# Modbus Configuration tool, release 1.0, Dec 2022

# Installation instructions

Launch the **Mk2MbCfg1.0.exe** and select the folder to unpack the archive contents. Any local or network disk can be used.

# User guide

The main aim of the tool is to stitch together necessary chunks of Modbus configuration lines and renumber all registers into one continuous register space. The predefined chunks (templates) shall be placed into “Library” subfolder.

In the current release, the following templates are available:

|  |  |
| --- | --- |
| **Template** | **Description** |
| full\_header.cfg | Full header with TCP-RTU settings |
| header\_simple.cfg | Shortened header with only TCP settings |
| heartbeat.cfg | Heartbeat function example |
| mpc4-channel-status.cfg | Example of MPC4mk2 status values |
| mpc4mk2-1output.cfg | One single extraction from MPC4mk2 |
| mpc4mk2-simple.cfg | Simple MPC4mk2 board config (values and statuses) |
| mpc4\_mk2\_imperial.cfg | MPC4mk2 board (values and statuses) in Imperial units |

All your custom templates can be put into Library subfolder and will be available in the tool next time it will be started.

After populating the list of the necessary chunks of configurations, you need to select the appropriate Slot, Channel and Output values for each template. Some templates may have only subset of these values, e.g. **mpc4mk2-simple.cfg** has only “Slot”, and headers have no changeable values at all. After setting correct values for all these values, click “Save” button to save the resulting Modbus configuration file. At the moment, during renumbering, all registers of all function codes will be pulled down to make the configuration to start with 00000.

# Template creation instructions

* First line of template is displayed in “description” field of the table in the tool. Use it like a comment, for user convenience but it may also be a register or formula.
* Each template may have any amount of registers and all four FC segments. However, there shall be no holes between registers in the same function codes.
* All registers in template shall be in 6xxxx range, to avoid problems during renumbering.
* All registers shall be in 5-digit format with leading zeros (e.g. 60023:3:F)  In formulas, please avoid spaces between register and function code (e.g. “CALCULATOR (MUL,60024,4,60022,4) is good and “CALCULATOR (MUL, 60024, 4, 60022, 4) is bad)
* Available macros are:
  + Channel: “<C>”,
  + Slot ”<S>”,
  + Output “<O>”

Any occurrences of them in template will be replaced by a value you fill in the table on the same line with template. Look at other template files to understand how to use them. (e.g. **mpc4mk2-1output.cfg**)

* Templates can be removed and added, but the tool shall be restarted to pick new ones and forget the deleted.
* If there is an error in template, the tool will report it and close. Correct the error and re-launch the tool.
* The file **\Library\macros.txt** shall be kept intact

In case of questions, contact: [energysupport@ch.meggitt.com](mailto:energysupport@ch.meggitt.com) or the customer service desk.