

Manual for Framework example with C# Wrapper



EASY-ROB™ Framework Example

Thank you for your interest in the EASY-ROB™ Product Suite.

Goal of this manual

This guide explains the first steps in the example of the EASY-ROB Framework with C# Wrapper.

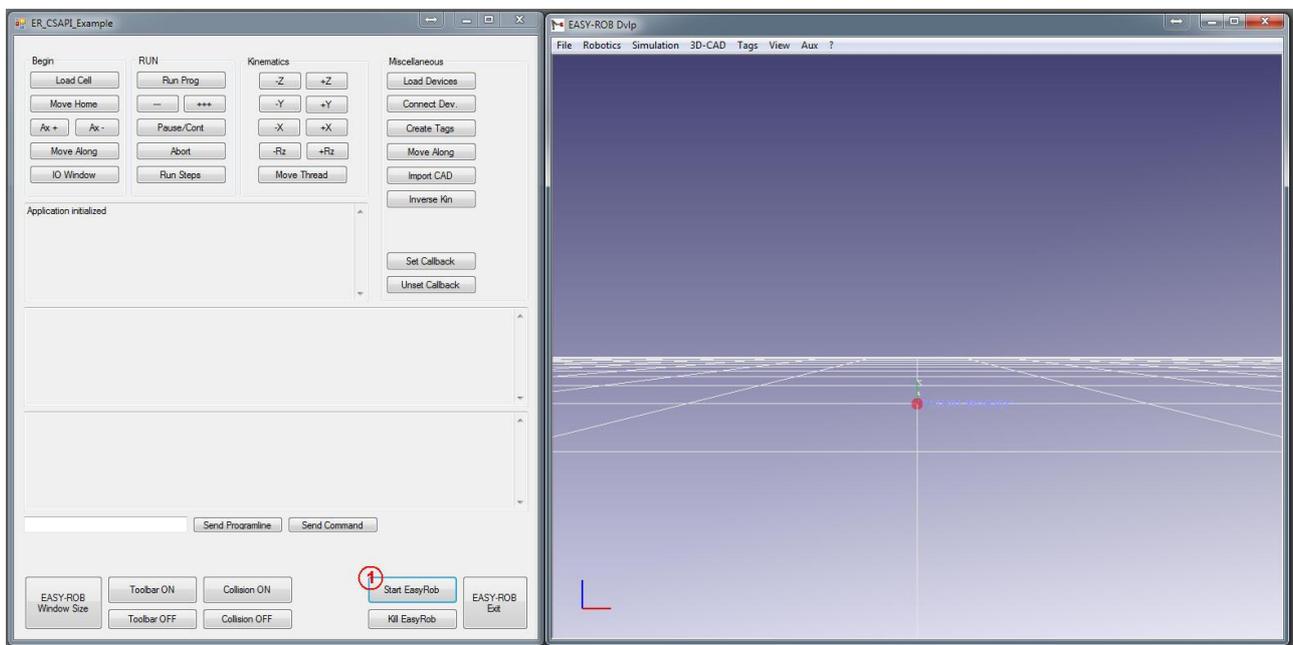
EASY-ROB™ Framework with C# Wrapper

The current version can be downloaded here:

https://easy-rob.com/fileadmin/Userfiles/dll_v83/x64/er-erosa-v8308.zip

What to do?

- Please copy the file "license.dat" to
.\\easy-rob-v83\\ER_CSAPI_Example\\ER_CSAPI_Example\\bin\\
and overwrite the old one.
- To check the license, go to the directory
.\\bin\\Releasex64
and start the C# App "ER_CSAPI_Examplex64.exe"
- Start the EASY-ROB Framework from the C# App,
1. Button "Start EasyRob". It should look like this:



Subject to change or improve without prior notice

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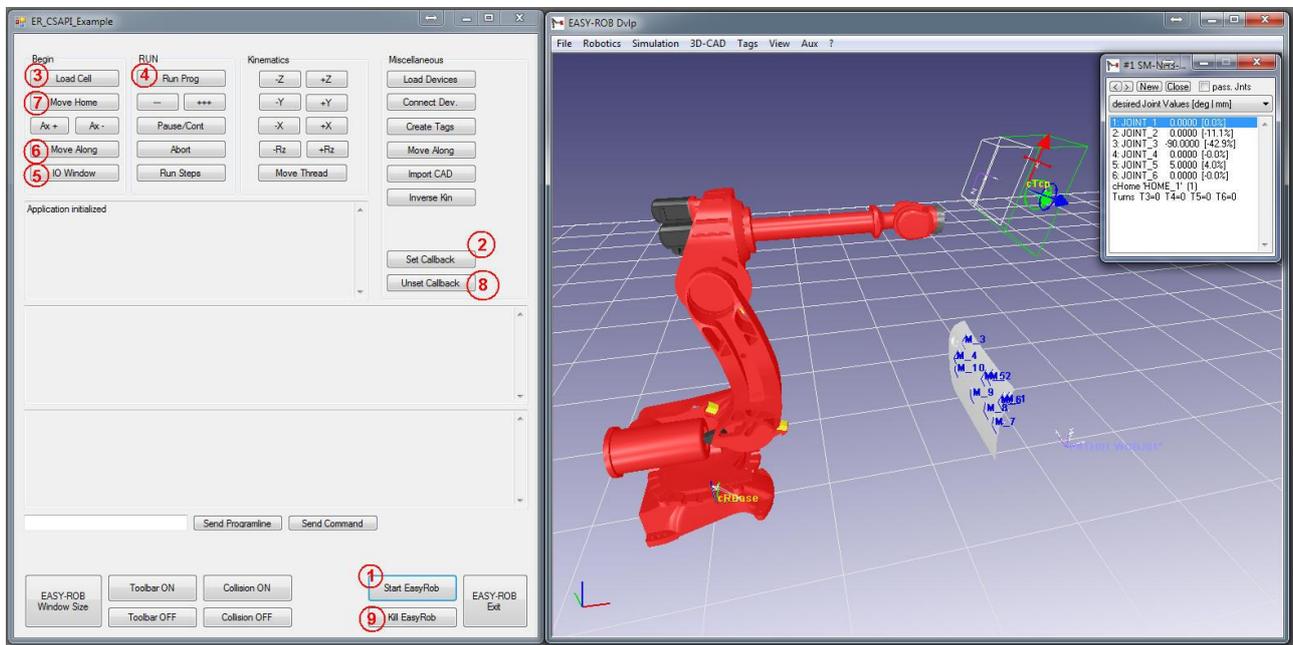
Important note:

The redistributables of VS 2017 x64 must be installed.
If the EASY-ROB Framework still does not start, please contact us, because it could also point to a faulty license.

- Follow the other steps to try some functions:
 - Set Callback in order for the C# App to receive feedback messages from EASY-ROB. Confirmation of collision, exceeding travel ranges, etc
 - Load cell file from ER_API_01.cel" aus .\proj\
 - Program execution, please see "ER_API_01_SM-NH3-165-3,0.prg"
 - „I/O Window“ open to watch the axes angles
 - „Move Along“, let the robot move along the current path (blue Tag points M_1 .. M_10, the axes values of the robot will be displayed
 - Move Home

Please check more functionality by using other buttons!
Do not worry, nothing can go wrong...

- Quit job
 - Unset Callback
 - Kill EASY-ROB Framework
- Please confirm the question "Save modified Cell file?" with NO
C# App end by using the button " Kill EasyRob ". All buttons in the overview:





The C# App controls the EASY-ROB Framework completely.

Create the C# App:

- Please open the C# project "ER_CSAPI_Example.sln" in `.\easy-rob-v83\ER_CSAPI_Example`
- Select e.g. the "ER_CSAPI_Example64" Solution and create the Release x64 Version, please set in advance the configuration to "Release", Debug is also suitable.
- Re- create the C# App "ER_CSAPI_Example64.exe", which will be copied to `.\easy-rob-v83\ER_CSAPI_Example\ER_CSAPI_Example\bin\Release64`
Here will be the CS Wrapper "ER_CSAPIx64.dll" used
- You can now familiarize yourself with the implementation of the class ER_CSAPI, please see "ER_CSAPI_Example.cs"

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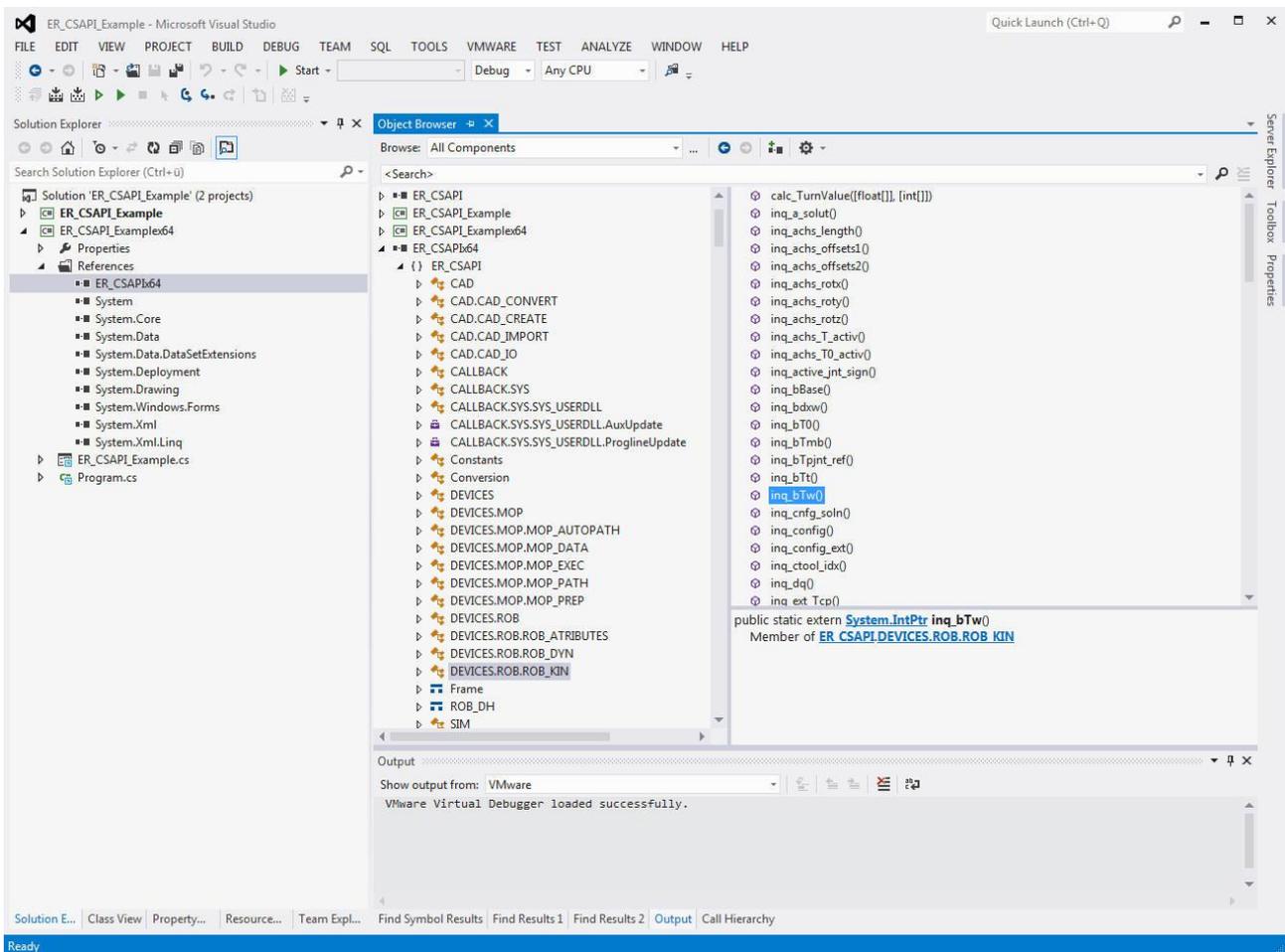
Classification of the example

This CS App is just a basic example to explain the integration of the EASY-ROB™ Framework into your own applications.

We use this example for the training, the C ++ Example is identical in functionality, the class ER_CAPI is used. Only the API methods are called here which is most frequently used, but this is of course only a small fraction.

A detailed doxygen documentation you can study here [.\easy-rob-v80\er_dvlp\](#). Here the individual methods of the class ER_CAPI are explained.

These methods are nearly identical to those from the CS class ER_CSAPI, as far as they can be transferred in the C# wrapper:





EASY-ROB™

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EASY-ROB customer area

Content: Program updates and robot libraries

Web: <https://easy-rob.com/en/downloads-2/client-area/>

Log in data:
User name: customer
Password: *****