

# GENIUS TOOLS for Creo

10.0.2.0

## News

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# 1 Important information

## Updating GENIUS TOOLS Parameter & Library

An update of GENIUS TOOLS Parameter & Library does not update the resource folder (*gt\_resource\_folder*). This must be updated manually. Consult the chapter *Update process* in the help document *GENIUS TOOLS Starter Installation.pdf*

## License-dependent functions

The following functions are limited to subscription licenses for either GENIUS TOOL® Library, GENIUS TOOLS® Parameter or Startup TOOLS.

**Please note:** The sum of all extension modules for Creo Parametric, which comprise these products, are called GENIUS TOOLS for Creo.

Extension module	Description	Release
Load Save Converter	Converts Creo objects from previous Creo-, Wildfire- or Pro/ENGINEER versions to the currently used version.	7.0.0.0
Inspect Revision	Stores all versions of inspection symbols on a drawing. Easily creates an overview of a revision history.	7.0.0.0
Open Base Model	Opens geometric base models that are reference sources for features with one click in the context menu of a feature.	7.0.0.0
Extend Relations	Adds functions to model relations that define parameters for models and for bodies.	7.0.0.0 - 8.0.0.0
Select Surfaces By Color	Surfaces of the same color can be selected with one click and be colored or otherwise modified thereafter.	7.0.1.0
CS Assembler	Automatically adds a number of components to an assembly by deploying a coordinate system (CS).	7.0.1.0

Extension module	Description	Release
Extended Dimension Functions	Model dimensions can be increased or decreased very quickly with the mouse in a defined increment in the graphics window.	7.0.2.0
Copy Component Parameter To Substitution Component Parameter	If a value has been assigned to a component parameter for a part in the master representation, this value can be copied to the component parameter for a simplified part.	7.0.2.0
Toggle Symbol Variants	If a grouped symbol has variants in the first level, you can switch between these variants more quickly.	7.0.2.0
Multibody to Assembly	Converts multiple bodies into assemblies (Creo Advanced Assembly Extension (AAX) is required.)	8.0.0.0
Work Dir Manager	Automatically collects all directories used during the work process and enables the current working directory to be changed quickly.	8.0.0.0
Full Backup	Quickly backs up the current model with all dependent data.	8.0.0.0
Command Control	With Command Control, Creo Parametric ribbon commands / commands can be hidden or deactivated.	8.0.1.0
Feature Regeneration Profiler	Regenerates models and displays regeneration times for each feature.	10.0.1.0

## GENIUS TOOLS for Creo: End of support for Creo versions 7.0.0.0 and 7.0.1.0 (Version 10.0.1.0)

PTC Creo versions 7.0.0.0 and 7.0.1.0 are no longer supported.

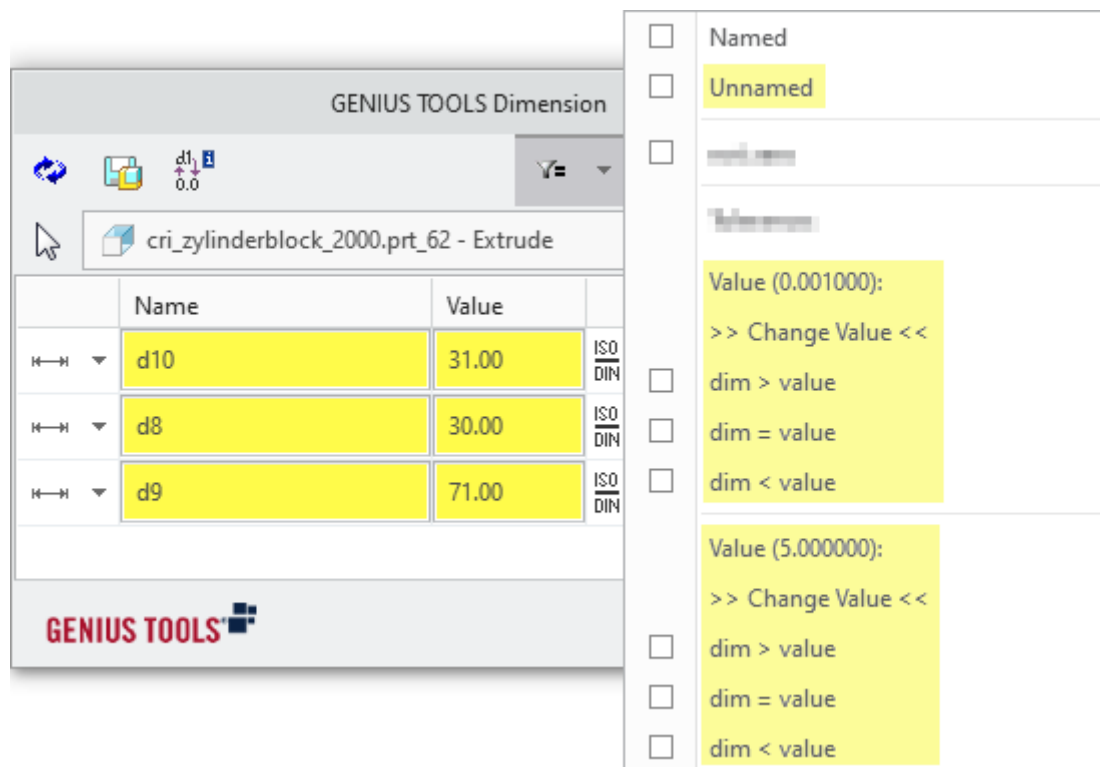
## 2 What's new in release 10

The GENIUS TOOLS add-on applications for Creo - included in the GENIUS TOOLS Library and GENIUS TOOLS Parameter products - support Creo Parametric version 10.

### 2.1 GENIUS TOOLS Dimension

#### Dimension: Extended filter options (Version 10.0.1.0)

Filters were expanded to include the option *Unnamed* and the option to search for values.



All dimensions equal to, less than, or greater than the selected value are displayed. You can search for two different values, e. g. to search for a range of values. The filterable values can be set using <<Change Value>> in the user interface. Alternatively, the values can be set using the configuration options `gtd_filter_value` and `gtd_filter_value2`.

The filter options are only active when the configuration option `gtd_filter_additive=0` is set (default).

## 2.2 GENIUS TOOLS Library

### Path change includes info documents (10.0.2.0)

In Library Editor, the function *Change Path* in *Batch mode* was extended so that the path is changed not only for the Creo model concerned, but also for an attached info document. This means that after changing the path, the info document can be opened without any further settings.

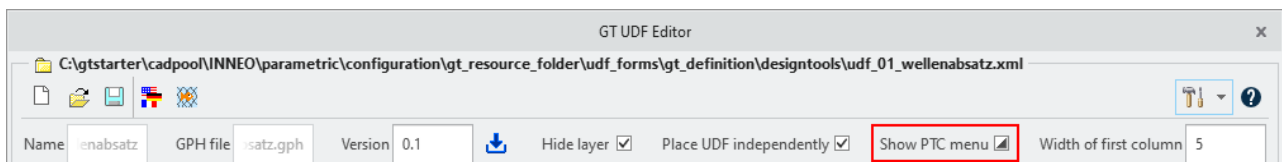
## 2.3 GENIUS TOOLS Parameter

### Parameter: New list „REST API“ (Version 10.0.1.0)

In GENIUS TOOLS Parameter Editor, you can set up a new value list for parameters: REST API. The REST API list function is available for PTC Windchill with 2.5 REST Services installed. BasicAuth authentication protocol is supported.

## 2.4 GENIUS TOOLS UDF Forms

### UDF Forms: Checkbox for display of the PTC menu (Version 10.0.1.0)



A new checkbox *Show PTC menu* is available in the *GENIUS TOOLS UDF Forms Editor*. This checkbox is used to determine whether the PTC menu for selecting the assembly properties is displayed: *On* ☒ / *Off* ☐ / *Conditionally On* ☒. *Conditionally on* ☒ is selected by default. With this function, the menu for selecting assembly properties is displayed only if Creo Parametric decides that it is required for the particular UDF.

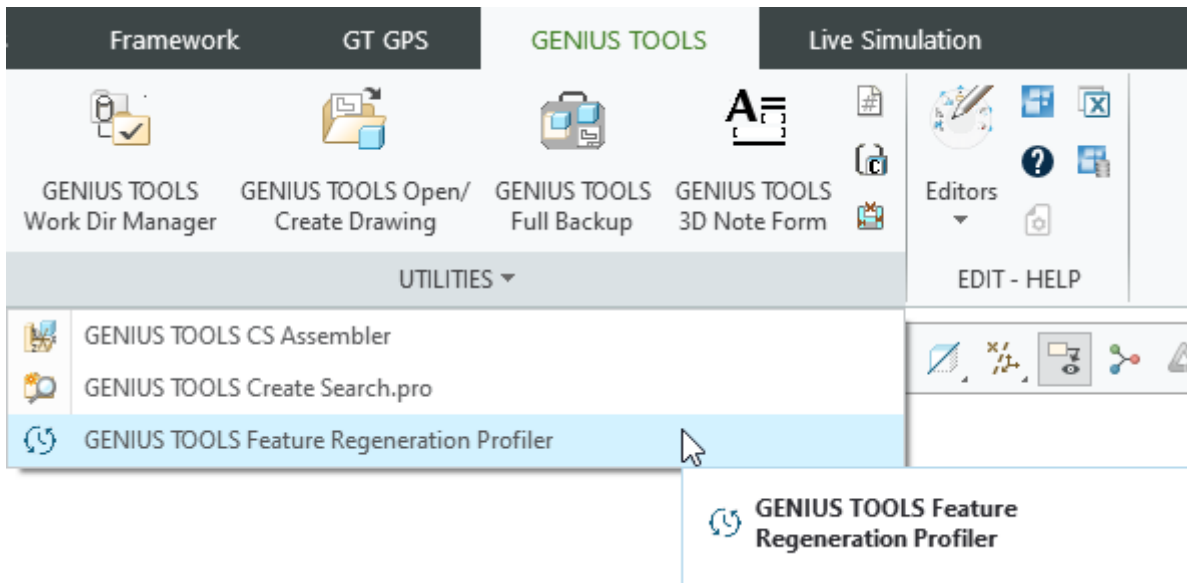
### UDF Forms: Integration of Creo assembly functionality (Version 10.0.1.0)

The Creo function for standard assembly of a UDF is integrated in the user interface of *GENIUS TOOLS UDF Forms*. The function *Create new UDF group by Creo std. Dialog (values would not be transferred)* is only available with the configuration option `gtuf_show_create_by_creo = 1` (Default: 0).

## 2.5 GENIUS TOOLS Utilities

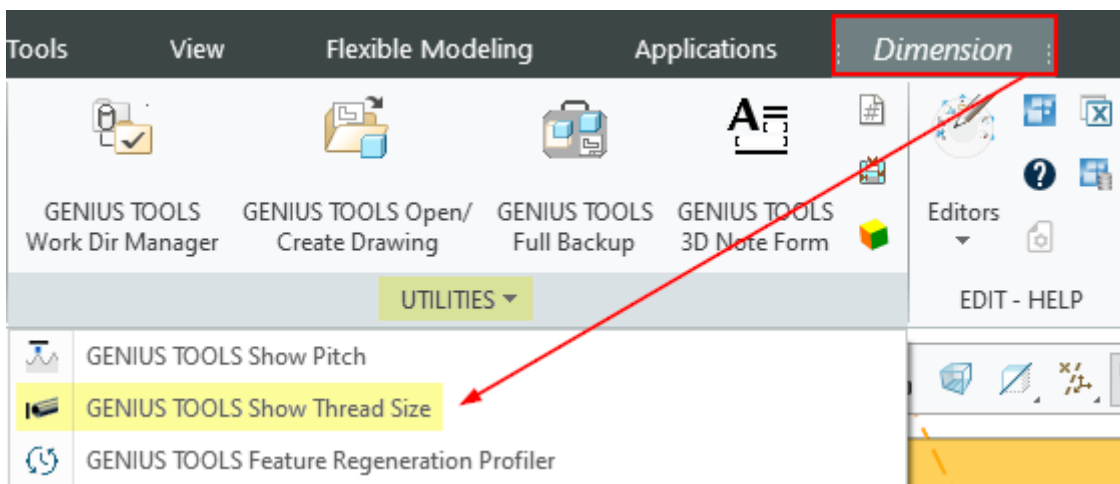
### Utilities – New function „Feature Regeneration Profiler“ (10.0.1.0)

With the *GENIUS TOOLS Feature Regeneration Profiler* you can regenerate your models and simultaneously display the times for the regeneration of each individual feature.



### Utilities – New function „Show Thread Size“ (10.0.1.0)

This function extends the displayed dimensions of a bore thread by the thread size.



### Utilities – Feature Regeneration Profiler: Output as CSV file (10.0.2.0)

The regeneration is output and saved as a CSV file. The CSV file replaces the information in the message log. In addition, the feature name is added to the information specified in the regeneration:

**Model name - Feature ID | Feature name | Number of regenerations | Time in seconds (0.001 → 1 ms)**

Variable features are added. The counter is incremented accordingly.

The name of the CSV file is defined in the configuration option

`gtu_feature_regeneration_file_name`. Default: @mdl@

The configuration option `gtu_feature_regeneration_profiler_separator` was set up to control the display of decimal fractions. Default: ; (The separator is a comma.)

Regeneration times are not lost with the CSV file. You can use these CSV files, for example, to compare the regenerations of two consecutive days, or to determine if the model contains a failure-prone component that takes a particularly long time to regenerate.

**Utilities – New function „Convert Materials“ (10.0.2.0)**

The function *Convert MAT to MTL*, previously available in the freeware tool GENIUS TOOLS Material Browser, was integrated into Creo and is now available as a standalone utility *Convert Materials*. The function *Convert Materials* converts all MAT files into MTL files.

MTL files can contain much more information than MAT files. The converted MAT files are moved to the directory *old* within the selected directory.

**2.6 GENIUS TOOLS Value Transfer****Value Transfer: Usage of boolean parameters (Version 10.0.1.0)**

When using boolean parameters, the values *yes*, *true*, *1*, *ja* (engl. yes), and *wahr* (engl. true) are interpreted as *correct*. Any other input is interpreted as *false*.

**2.7 Javascript****Excel support (Version 10.0.1.0)**

GENIUS TOOLS Javascript Editor supports Excel with these new functions:

**excelOpen**

Opens a document from a path and allows access to the individual cells from this Excel table.

**excelCellValueGet**

Reads a value from a particular cell.



## File selection and text query (Version 10.0.1.0)

There are three new functions in GENIUS TOOLS JavaScript Editor. In this context, the dropdown menu was adjusted to reorganize functions.

**getStringUI("request", "default\_value" (optional));**

Queries a text.

**openFileUI("\*.extension", path (optional), title (optional), preselected\_file (optional));**

Opens a file.

**saveFileUI("\*.extension", path (optional), title (optional), preselected\_file (optional));**

Saves a file.

## Other tools – Javascript Editor: Function runHttpRequest extended (10.0.2.0)

The JavaScript function **runHttpRequest** is extended by the option "**HeaderOption**" to:

**runHttpRequest("URL", "DATA", 1/0, "HeaderOption")**

In addition to the previous options, this last entry allows you to further specify the request with an HTTP header option

Example: `runHttpRequest("Accept-Language: fr-CH, fr;q=0.9, en;q=0.8, de;q=0.7, *;q=0.5")`

## 2.8 Variables

### New variables (10.0.2.0)

These new variables are available:

**@curdrwmdl@**

Returns the name of the current model of a drawing.

**@curdrwmdltype@**

Returns the type (e. g. PRT) of the current model of a drawing.

## 3 Configuration options

The following configuration options have been added, changed or deleted since version 10.0.2.0.

### 3.1 New configuration options (10.0.1.0)

#### Dimension: New configuration options

**gtd\_filter\_value**

Defines the start value for the value filter. Default: 0.001

**gtd\_filter\_value2**

Defines the start value for the second value filter. Default: 5.000

(More information under New features: Extended filter options.)

#### Inspect: Deleted configuration option

The following configuration option has been deleted.

**gti\_size\_wchar**

Defines the size of a wchar, important for automatic symbol placement.

The following automation has replaced this configuration option: When you insert a linked inspection symbol, it is automatically attached to a drawing item with the same alignment.

#### Material: New configuration option

**gtm\_delete\_not\_current\_materials**

Deletes all materials that do not match the current material when a new material is set.  
Default: 0

When working with relations, family tables and multi bodies in a part, activating this option can cause problems. We therefore do not recommend setting this option.

#### Utilities: New configuration options

##### Show Thread Size

**gtu\_show\_thread\_size\_check\_param**

Defines a language dependent feature parameter. If defined, it will be checked if the

parameter exists. If the parameter does not exist, the action is not available. Default: SCHRAUBEN\_GROESSE

**gtu\_show\_thread\_size\_check\_param\_fallback**

Defines a language dependent feature parameter. If defined, it will be checked if the parameter exists. If the parameter does not exist, the action is not available. Default: SCREW\_SIZE

**gtu\_show\_thread\_size\_text\_definition**

This configuration option must be customized for the used Creo language in order for GENIUS TOOLS Show Thread Size to work.

**gtu\_show\_thread\_size\_text\_definition\_fallback**

This configuration option must be customized for the used Creo language in order for GENIUS TOOLS Show Thread Size to work. The fallback is only used if gtu\_show\_thread\_size\_check\_param is not found.

**gtu\_start\_show\_thread\_size**

Defines whether the button "Show Thread Size" is displayed. (0 - No, 1 - Yes) Default: 1

## Utilities: New configuration options

### Feature Regeneration Profiler

**gtu\_feature\_regeneration\_file\_name**

Defines the CSV file name. Default: @mdlIn@

**gtu\_feature\_regeneration\_profiler\_separator**

Defines the separator for writing CSV files. Default: ; (A comma is displayed. For all entries except ; , . is automatically used as a separator.)