GENIUS TOOLS®

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GENIUS TOOLS Model Processor User

12.0.0.0

Manual

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1 Introduction

With GENIUS TOOLS Model Processor User, CAD users execute task lists (MPX files) for data processing in Creo Parametric, e.g., to adapt catalog parts to company standards. Users have access to task lists created by the administrator with GENIUS TOOLS Model Processor Report or Model Processor Rework.

Advantages of GENIUS TOOLS Model Processor User:

– A tool for Creo users

– Integrated into Creo

– Faster than GENIUS TOOLS Model Processor for single tasks

– Simple user interface and less complex than GENIUS TOOLS Model Processor

– Rework of models in the change process

– GENIUS TOOLS Model Processor User finds and updates all models related to and depending on the current model

Advantages of GENIUS TOOLS Model Processors:

– A tool for Creo administators

– User interface for defining and testing task lists

– Massive automatic rework of models

– Quality analysis and reporting in batch processes (PDF reporting is also available in GENIUS TOOLS Model Processor User)

1.1 Model Processor and Model Processor User

The Model Processor creates an MPX file from the MPX directory specified in the configuration (see installation instructions). This file can be read by the GENIUS TOOLS Model Processor User. The GENIUS TOOLS Model Processor User requires a temporary directory for this purpose, which is defined in the configuration.

The version of the MPX file is not checked when it is opened. The compatibility of the version is only checked when the individual tasks are executed. If there is no compatibility, the MPU version compatible with the GENIUS TOOLS Model Processor must be installed.

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1.1.1 Task Differences

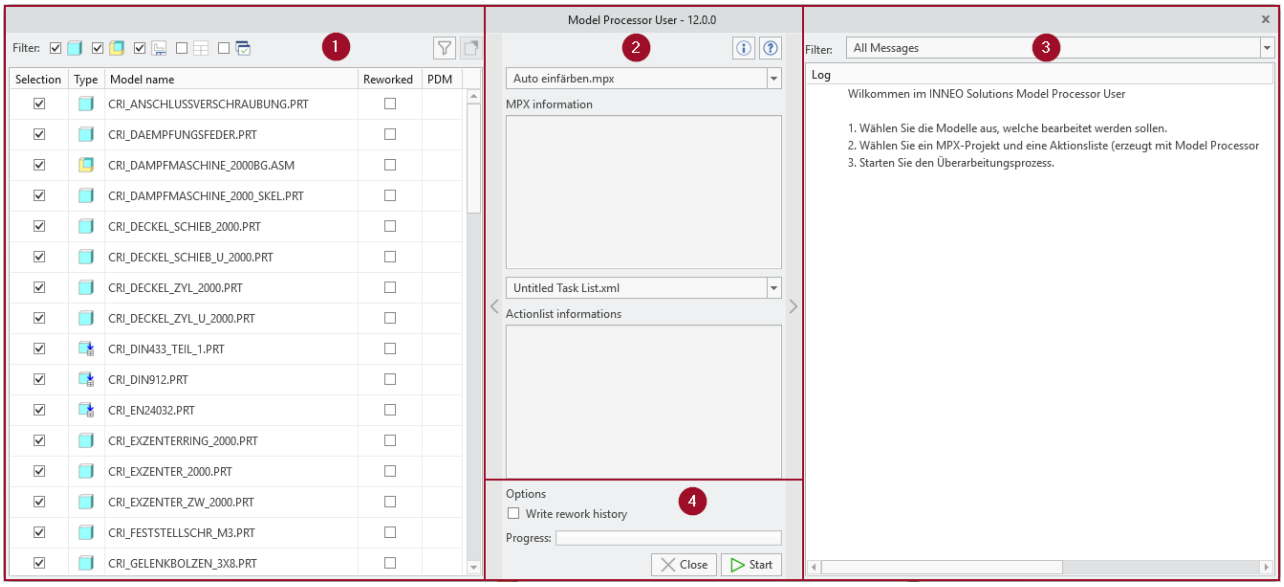
You can use variables in tasks. If the variable `@project_dir@` is used as output path, the output is written into the sub directory *open_mpz* in the temporary directory. If the GENIUS TOOLS Model Processor User is called up again, all files in the directory will be deleted. This also applies to changes made to the MPX file within the GENIUS TOOLS Model Processor User.

Please note: It is recommended that the variable @project_dir@ for outputting MPX tasks not be defined within the GENIUS TOOLS Model Processor.

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2 User Interface

GENIUS TOOLS Model Processor 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 4
2. Task list selection area 8
3. Log area 9
4. Control console 11

The areas *task list selection* and *model selection* influence each other via the extended filters. For detailed information see Model selection area 4.

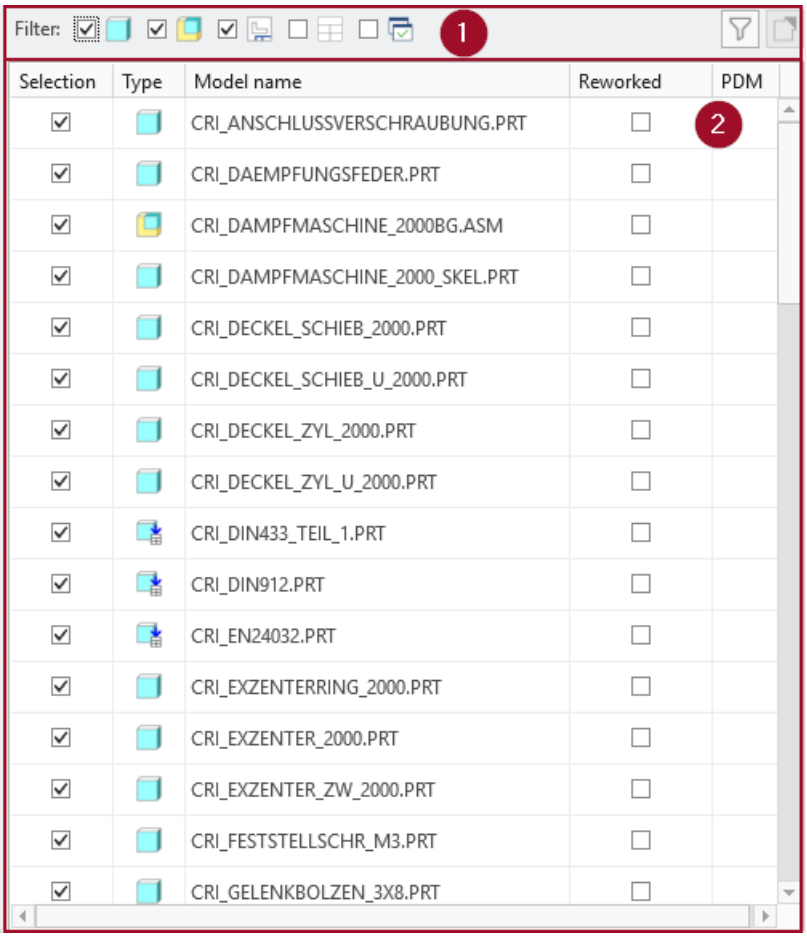
Additional functions in the task list selection area:

- 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:

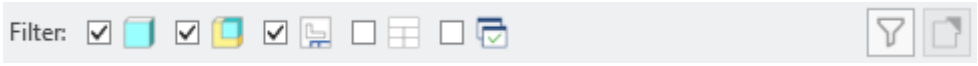
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1. The filter elements and
2. the model selection area.

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.

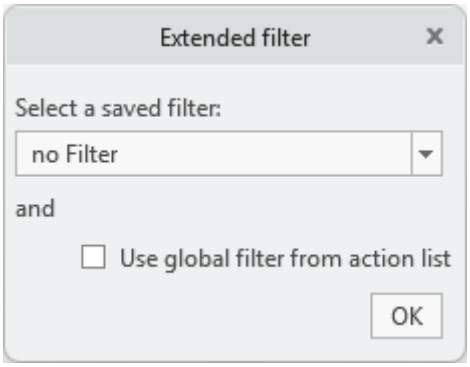
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Extended Filters

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 GENIUS TOOLS Model Proccesor)
2. global filter of an task list.

If you use the global filter, please note that it is selected automatically if it is selected in the task list. This behavior can be changed in the configuration file *configuration file* .

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

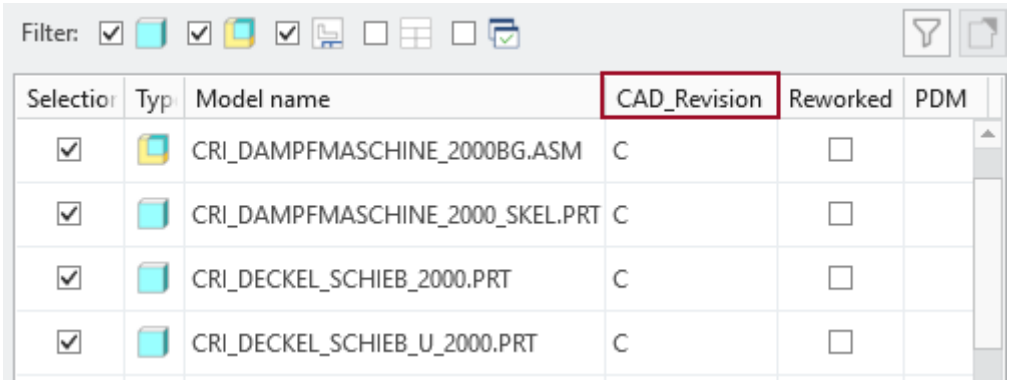
 Currently no PDM system can be found or no status can be determined

2.1.1 Selection Area in the Model Selection

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

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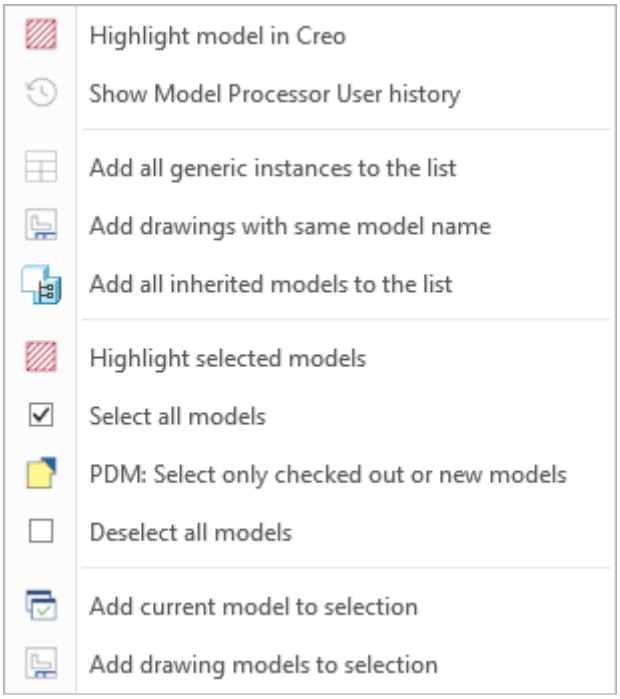
You can add an additional column. In this column, you can display any parameter value. The displayed parameter can be set in the configuration via the setting `mpu_column_parameter`.



The parameter CAD_Revision has been added.

2.1.2 The Context Menu

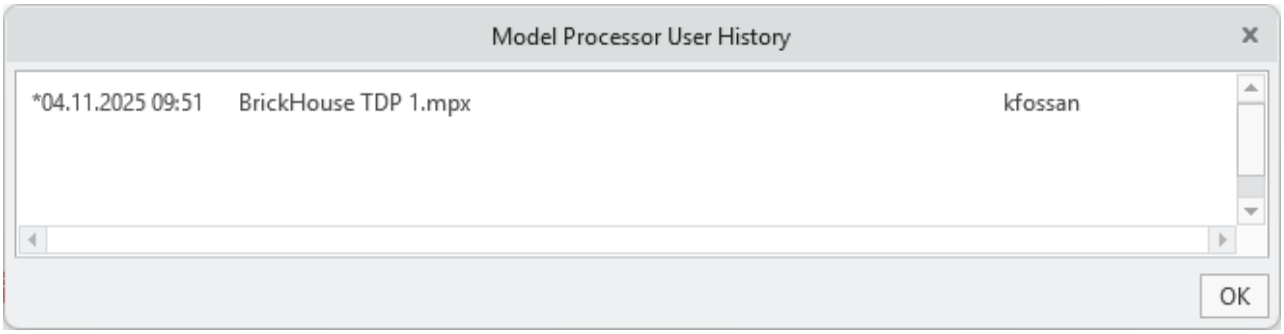
The model selection area contains a context menu. By clicking with the right mouse button on any column in the model selection you can open it.



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 GENIUS TOOLS Model Processor (if *Write rework history on file* was set.)

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The output contains the following entries:

– the asterisk indicates whether the task list is identical to the currently selected list

– date and time of the rework

– used MPX file

– used task 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).

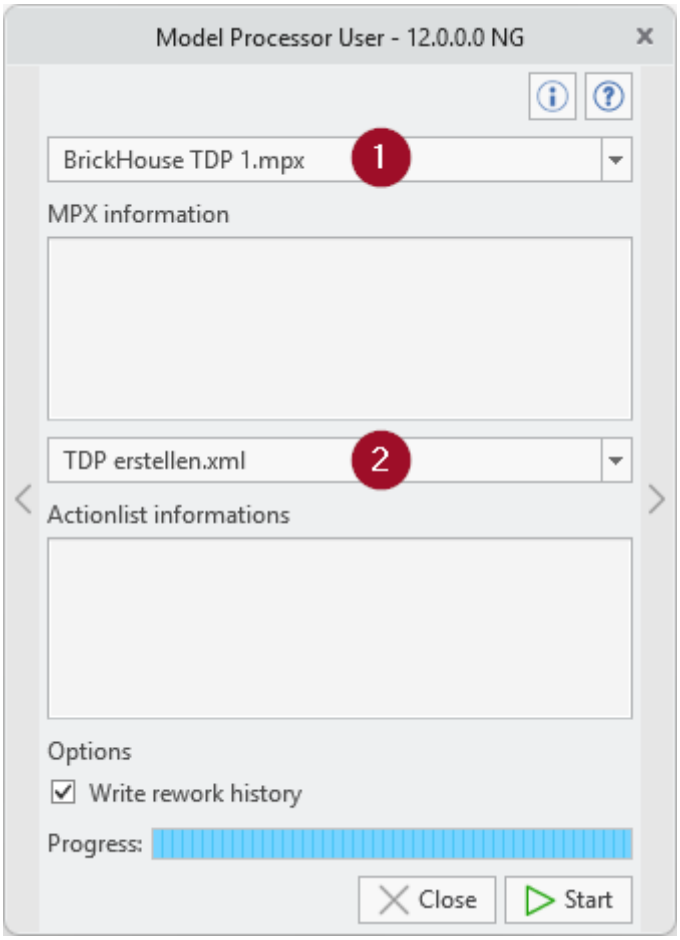
Add current model to selection: The current model is added to the selection.

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

2.2 Task List Selection Area

The task list selection area is organized as follows:

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(1) You can select a MPX file from the MPX directory in the drop down list. (The directory can be defined in the configuration.)

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

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

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

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

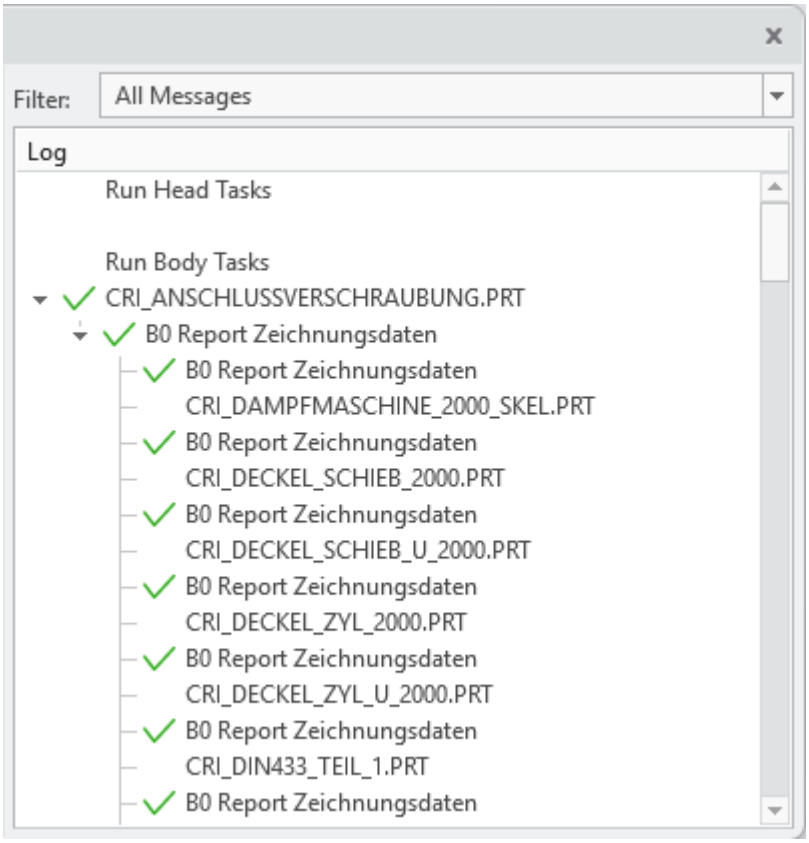
Please note: Please select the task list first and then the models to be reworked.

2.3 Log area

The log area displays informational output from GENIUS TOOLS Model Proccesor like messages and warnings.

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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.

The following icons are used for the messages:

Error

Warning

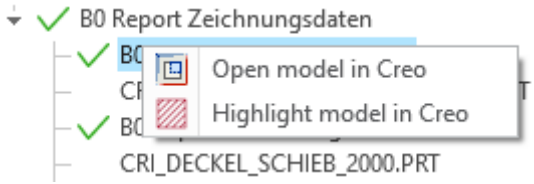
Message

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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.



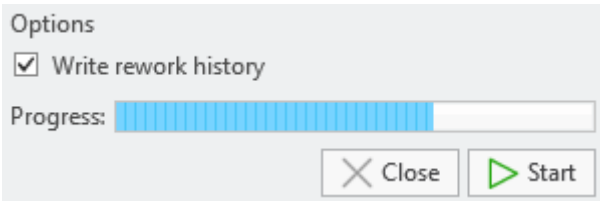
Open model in Creo: Opens the indicated model in Creo.

Warning: This task 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 task list.
✕	*Close* does *not* stop the rework. It only closes the window.

Please note: A running rework cannot be stopped.

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