

MCTA PC Configuration Utility Quick Start

Revision 1.0.0.0, 06-20-2022

About the program

The MCTA Configuration Utility replicates the Configurator application of the MCT product line of controls utilizing the “4MA” version of software. This provides the ability to create configuration files on a PC, that can then be imported into the MCT device, or open and edit existing configuration files.

The program also provides many of the runtime setup operations as well as a ramp/soak program editor allowing the user to create/edit programs at the PC which are compatible with the loaded configuration file. The programs can be saved at the PC or exported to a USB memory device to be imported on the compatible MCT device.

Files part of the package:

MCTA Configuration Utility, MCTA Configuration Utility.exe
Executable program

MCTA PcConfig Quick Start_V1.0.pdf

Support directories:

MCTA Configurations

Folder provided in application directory (and automatically created if deleted) to provide convenient storage location for user created configurations.

MCTA Programs

Folder provided in application directory (and automatically created if deleted) to provide convenient storage location for user created ramp/soak programs.

Temp

Folder automatically created in program directory on open/create of a configuration file to hold required data and is automatically deleted on program exit. *DO NOT save to this folder or files will be lost.*

Log file:

errorLog.csv

File created in program directory only on application error and used for debugging purposes. Once file size exceeds 1MB will no longer record error events. Can be safely deleted.

Important Note: For detailed information on the configuration, runtime settings and program (ramp/soak) creation, see the main MCT4/MCTB manual. The PC configuration screens are identical in layout and operation to the actual MCT device settings which are covered in detail in the MCT4/B manuals.

Using the MCTA Configuration Utility

The program interface duplicates that of the actual Configurator on an MCT device, so whether using the PC application or modifying settings on an actual MCT device, there is a common look and feel.

The numeric and text entry keypads of the PC application also duplicate those of the MCT device Configurator. Thus, you can either left-click the desired buttons with a mouse, touch the buttons to select them (if the PC is equipped with a touch screen) or even use the PC keyboard to make the entry.

Creating/Opening a Configuration File

The “File” menu of the program provides options to create a “New” configuration file or “Open” an existing configuration file. When a new configuration file is created, it applies the FDC factory defaults for all settings. When an existing configuration file is opened, the settings from there are displayed.

Valid configuration files will have the “MCTA_” prefix and be of the type “.ccg”.

Saving a Configuration File

The “File” menu of the program provides the option to “Save” an existing file that was opened, in which it will overwrite the existing file with the current settings. It also provides the ability to save the file under another name (Save As).

When saving a file under a different name, it will allow you to choose the location for the new file and enter a new name for the file. When the “Save As” dialog is displayed, it is not necessary to apply the prefix “MCTA_” or append the proper file extension (.ccg) to the file name entered. Upon clicking the “Save” button, the program will automatically append the proper prefix and file extension to the name entered and save the file in the chosen folder.

Import/Export from MCT-Connect

If the PC has MCT-Connect installed, the “Import from” and “Export to” MCT-Connect menu items will be provided under the “File” menu. When selected, the “Open” file dialog or “Save As” file dialog will be shown and the MCT-Connect configuration files folder will automatically be selected as the file directory.

Note that in most cases, reading from the MCT-Connect directory will be permitted. However, when trying to save to the MCT-Connect directory, elevated permissions will most likely be required due to the default security levels assigned to MCT-Connect. In order to be able to save to the MCT-Connect directory, you can either run the MCTA Configuration Utility with administrator privileges (right click on application and select “Run as administrator” if menu item exists) on the PC or contact your IT administrator in order to obtain write permission based on your user login to the PC.

Export for USB

The “File” menu provides the ability to export a configuration file in the proper format for use on a USB memory device so that it can be imported into an MCT device via its USB port. In order for a created configuration file to be detected by an MCT device, the configuration file (MCTA_*.ccg), must be saved within a folder of the same name on the USB device (MCTA_*).

The current configuration file must be saved locally first, before it can be exported. When this menu item is selected, a directory search dialog will be shown. Simply select the USB device connected to the PC, and press the “OK” button. The configuration file will then be copied to the proper destination on the USB device which then can be used to import the configuration to the MCT device.

Editing Ramp/Soak Programs

The program editor is a duplicate of the actual program Entry screen on an MCT device, so whether using the PC application or editing programs on an actual MCT device, there is a common look and feel. All menu items and step entry/edit options are provided, matching that of the actual MCT device.

The advance previous/next step (arrow) buttons are located at the bottom right of the screen (instead of top right like on an MCT device). Keyboard left/right arrow keys can be utilized to quickly advance through program steps rather than repeatedly clicking the advance previous/next arrow buttons. The PC numeric keypad “+” and “-” keys can be utilized to insert and delete steps respectively.

Note that in order to utilize the program editor, a configuration file must be loaded. This provides the program editor with the information necessary (number of loops, events, etc.), to create compatible programs. Changes to the configuration can affect options available in the program editor, thus, the program editor should only be utilized when a complete, valid configuration is loaded.

The popup “File” menu of the program editor provides the ability to export a program file in the proper format for use on a USB memory device so that it can be imported into an MCT device via its USB port. In order for a created ramp/soak program file to be detected by an MCT device, the program (*.txt), must be saved within a folder of the name “Programs_MM_DD_YYYY_HH_MM_SS” on the USB device.

The current program file must be saved locally first, before it can be exported. When the “Export” menu item is selected from the popup File menu, a directory search dialog will be shown. Simply select the USB device connected to the PC, and press the “OK” button. The program file will then be copied to the proper destination on the USB device which then can be used to import the ramp/soak program to the MCT device.

MCTA PC Configurator Menu Structure

Following is the menu structure for the MCTA PC Configurator:

File Menu:

- New: Create a new configuration
- Open: Open a configuration
- Save: Save the configuration
- Save As: Save the configuration with different name
- Import from MCT-Connect: Import configuration from MCT-Connect “Config” directory
- Export to MCT-Connect: Export configuration to MCT-Connect “Config” directory
- Export for USB: Export configuration to USB memory device
- Close Configuration: Close current configuration
- Exit: Exit application

Configuration Settings Menu:

- Setup: Access setup sub menus
 - Control Setup: Access main control setup
 - Loop Configuration: Access loop configuration
 - Limit Configuration: Access limit configuration
 - Monitor Configuration: Access monitor points configuration
 - Soft Alarm Configuration: Access soft alarm configuration
 - Math/Logic Configuration: Access math/logic configuration blocks
- Option: Access options sub menus
 - Cascade Control: Access cascade control setup
 - Expansion IO: Access expansion IO configuration
 - Event Timer: Access event timer configuration
- Startup: Access startup sub menus
 - Functions: Access control functions accessibility setup
 - Startup View: Access start view setup
- Tagnames: Access tagnames sub menus
 - Alarm Name: Access alarm names setup
 - Event Names: Access event names setup
 - Custom Name/Address: Access custom splash/about setup

Runtime Settings Menu:

- Data: Access data sub menus
 - Data: Access main data log setup
 - Assign: Access data log point assignment configuration
- Chart: Access real time chart setup
- Security: Access security sub menus
 - Create: Access create new user setup
 - Users: Access view/delete users screen
 - Access: Access user rights setup
 - Options: Access security options setup
- Limits: Access loop set point limits setup
- PID Sets: Access PID set setup
 - Loop 1: Access loop 1 PID setup
 - Loop 2: Access loop 2 PID setup (if configured)
 - Loop 3: Access loop 3 PID setup (if configured)
- Email: Access email setup
 - New: Access create new email user setup
 - Addresses: Access view/delete email addresses screen
 - Settings: Access email SMTP options setup
- Navigation: Access screen navigation setup
- Language: Access current language setup
- Cloud: Access cloud setup

Ramp/Soak Program Edit Menu:

- Access ramp/soak program editor

Release History

Revision 1.0.0.0: Original Release