

**GENIUS TOOLS**<sup>®</sup> 

# Model Processor User

Version 10.0.0.0

## User Manual

© 2023 INNEO Solutions GmbH





<b>1</b>	<b>Model Processor User Overview</b>	<b>2</b>
1.1	Model Processor and Model Processor User .....	2
1.1.1	Action Differences .....	3
<b>2</b>	<b>User Interface</b>	<b>4</b>
2.1	Model Selection Area .....	4
2.1.1	Selection Area in the Model Selection .....	6
2.1.2	The Context Menu .....	7
2.2	Action List Selection Area .....	8
2.3	Log area .....	9
2.3.1	The Context Menu .....	11
2.4	Control console .....	11
<b>3</b>	<b>Configuration</b>	<b>12</b>
3.1	Integration in Creo .....	12
3.2	Configuration via mpu_main.cfg .....	13
3.3	Configuring Triggers .....	14
3.4	Configuring Model Processor Worker Extension .....	15
3.5	Configuration Options .....	17
3.6	Example Commands .....	28
3.6.1	Installation and Integration of the Actions .....	28
3.6.2	Command Overview .....	30
<b>4</b>	<b>Copyright</b>	<b>36</b>

# 1 Model Processor User Overview

Model Processor User is a synchronous Toolkit program allowing to apply MPZ files created with Model Processor instantly to Models created in Creo.

## Advantages of Model Processor User:

- A tool for Creo users
- Integrated into Creo
- Faster than Model Processor for single actions
- Simple user interface and less complex than Model Processor
- Rework of models in the change process
- Model Processor User finds and updates all models related to and depending on the current model

## Advantages of Model Processor:

- A tool for Creo administrators
- User interface for defining and testing action lists
- Massive automatic rework of models
- Quality analysis and reporting in batch processes (PDF reporting is also available in Model Processor User)

## 1.1 Model Processor and Model Processor User

Model Processor (MP) is used to create a MPZ file, which is read with Model Processor User (MPU) from the MPZ directory, specified in the configuration ( see also [Configuration via mpu\\_main.cfg](#)<sup>[13]</sup>). Model Processor User needs a temporary directory, which is set in the configuration.

Upon startup, Model Processor User does not check the version of the MPZ files. The version and compatibility of the actions is checked on execution. If compatibility is not granted, the MPU version compatible with the MP version have to be installed.

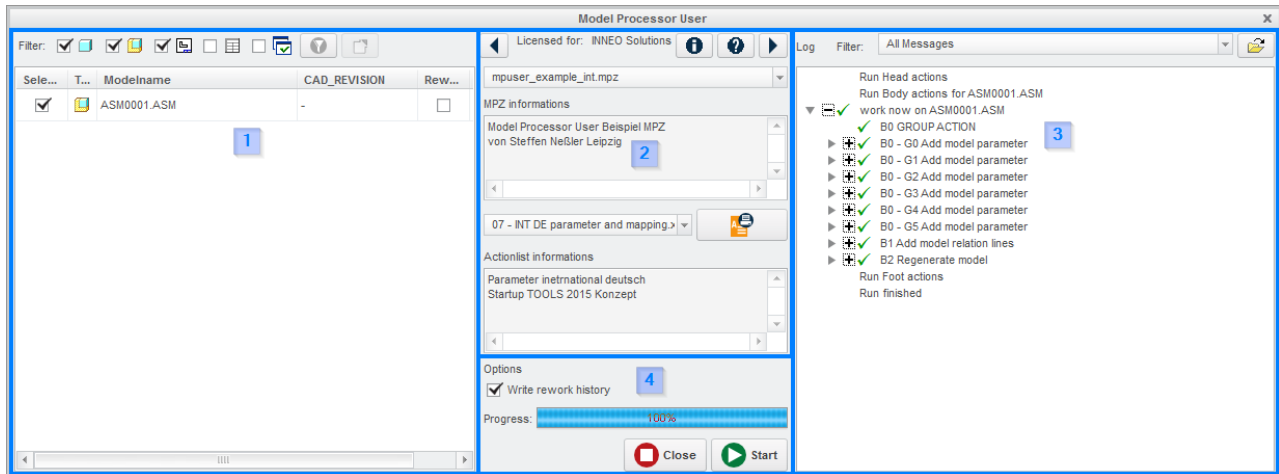
## 1.1.1 Action Differences

You can use variables in actions. If the variable `@project_dir@` is used as output path, the output is written into the sub directory *open\_mpz* in the temporary directory. This output will be deleted upon re-opening of the MPU. This happens also upon changes in the MPZ file in MPU

Please, do not use the output path `@project_dir@` for actions that create files!

## 2 User Interface

Model Processor User is a toolkit application and uses the interface of the current Creo version.



The user interface is divided into four areas:

1. [Model selection area](#)<sup>[4]</sup>
2. [Action list selection area](#)<sup>[8]</sup>
3. [Log area](#)<sup>[9]</sup>
4. [Control console](#)<sup>[11]</sup>

The areas *action list selection* and *model selection* influence each other via the extended filters. For detailed information see [Model selection area](#)<sup>[4]</sup>.

Additional functions in the action list selection area:

- ◀ Show/hide the model selection area
- ❗ Open the dialog for related extended license information
- ▶ Show/hide the log area
- ❓ Open the help

### 2.1 Model Selection Area

The model selection area is divided into two elements:

Selection	Type	Modelname	CAD...	Reworked	PDM
<input checked="" type="checkbox"/>		CRI_ANSCHLUSSVERSCHRAUBUNG...	C	<input type="checkbox"/>	2
<input checked="" type="checkbox"/>		CRI_DAMPFMASCHINE_2000BG.ASM	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DAMPFMASCHINE_2000_SKEL....	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DECKEL_SCHIEB_2000.PRT	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DECKEL_SCHIEB_U_2000.PRT	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DECKEL_ZYL_2000.PRT	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DECKEL_ZYL_U_2000.PRT	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DIN433_TEIL_1.PRT	B	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DIN912.PRT	B	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_EN24032.PRT	B	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_EXZENTERRING_2000.PRT	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_EXZENTER_2000.PRT	C	<input type="checkbox"/>	

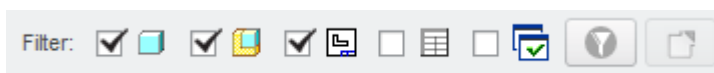
1. The filter elements and
2. the model selection area.

The filter elements determine (via the checkbox) which models type will be displayed in the model selection area. Only displayed models can be selected and reworked.

---

**Warning:** If you change the filters, the selection of the models to be processed is reset!

---





*Filter control elements*

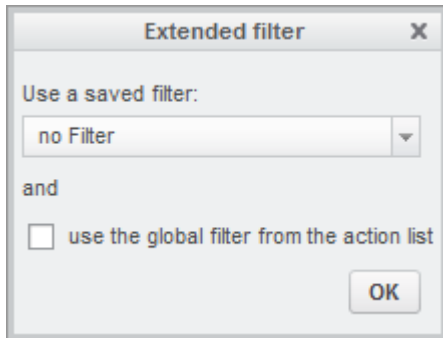
Each selected symbol indicates a certain group of models and determines whether such models will be displayed. Model selections may overlap.

- All parts will be displayed
- All assemblies will be displayed
- All drawings will be displayed
- All instances will be displayed
- Models will only be displayed, if they correspond to the currently active model. Models will only be shown if they are current AND match the other filters.

## Extended Filters

The symbol for opening the extended filter dialog has two states:

-  No extended filter is active (The button in this state is also clickable)
-  An extended filter is active



In the filter window, you can set two filters:







1. saved filter compilation (this compilation is saved after the creation of the extended filters in Model Processor)
2. global filter of an action list.

If you use the global filter, please note that it is selected automatically if it is selected in the action list. This behavior can be changed in the [configuration file](#) `mpu_main.cfg`.

## Checkout

If the checkout button is active (colored) a connected Windchill PDM system was found. You can select Files in the model selection area and check them out by clicking on the checkout button into the current workspace.

You can see the current status of a file in the column PDM:

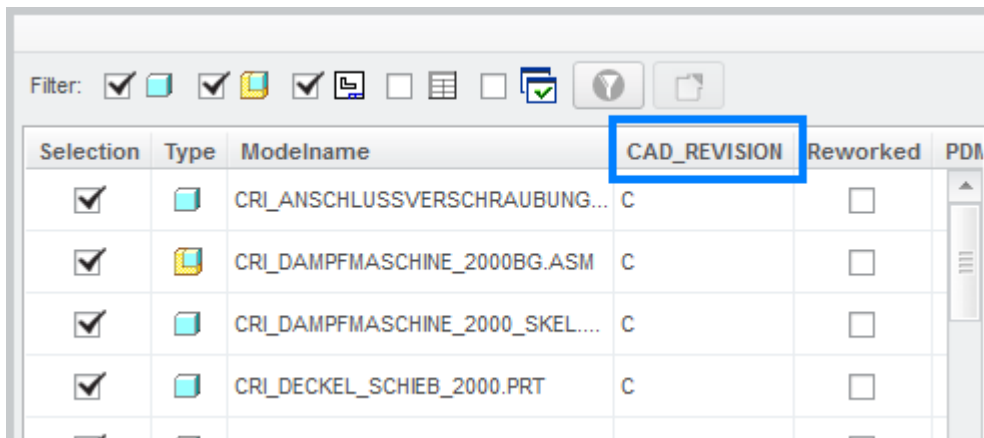
-  The file is from the local hard drive and not in the PDM system
-  The file is checked out and has been changed
-  The file is checked out
-  An error occurred during the checkout
-  The file is not checked out
-  Currently no PDM system can be found or no status can be determined

### 2.1.1 Selection Area in the Model Selection

In the model selection area, all available models are displayed.



You can add an additional column. In this column, you can display any parameter value. The displayed parameter can be set in the [configuration](#)<sup>17)</sup> via the setting `mpu_column_parameter`.



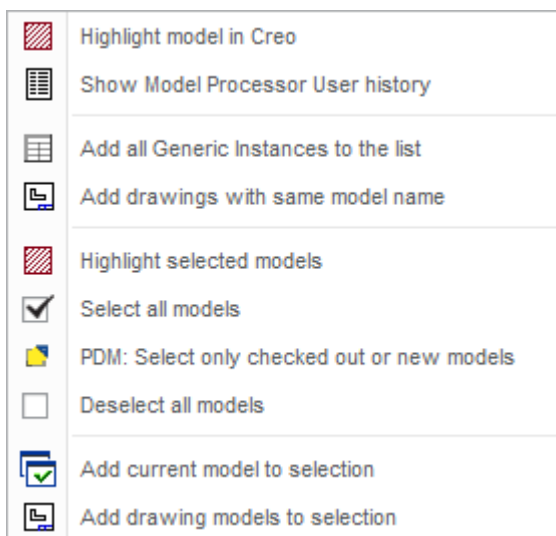
The screenshot shows a table with the following columns: Selection, Type, Modelname, CAD\_REVISION, Reworked, and PDM. The CAD\_REVISION column is highlighted with a blue box. The table contains four rows of data, each with a checked selection box, a type icon, a model name, a revision value 'C', an unchecked reworked box, and a PDM icon.

Selection	Type	Modelname	CAD_REVISION	Reworked	PDM
<input checked="" type="checkbox"/>		CRI_ANSCHLUSSVERSCHRAUBUNG...	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DAMPFMASCHINE_2000BG.ASM	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DAMPFMASCHINE_2000_SKEL....	C	<input type="checkbox"/>	
<input checked="" type="checkbox"/>		CRI_DECKEL_SCHIEB_2000.PRT	C	<input type="checkbox"/>	

*The parameter CAD\_REVISION has been added.*

## 2.1.2 The Context Menu

The model selection area contains a context menu. By clicking with the right mouse button on any column in the model selection you can open it.

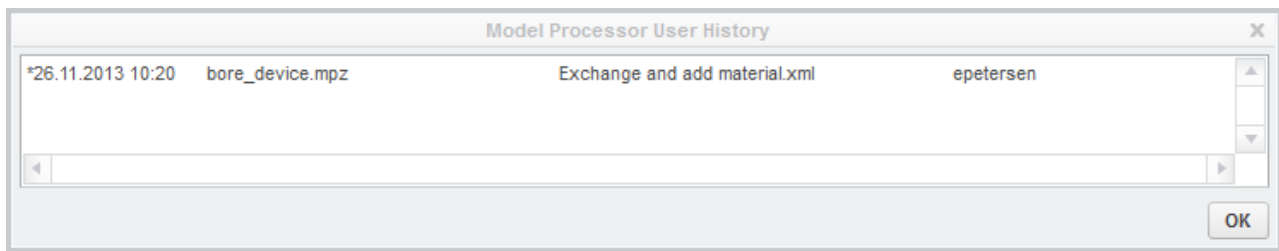


The screenshot shows a context menu with the following options:

	Highlight model in Creo
	Show Model Processor User history
	Add all Generic Instances to the list
	Add drawings with same model name
	Highlight selected models
<input checked="" type="checkbox"/>	Select all models
	PDM: Select only checked out or new models
<input type="checkbox"/>	Deselect all models
	Add current model to selection
	Add drawing models to selection

**Highlight model in Creo:** You can use this option if the current model is an assembly. If you select this menu entry, all assemblies of the selected part are highlighted colored.

**Show Model Processor User History:** This opens a new dialog, showing all revisions done by Model Processor User (if *Write rework history on file* was set.)



The output contains the following entries:

- the asterisk indicates whether the action list is identical to the currently selected list
- date and time of the rework
- used MPZ file
- used action list
- user name of the reworker

**Add all generic instances to the list:** All available generic instances (not assembled generic instances also) are added to the list and the selection.

**Add drawings with same model name:** All available drawings with the same model name are added to the list and the selection.

**Highlight selected models:** All currently selected models are highlighted colored in the Creo window.

**Select all models:** All models currently displayed in the list are added to the selection (the checkbox in the column selection is set). The property that a model was already reworked is excluded.

**PDM: Select only checked out or new models:** If you use a PDM system, you can use this option to add new or checked out models to the selection.

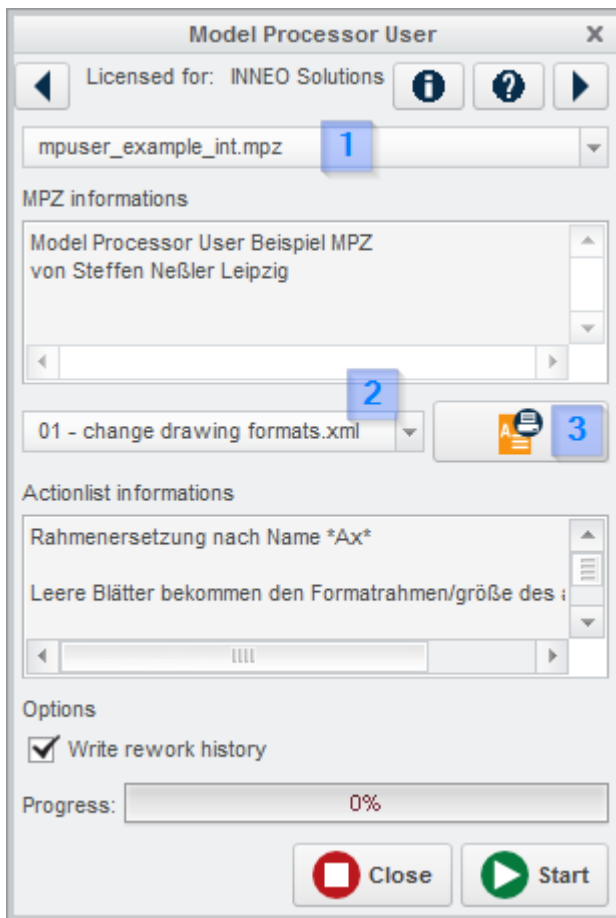
**Deselect all models:** All currently in the list displayed models, added to the selection are removed from the selection (the checkbox in the column "Selection" is removed).

**Add current model to selection:** The current model is added to the selection.

**Add drawing models to selection:** All models displayed in a drawing are added to the selection.

## 2.2 Action List Selection Area

The action list selection area is organized as follows:



(1) You can select a MPZ file from the MPZ directory in the drop down list. (The directory can be defined in the [configuration](#) <sup>17</sup>.)

**Tip:** The standard selection on MPU startup is the MPZ file with the lowest alphanumerical value.

(2) After the file selection you can select the action lists in the second drop-down list.

Now you can select an action list. The selected action list is not verified or tested for functionality. This happens after a click on the *Start* button in the control area.

The selected action list always influences the model selection. So changed selections in the model selection are reset.

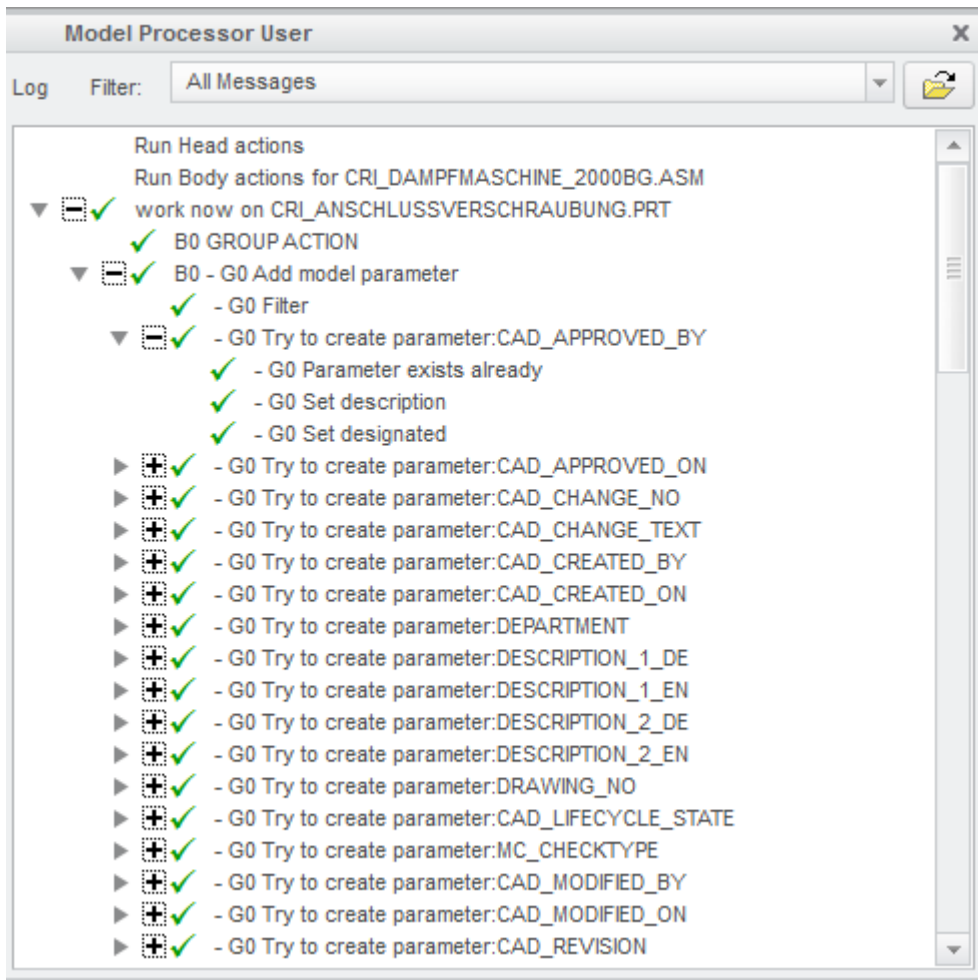
**Please note:** Please select the action list first and then the models to be reworked.

(3) The print button displays the the selected action list in the integrated browser window in Creo.

## 2.3 Log area

The log area displays informational output from Model Processor User like messages and warnings.

The output is displayed in a tree view as standard. You can change it to list view with a setting change in the file *mpu\_main.cfg*.



You can filter the displayed information in the log. The following four filters are available:

- All messages (displays no detailed debug information)
- Warnings and Failures
- Errors
- Debug (displays all messages and debug messages)

All message categories pass their message type on to the parent node. Warnings overwrite normal messages and errors as well as all other messages.

Error -> Warning -> Message

The warning inheritance can be deactivated in the [configuration](#) <sup>17</sup>.

The following icons are used for the messages:



Error



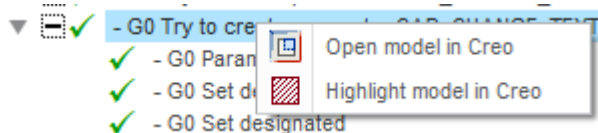
Warning

✓ Message

## 2.3.1 The Context Menu

The log area has a context menu. You can open it via a right click on an entry.

**Please note:** The log context menu is only available in tree view.



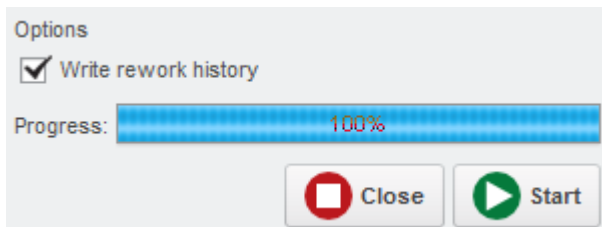
**Open model in Creo:** Opens the indicated model in Creo.

**Warning:** This action changes the model base.

**Highlight model in Creo:** This option is usable, only if the current model is an assembly. If you select this menu item, all uses of the model are highlighted colored.

## 2.4 Control console

The control console displays the current progress of the rework.



*Control console after a successful run*



*Start* starts reworking the selected models with the active action list.



*Close* does *not* stop the rework. It only closes the window.

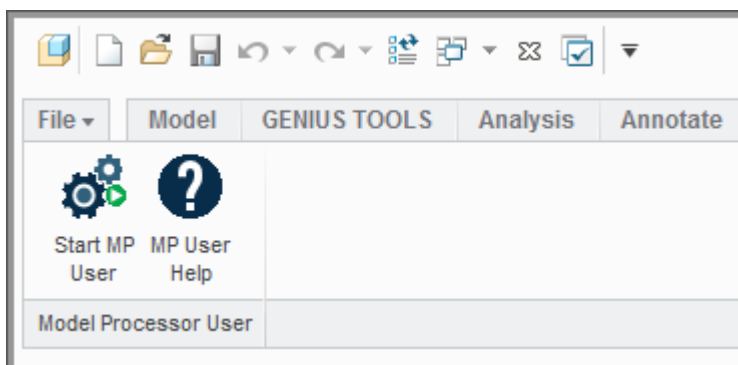
**Please note:** A running rework cannot be stopped.

## 3 Configuration

Model Processor User is controlled via a configuration file (CFG file). The configuration settings in this file influence the UI and the functionality of Model Processor User.

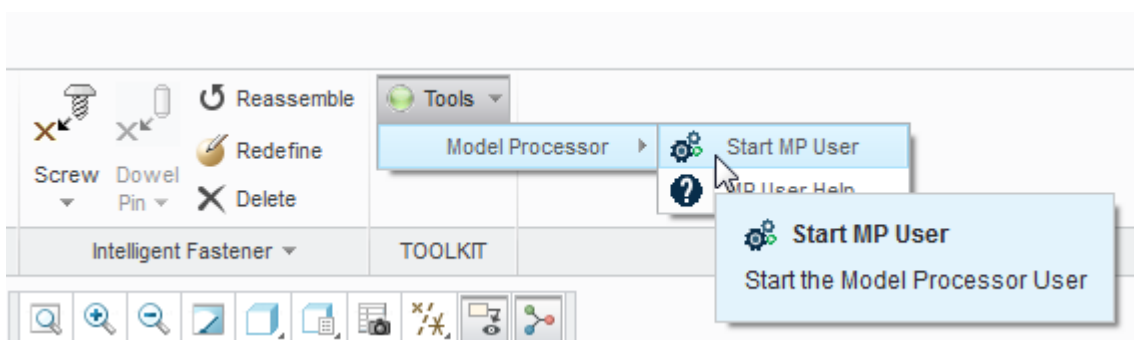
### 3.1 Integration in Creo

Upon start Model Processor User is completely integrated into Creo and automatically places a tab in the ribbon menu by default.



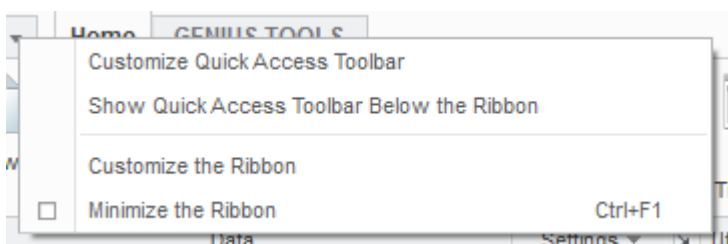
If you do not need the ribbon menu, you can delete, move or rename the file *toolkitribbonui.rbn* in the *text* directory of Model Processor User. Then you can place the command icons in the Creo UI freely.

**Tip:** Deleted files in the *text* directory are restored after an update.

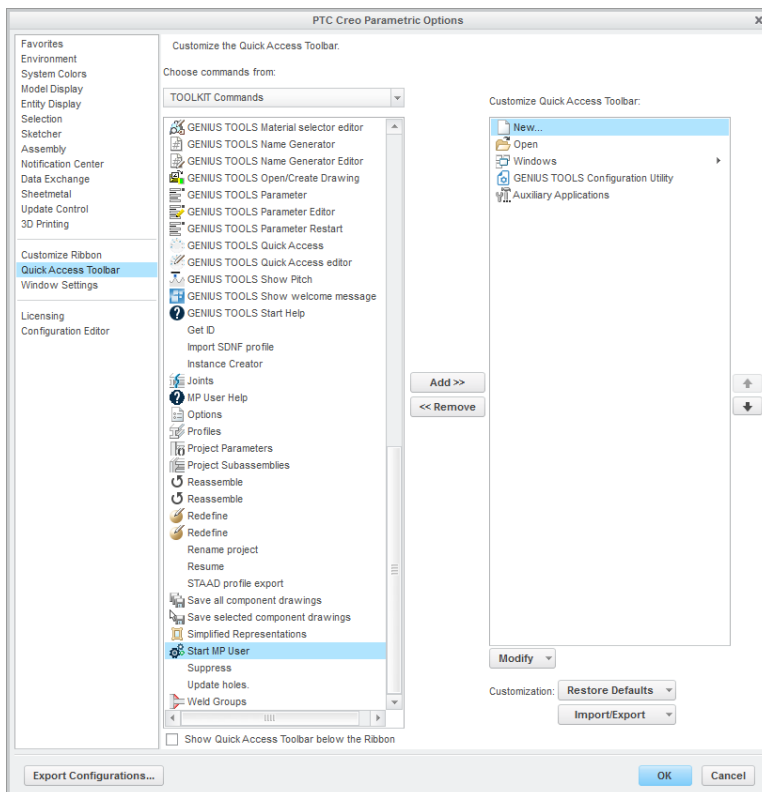


To add start commands in menus, you have to edit the toolbar.

Right-click the toolbar to display the following menu:



After a click on *Customize the Ribbon* the following window opens:



Now you can add the commands under *TOOLKIT commands* to the respective ribbon via drag-and-drop.

---

**Please note:** You have to repeat this step for every mode (PRT, ASM, DRW).

---

## 3.2 Configuration via `mpu_main.cfg`

The file `mpu_main.cfg` can be found in the `conf` directory of your MPU installation. All available configuration options are described in English and German in this file.

---

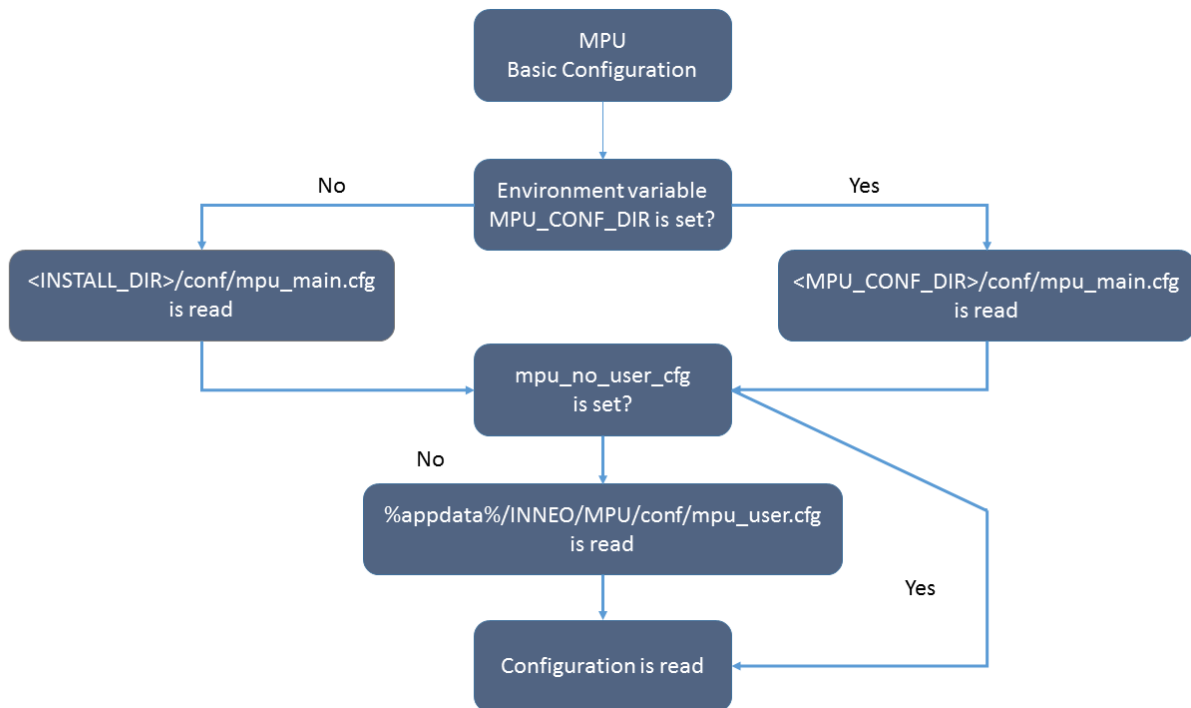
**Please note:** Please do not use unnecessary spaces and make sure that an empty line is at the end of the file.

---

The file requires the encoding UTF-8. After an update of MPU you can find all new configuration options in the file `mpu_main_default.cfg`. The `mpu_main.cfg` is not touched by the update process.

You can also use another directory to store your `mpu_main.cfg`. You have to specify this folder with the environment variable `MPU_CONF_DIR`.

Additionally, you can create a `mpu_user.cfg` in the users folder (`%appdata%\INNEO\MPU\conf\mpu_user.cfg`). There you can add user specific configuration options. The same rules as in the `mpu_main.cfg` file have to be respected.



### 3.3 Configuring Triggers

You can configure triggers for Model Processor User, to rework files on certain events. Every trigger only supports one action list.

Duplicating the configuration option does *not* lead to executing more than one action list.

The following triggers are supported:

- before\_save: before a model is saved
- after\_open: while a model is opened

– **WARNING:** The Creo config option `retrieve_instance_dependencies` need to be `instance_req_generic *` for the use of the `after_open` trigger.

#### Trigger configuration

The required triggers have to be configured in the file *mpu\_main.cfg* as follows.

```
mpu_start_mpz_<trigger name>=MpzFile ActionList
```

**MpzFile:** name of the MPZ file without file extension

**ActionList:** name of the action list to be performed

The following configuration options are mandatory and have to be configured:

**mpu\_start\_mpz\_<trigger name>\_write\_check\_rework\_history:** analysis of the history (0 or 1) and writing the history (0 or 1)



**mpu\_start\_mpz\_<trigger name>\_conf:** defines the filter selection for the rework (PRT, ASM, DRW, instances, current model), 0 or 1 for each in order

**mpu\_start\_mpz\_<trigger name>\_conf\_showUI:** display UI after the rework process (0 or 1)

#### Example:

```
mpu_start_mpz_before_save=autompz second_action_list
mpu_start_mpz_before_save_write_check_rework_history=01
mpu_start_mpz_before_save_conf=11101
mpu_start_mpz_before_save_showUI=0
```

## 3.4 Configuring Model Processor Worker Extension

Model Processor User can be used to rework files automatically at the occurrence of defined events. To use this trigger functionality inside of PTC Creo View Adapter, a free Model Processor Worker Extension license is needed. We recommend to install the license server on the same machine as the PTC Creo View Adapter. If multiple machines are used it would be recommended to use one license per machine that is defined to create Creo Viewables inside of the queue definitions on the WT Server.

### 1. Installation

The installation of Model Processor User have to be into a defined folder on the same machine as the PTC Creo View Adapter installation. The directory must have the rights to be read by the user (under which the PTC Creo View Adapter is running). Please consider the advices to the installation (separate) and configuration from the chapters ([Configuration via mpu\\_main.cfg](#)<sup>[13]</sup> and [Configuring Triggers](#)<sup>[14]</sup>).

### 2. Configure mpu\_main.cfg

Additional to the normal configuration the after\_open trigger need to be configured. This could be like:

```
mpu_start_mpz_after_open=trigger run_trigger
mpu_start_mpz_after_open_write_check_rework_history=00
mpu_start_mpz_after_open_conf=11101
mpu_start_mpz_after_open_showUI=0
```

The following options should be set in addition:

```
mpu_no_pro_notifications=1  
mpu_show_no_pdm_server_informations=1  
mpu_cancel_if_not_checked_out=0  
mpu_pdm_mdll_change_dialog=0
```

Please also check:

```
mpu_auto_unset_already_reworked_models=0  
mpu_temp_path= <PATH_TO_TEMP>
```

The temp path should be set to a through normal users read and writeable path. So the log files can be checked later easily. Also the process User need read and write rights to these folder. The deletion of log files could be deactivated for testing purpose.

More informations to the configuration options could be find in the chapter [Configuration Options](#)<sup>[17]</sup> or inside the mpu\_main.cfg.

### 3. Configure the PTC Creo View Adapter

Model Processor User have to be inserted inside the config.pro of Creo View Adapters (std. proe\_setup) for Creo visualizations.

```
! MPUser
```

```
protkdat      <INSTALL_PATH>\mpuser\creotk_creo7.dat
```

### 4. MPZ design

At the design of the mpz the variable @workdir:<PATH\_TO\_DIR>@ has to be used for export files. The path to the PTC Creo View Adapter transfer directory or pubtemp directory can be used. The path is defined by the PTC Creo View Adapter configuration. More information about the usage of variables can be found inside the Model Processor documentation.

## 5. Configuration of PTC Windchill

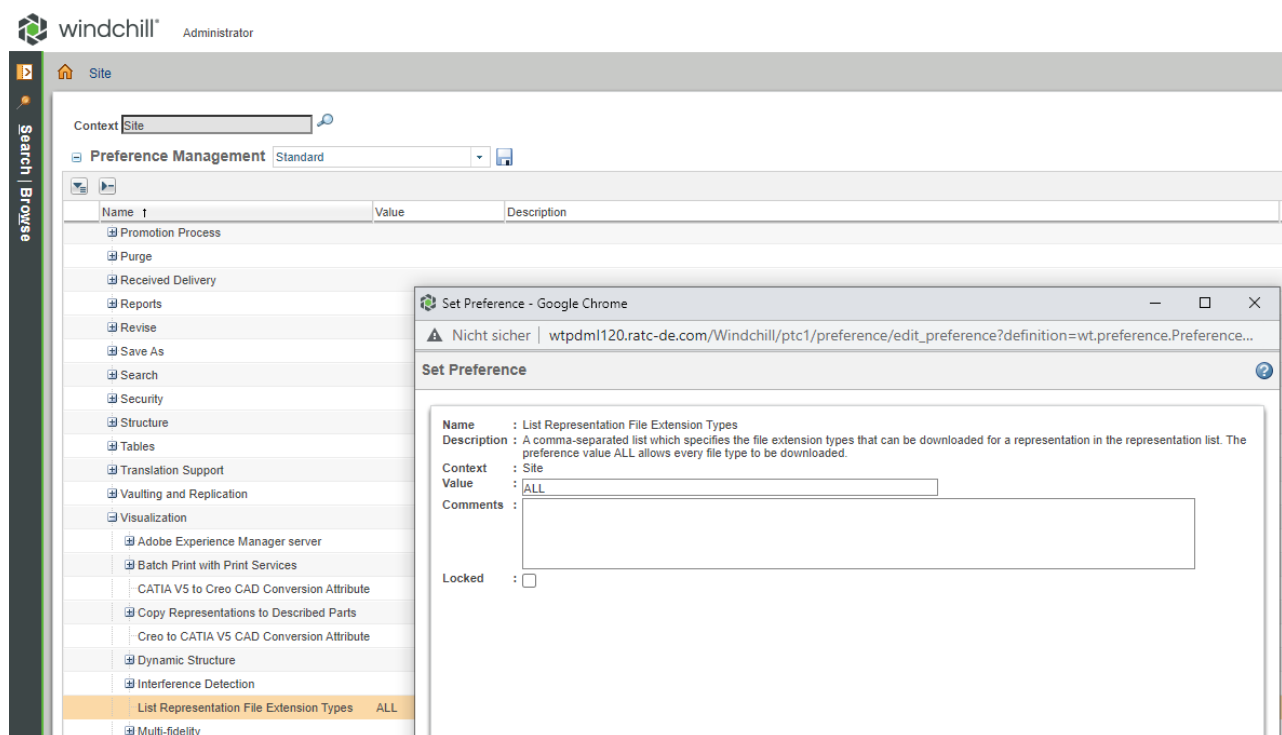
The file extension which should be transferred to Windchill has to be propagated by the wvs.properties file.

e.g.

cadagent.pvfiletypes=OL ED PVS PVP PVM PLT DXF HPGL PGL TXT AST CCZ CC GIF JPG PDF PVT GRP EMK ETB PVA CGM TGA DWF EXTENTS DWG PVO EDA PVC PNG PVD PVOA STP IGS TIFF GLB

Also the display inside of Windchill need to be activated.

SITE -> Preference management -> Visualization -> List representation file extension types:



## 3.5 Configuration Options

In the configuration file *mpu\_main.cfg* the different settings are managed.

**Tip:** You can use percent signs (before and after a variable) to use environment variables.

## General Configuration Options

### **mpu\_mpz\_path**

<b>Module</b>	Model Processor User
<b>File Name</b>	mpu_main.cfg
<b>Standard</b>	C:\temp\MPZs\
<b>Options</b>	Folder path Defines the path to a folder, containing the MPZ files (read-only access is required)

### **mpu\_lic\_path**

<b>Module</b>	Model Processor User
<b>File Name</b>	mpu_main.cfg
<b>Standard</b>	7766@localhost
<b>Options</b>	Port@ServerName Defines the path to the license server.

### **mpu\_bin\_path**

<b>Module</b>	Model Processor User
<b>File Name</b>	mpu_main.cfg
<b>Standard</b>	<BIN directory of the installation>
<b>Options</b>	Folder path Defines the path to the BIN directory and is automatically set during the installation. The MPZ files can reference this directory.

### **mpu\_temp\_path**

<b>Module</b>	Model Processor User
<b>File Name</b>	mpu_main.cfg
<b>Standard</b>	%TEMP%
<b>Options</b>	Path to a directory Defines a (flat) path to the temporary folder. This folder is also used for the log files. (read and write access is required.)

**mpu\_filter\_curmod****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0 or 1

Defines, if the filter for the current model is activated at Model Processor User startup.

**mpu\_filter\_prt****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines, if the filter for the parts is activated at Model Processor User startup.

**mpu\_filter\_asm****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines, if the filter for assemblies is activated at Model Processor User startup.

**mpu\_filter\_drw****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines, if the filter for drawings is activated at Model Processor User startup.

**mpu\_filter\_inst****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0 or 1

Defines, if the filter for instances is activated at Model Processor User startup.

**mpu\_column\_parameter****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** --**Options** Parameter name

The name of a parameter. This parameter is displayed as extra column in the model selection area.

**mpu\_column\_parameter\_width****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 10**Options** Number of character widths

The width of the column for the parameter given in `mpu_column_parameter` in characters.

**mpu\_ext\_filter\_file****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** mp\_check.xml**Options** File name

An external filter. This filter will be selected automatically (Please note: You have to enter the external filter with file extension)

**mpu\_use\_global\_filter****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0 or 1

Defines, if the global filter for the action list should be set automatically or not.

**mpu\_auto\_unset\_already\_reworked\_models****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0 or 1

Deselects all with the current MPZ file and action list already reworked models, if the option "mpu\_write\_history\_in\_models" was activated.

**mpu\_write\_history\_in\_models****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0 or 1

Defines, if in reworked models an entry is created, containing the used MPZ file and action list.

**mpu\_lang****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** de**Options** de or en

Defines the language settings for the log output (not for the user interface)

**mpu\_write\_welcome\_message****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines, if the welcome message at the MPU startup is shown.

**mpu\_show\_log****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0, 1

Defines whether the log area should be displayed (1) or hidden (0).

**mpu\_show\_tree****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0, 1

Defines whether the tree area to the left should be displayed (1) or hidden (0).

**mpu\_log\_as\_tree****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines the type of the log output (1 - tree view, 0 - list)



**mpu\_show\_no\_warnings\_in\_log****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0 or 1

Defines, if warnings are displayed in the setting "Show all messages" (1 - all warnings are not displayed, 0 warnings are displayed)

**mpu\_new\_log\_file\_for\_every\_run****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines, if a new log file is created for every run of the MPU (this also affects the display) (1 - For every run a new log file is created, 0 - for every MPU start a new log file is created)

**mpu\_show\_no\_debug\_in\_log****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines if debug information is written into the log files.

**mpu\_log\_show\_filter\_warning\_on\_parent\_node****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0 or 1

Defines, if warning symbols are inherited to their parent node (1 - yes, 0 - no).

**mpu\_no\_debug\_in\_creo\_log****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0, 10

Defines if debug information is written into the Creo log files.

**mpu\_log\_level****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0-10

Defines which log information should be written. 0=All except Debug;  
1=Warnings and Errors; 2=Errors; 8=Debug information; all other values=no  
output.

**mpu\_delete\_log\_files****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0, 1

Defines which log files should be deleted at the application unload. (1 - yes, 0 -  
no)

**mpu\_no\_user\_config****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0, 1

Defines that no configuration file is loaded from the user directory (typically %  
*appdata%*\INNEO\MPU\conf) for the value 1. For the value 0, the user  
configuration is loaded.

**mpu\_pdm\_mdI\_change\_dialog****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0, 1

Defines whether the Creo checkout dialog should be displayed for objects not checked out found on Windchill status check.

**mpu\_cancel\_if\_not\_checked\_out****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0, 1

Defines whether starting the Model Processor rework process should be canceled with an error message if a Windchill object that has not been checked out is contained in the list.

**mpu\_show\_no\_pdm\_server\_informations****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0, 1

Defines that the Windchill status should not be displayed.

**mpu\_no\_pro\_notifications****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0, 1

Set this option to 1 if you are using both triggers and the Model Processor User UI and leave the UI open when switching between models. Otherwise, the triggers and the UI can interfere with each other and, for example, run into an infinite processing loop.

**mpu\_start\_trigger\_without\_mpu****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 0**Options** 0, 1

Defines that only the trigger configuration should be started without MPU licenses.

**mpu\_show\_trigger\_license\_error****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** 1**Options** 0, 1

Defines that an error message is displayed if no license is available.

**mpu\_check\_parameter****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** --**Options** Parameter name

Check parameter. If the specified parameter is not present on the model, or does not have the value specified under `mpu_check_parameter_value`, an Icon for starting Model Processor User is displayed.

**mpu\_check\_parameter\_value****Module** Model Processor User**File Name** mpu\_main.cfg**Standard** --**Options** Parameter value

Value for the check parameter given under `mpu_check_parameter`.

**Configuration Options for Trigger**

You can get further information in the section [Configuring Triggers](#) <sup>14</sup>.

**mpu\_start\_mpz\_before\_save**

**Module** Model Processor User

**File Name** mpu\_main.cfg

**Default** --

**Options** MPZ file and action list  
Trigger *Before saving a model*. Defines the MPZ file and action list.

**mpu\_start\_mpz\_after\_open**

**Module** Model Processor User

**File Name** mpu\_main.cfg

**Default** --

**Options** MPZ file and action list  
Trigger *After opening a model*. Defines the MPZ file and action list.

**<trigger name>\_conf**

**Module** Model Processor User

**File Name** mpu\_main.cfg

**Default** --

**Options** 00000 - 11111 (0 or 1 for every filter)  
Defines the filter selection for the rework (PRT, ASM, DRW, instances, current model)

**<trigger name>\_showUI**

**Module** Model Processor User

**File Name** mpu\_main.cfg

**Default** --

**Options** 0, 1  
Should the UI be shown after the rework process (0 or 1)

<trigger name>\_write\_check\_rework\_history

**Module** Model Processor User

**File Name** mpu\_main.cfg

**Default** --

**Options** 00 - 11 (0 or 1 for read/write)

Analysis of the history (0 or 1) and writing the history (0 or 1)

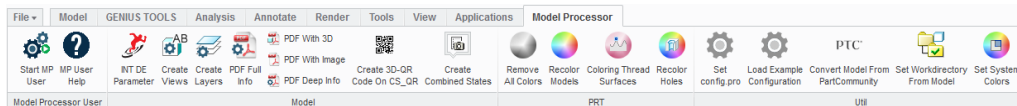
## 3.6 Example Commands

Example command extensions exist for MPU. With these extensions, frequently used MPU actions are accessible directly via the MPU ribbon in Creo.

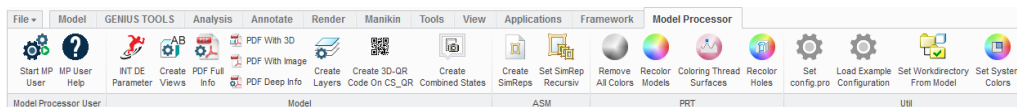
Every button in the ribbon starts an action list via a mapkey. These mapkeys can be configured individually and be used for example in Quick Access together with variables as intelligent mapkeys.

**Please note:** The command extension only contain examples to show different applications. Please customize the commands first with MP for your application scenario.

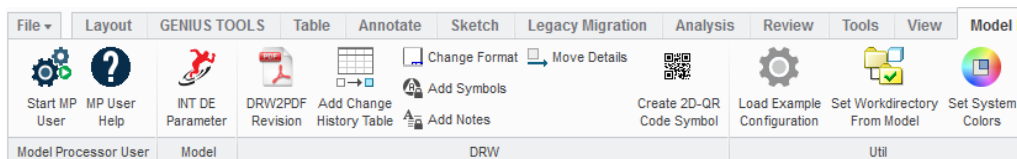
You have to install this extension separately.



*Part mode*



*Assembly mode*



*Drawing mode*

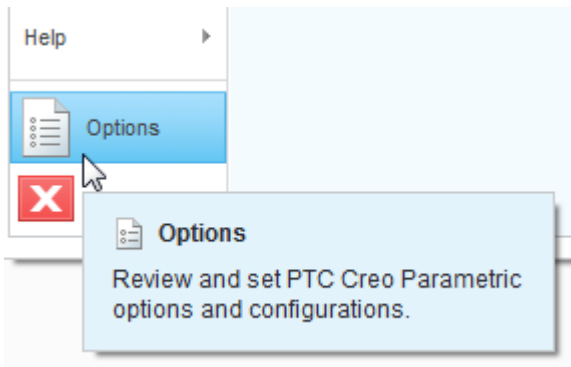
### 3.6.1 Installation and Integration of the Actions

You can find the example commands in the installation directory of Model Processor User in the subdirectory *examples*.

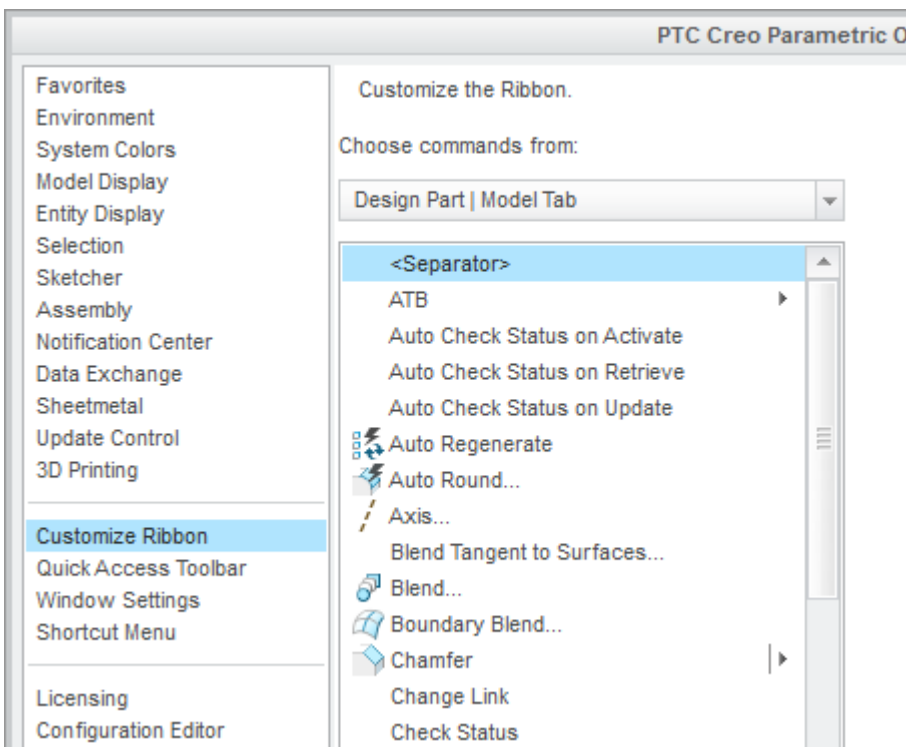
**Startup TOOLS installation:** apps\mpuser\examples

**Stand-alone installation:** C:\Program Files (x86)\GENIUS TOOLS\mpuser\examples

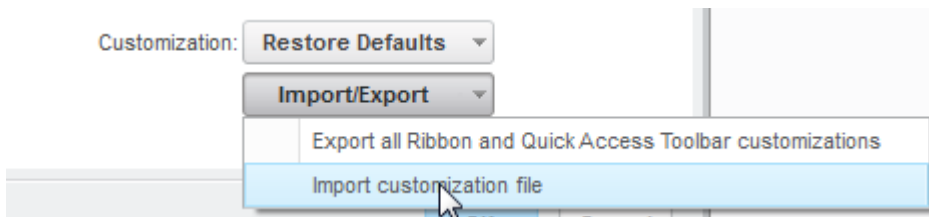
- (1) Unzip the ZIP file into a subdirectory.
- (2) Copy the MPZ file into the defined MPZ directory (default: `<InstallationDirectory>\mpzs`).
- (3) Copy the file `config_muser_example_int.pro` into your project directory (If you use Startup TOOLS: `configuration\projects\<ProjectDirectory>`) to ensure that the `config.pro` building block is read on the next Creo start.
- (4) Start Creo.
- (5) Open the Creo options dialog.



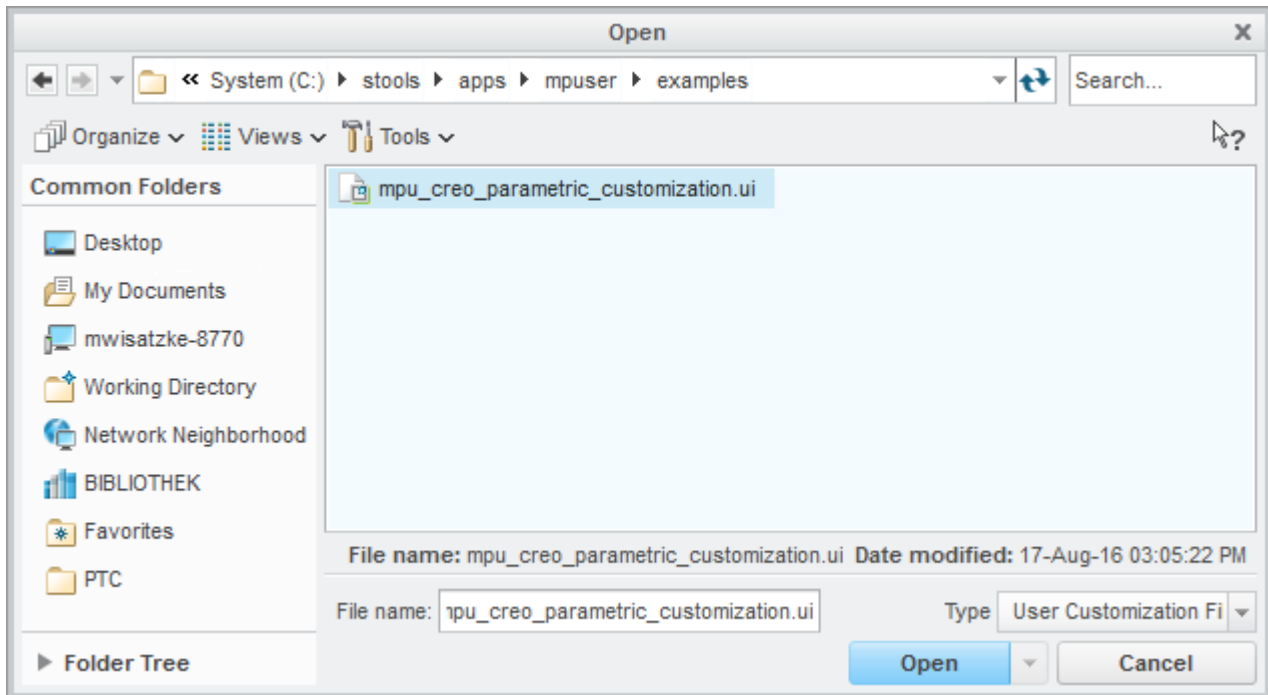
- (6) Select *Customize Ribbon*.



- (7) Click *Import/Export*, then *Import customization file*.



(8) Navigate to the directory containing the UI file, select it and click *Open*, then click *Import all*.



The Model Processor User ribbon with the example actions has now been installed successfully.

---

**Please note:** To ensure that the changes are saved successfully in Creo, please quit Creo normally and restart it.

---

If you open a part, an assembly or a drawing, you can now use the different actions for Model Processor User.

## 3.6.2 Command Overview

In the following overview, all available commands of the example command extension are listed.

---

**Warning:** The command extension only contain examples to show different applications. Please customize the commands first with MP for your application scenario.

---



## Commands for the Current Model



### INT DE Parameter

**Available in the following modes:**

PRT, ASM, DRW

This command creates all standard parameters for a model for international use (and for use with Startup TOOLS) inclusive description and designate option.



### Create Views

**Available in the following modes:**

PRT, ASM

This command creates all views for a model in German and English (3D, Front, Right, Left, Back, Top and Bottom)



### Create Layers

**Available in the following modes:**

PRT

This command deletes all existing layers and creates new layers for all elements of a model. The layers to be created are defined in a template (included in the MPZ file).



### PDF Full Info

**Available in the following modes:**

PRT, ASM

Created a predefined PDF report with many different information about the current model.



### PDF with 3D

**Available in the following modes:**

PRT, ASM

Creates a 3D view of the current model as PDF file in the temporary directory.



### PDF with image

**Available in the following modes:**

PRT, ASM

Created a PDF file for the current model with the current orientation as image.



### PDF Deep Info

**Available in the following modes:**

PRT, ASM

Creates a predefined PDF report for the current model in its directory. Also relations of features and sketches are analyzed.

**Create 3D-QR Code on CS\_QR****Available in the following modes:**

PRT, ASM

Creates a 3D QR code on a system of coordinates on the component. The coordinate system name must be CS\_QR. The 3D QR code is created using hole features.

**Create Combined States****Available in the following modes:**

PRT, ASM

Creates a predefined, combined view including layers and note features of the current model.

## Commands for Parts Mode



### Remove all colors

**Available in the following modes:**

PRT, ASM

Removes all colors from all surfaces in the current model.



### Recolor Models

**Available in the following modes:**

PRT, ASM

Colors all surfaces, holes, threads etc. of the current model with predefined colors.



### Coloring Thread Surfaces

**Available in the following modes:**

PRT, ASM

Colors all threads with predefined colors depending on thread size and type.



### Recolor Holes

**Available in the following modes:**

PRT, ASM

Colors all holes of the current model with predefined colors.

## Commands for Assembly Mode



### Create SimReps

**Available in the following modes:**

ASM

Creates recursively a simplified representation of an assembly (low details, medium details or no geometry).



### Set SimRep Recursiv

**Available in the following modes:**

ASM

Sets a simplified representation for an assembly (low details, medium details or no geometry).

## Commands for Drawing Mode



### DRW2PDF Revision

**Available in the following modes:**

DRW

Exports a drawing as PDF file into the temporary folder. Parameters are used in the file name.



### Add Change History Table Available in the following modes:

DRW

Adds a change history table to a drawing and fills it with the last changes contained in the internationalized parameters.



### Change Format

**Available in the following modes:**

DRW

Adds to parts, assemblies and drawings the internationalized parameters and changes the drawing format to ISO 7200 (A0-A4).



### Add Symbols

**Available in the following modes:**

DRW

Adds symbols to tables, contained in drawings.



### Add Notes

**Available in the following modes:**

DRW

Adds drawing notes to drawings.



### Move Details

**Available in the following modes:**

DRW

Moves drawing details.



### Create 2D QR Code Symbol

**Available in the following modes:**

DRW

Creates a QR code symbol with any content on the right side of a drawing.

## Additional Commands



### Set config.pro

**Available in the following modes:**

PRT, ASM

Changes the display settings to one of three modes.



### Load Example Configuration

**Available in the following modes:**

PRT, ASM, DRW

Loads the sample configuration. The configuration options are applied immediately and can be use without a restart.



### Convert Model from PartCommunity

**Available in the following modes:**

PRT

Converts a model of PTCs PartCommunity and changes its characteristics like units, layers, tolerances, etc. Also the internationalized parameters are added.



### Set Working directory from Model

**Available in the following modes:**

PRT, ASM, DRW

Sets the working directory to the current model's directory.



### Set system colors

**Available in the following modes:**

PRT, ASM, DRW

Enables for a quick change of the system color scheme (Standard, Black/White, Dark Background).

## 4 Copyright

**Copyright 2023 by:**

INNEO Solutions GmbH

Rindelbacher Str. 42

73479 Ellwangen

This documentation is a product of INNEO Solutions GmbH, all rights reserved.

Without prior written consent of an authorized representative of INNEO Solutions GmbH it must not be copied, photocopied, reproduced, translated, recited, or converted to electronic or machine-readable form in whole or in part. Unauthorized use of the documentation can lead to claims for liquidated damages or criminal prosecution. INNEO Solutions GmbH does not accept liability for possible faulty information in this documentation and the consequences resulting from such.

**Note on registered trademarks:**

The majority of software, hardware and brand names mentioned in this documentation are registered trademarks of the respective software manufacturer.

**Registered trademarks of INNEO Solutions GmbH:**

Startup TOOLS ENGINEERING PERFORMANCE, GENIUS TOOLS, INNEO That's IT.