The purpose of sealing a project is to switch a project into online mode without having to compile the project before, i.e., the project is protected against re-compiling. This is for example useful if you have created a project with an earlier version of the programming system and, once you have updated the programming system and opened the project in the new programming system version, you want to debug the project in online mode without compiling it before.

Sealing an existing project is only possible if the project has been successfully compiled without errors.

The file extension of a sealed project is *.mws. A zipped sealed project has the extension *.zws.

Allowed / unallowed operations in sealed projects

The following table shows which operations are allowed/not allowed in sealed projects:

Operation	Allowed / Not allowed
Project comparison	Allowed
Project download	Allowed
Switching to online mode (variable status or address status with powerflow)	Allowed
Use of the Logic Analyzer	Allowed
Reading/writing recipes to/from the PLC via the Watch Window	Allowed
Password handling	Allowed
Project modifications such as insert, delete, cut, paste, import, rename operations (shown with key symbol attached to the objects in the project tree)	Not allowed
Editing short descriptions of POUs in the properties dialog	Not allowed
Compiling	Not allowed
Building cross references	Not allowed
Multi user handling	Not allowed
Switching the project language	Not allowed
Global/local search and replace	Not allowed

Log on and log off to/from the project	Not allowed
Executing a 'Save All' command	Not allowed

Rules for sealed projects

The following rules apply for sealed projects:

- in the title bar of the programming system, the project name gets the addition "(sealed)".

- the project files and the included libraries with the frontend code are saved to the sealed project file.

- **User libraries / Firmware libraries:**

    - when unpacking a zipped sealed project (*.zws), the new sub-directories "Libraries" and "FW-Libraries" are created in the directory of the sealed project file (*.mws). These sub-directories contain the unzipped sealed user libraries (directory "Libraries") and the firmware libraries (directory "FW-Libraries") included in the project.

    - when unsealing a sealed project by saving the project as *.mwt file, the user libraries stored in the sub-directory "Libraries" of the zipped sealed project file (*.zws) are copied to the default libraries directory and the firmware libraries stored in the sub-directory "FW-Libraries" are copied to the default firmware libraries directory. If a user or firmware library of the same name already exists in the default libraries directory, a corresponding warning message appears where you have to confirm overwriting the existing library.

- For multi user projects the connection to the server project is aborted and the multi user status is reset.

How to seal a project

- If not already done, compile the project by selecting 'Build > Make' and ensure that the project is successfully compiled without errors.

- Select 'File > Save Project As/Zip Project As'.
  The 'Save/Zip project as' dialog appears.

- Select a directory where to save the sealed project and choose the file type 'Sealed project files (*.zws)' from the file type list box.

- Click 'Save' to save the sealed project (see the following note).

Already existing sealed project files (.zws files) cannot be overwritten. A corresponding error message appears when you try to save a project as sealed project file that already exists in the selected directory.*

How to open a sealed a project

- Select 'File > Open Project / Unzip Project ...'.
  The 'Open/Unzip project' dialog appears.

- Browse for the desired sealed project file (*.zws), and click 'Open'.
  The sealed project is opened (in the title bar the project name gets the addition "(sealed)"). In the directory containing the *.zws file the sealed project is saved as *.mws file (with the corresponding sub-directory named as the project file).

How to unseal a sealed a project

- Open the sealed project as described above.

- Select 'File > Save Project As/Zip Project As'.
  The 'Save/Zip project as' dialog appears.
  Select the directory, enter a new name (different from the name of the opened project) and choose the file type
  *.mwt or *.zwt from the file type list box.

- Click 'Save'.