

GENIUS TOOLS[®] 

for Creo

Release 9.0.0.0

News

© 2022 INNEO Solutions GmbH



1	Important information	2
2	What's new in release 9	5
2.1	GENIUS TOOLS Assembly Report	5
2.2	GENIUS TOOLS Forms	5
2.3	GENIUS TOOLS Inspect	6
2.4	GENIUS TOOLS Library	7
2.5	GENIUS TOOLS Parameter	9
2.6	GENIUS TOOLS Quick Access	10
2.7	GENIUS TOOLS Utilities	11
2.8	GENIUS TOOLS Value Transfer	12
2.9	Javascript	12
3	Configuration options	13
3.1	New configuration options (9.0.0.0)	13
3.2	Altered configuration options (9.0.0.0)	14
4	Copyright	15

1 Important information

License-dependent functions

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

Function / 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
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	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	7.0.2.0

Function / module	Description	Release
Component Parameter	parameter for a simplified part.	
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

GENIUS TOOLS Assembly Report: Need to modify export templates (8.0.2.0)

The export function has been revised and now reads in parameters for report tables that contain a specific acronym for each GENIUS TOOLS component. Hence, to use export templates in GENIUS TOOLS Assembly Report header and report parameters must contain the acronym *gta*. For existing templates, change the parameters in the comment fields by prefixing each parameter with the abbreviation *gta*.; e.g. change *%head2%* to *gta:%head2%*.

Updating GENIUS TOOLS Library database from version 1.8 to version 1.9 (8.0.2.0)

To use the new feature, which allows for the exclusion of parameters and dimensions from the search index, the GENIUS TOOLS Library databases must be updated to version 1.9. Note that updating GENIUS TOOLS Library Data Importer changes the interface from Simple REST to ODATA REST in the WT area and therefore the XSLT must be adjusted accordingly.

GENIUS TOOLS Assembly Report Editor: Change of data type is passed to component parameters (8.0.2.0)

The data types of component parameters are updated as specified by the report definition. This means that if you change the type of a component parameter in GENIUS TOOLS Assembly Report Editor, for example from *String* to *Integer*, this will result in changes to the component parameter. This is useful to unify differently created data types, e. g. for Windchill.

Changing from String to Integer may result in data loss, e. g. the text input "x 10" will be replaced by "0" and "50.00 x" will be replaced by 50.

You can disable this behavior with the configuration option `gta_update_component_parameter_type=0`. [More information here](#).

2 What's new in release 9

2.1 GENIUS TOOLS Assembly Report

Configuring CSV export (9.0.0.0)

When exporting assembly reports to CSV you can now configure the separator symbol and the BOM coding with the options that also configure *GENIUS TOOLS Export Table to CSV*: `gtu_table_to_csv_export_sep`, `gtu_table_to_csv_write_file_as_utf8`, `gtu_table_to_csv_write_file_as_utf8_with_bom`.

Editor: New type of report parameter "Parent model parameter" (9.0.0.0)

A report parameter of the type Parent model parameter – specified under *Key* in the *Details* section – reads a model parameter from the parent model. This type of report parameter is useful for filtering out subcomponents from an assembly report, e. g. if purchased parts are to be displayed without their subcomponents.

Editor: New type of report parameter "Is embedded" (9.0.0.0)

The new report parameter "Is embedded" can be used for the display of the assembly report. The parameter checks whether a model in an assembly is embedded.

Editor: Filtering out subcomponents (9.0.0.0)

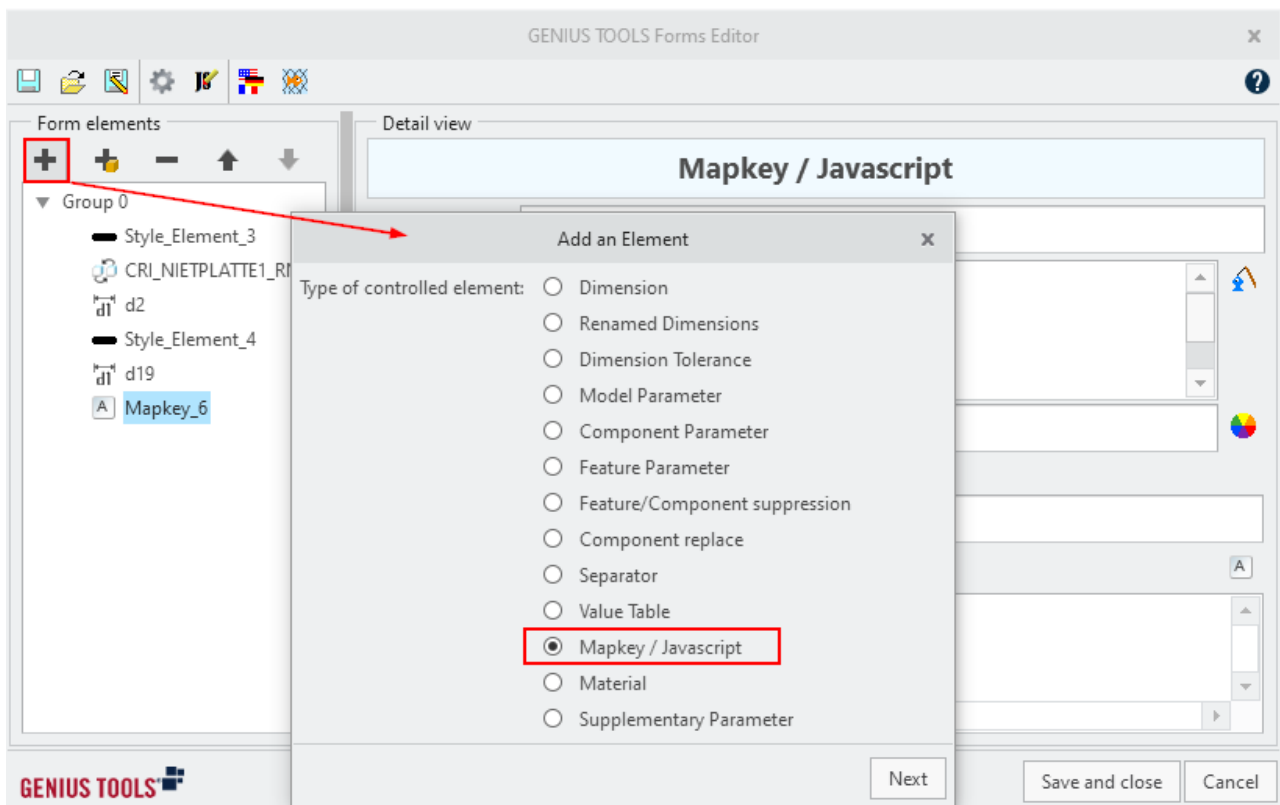
The filter conditions – in the tab *Table attributes* – that exclude assembly components from the assembly report can now be extended to also include their subcomponents, without checking the filter conditions on these subcomponents. This is useful, for example, to display purchased parts without their subcomponents. (To do so, use the new report parameter type *Parent model parameter*.)

Recursive filtering is only relevant for the display mode *List*, e. g. quantity BOMs. In the *Structure* display mode, subcomponents of assembly components that have been filtered out are not displayed.

2.2 GENIUS TOOLS Forms


Execute Javascript function with a form element (9.0.0.0)

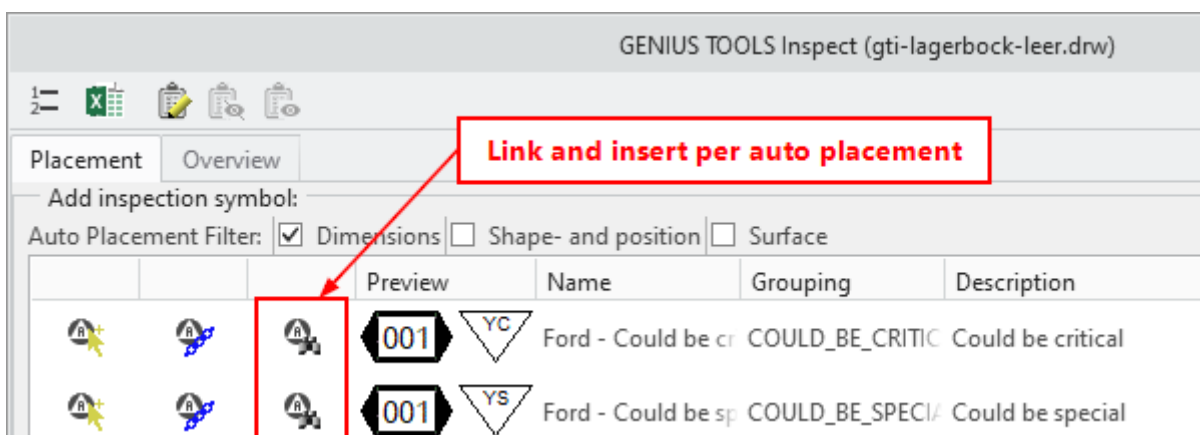
In GENIUS TOOLS Forms Editor you can create a button that executes Javascript code. Use the form element *Mapkey / Javascript*.



2.3 GENIUS TOOLS Inspect

Place and link inspection symbols automatically (9.0.0.0)



Inspection symbols can be automatically placed on selected drawing elements (dimensions, form-location tolerances and surfaces) by clicking the new button . Elements which are already linked to the selected inspection symbol are not re-linked. GENIUS TOOLS Inspect checks whether the SYM file of the selected inspection symbol matches the existing inspection symbol.



This option is made available to users in GENIUS TOOLS Inspect Editor in the Inspection Symbols and Tables tab under Inspection symbols > Details > Actions.

Default text in numbering tables (9.0.0.0)

In GENIUS TOOLS Inspect Editor, a placeholder for empty cells can be inserted for numbering tables, e. g. <Empty> in the image below. Go to the Inspection Symbols and Tables tab to the section Tables > Table type > Placeholder.

Function related classification		Inspection No.
Symbol	Critical Feature	1
	Hazardous to human beings	
Symbol	Main feature	<Empty>
	Restricted functionality, reduced output/performance	
Symbol	Standard feature	all other quality parameter
	no direct effect on functionality	

Creo table for numbering table

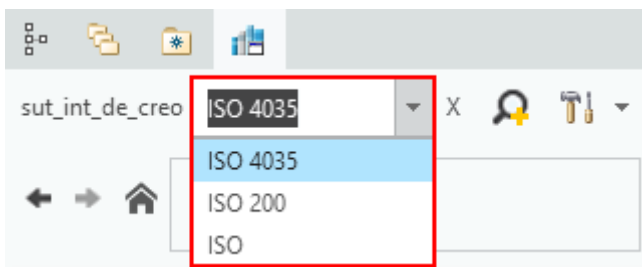
2.4 GENIUS TOOLS Library

Direct search function behaves differently (9.0.0.0)

The direct search is now conducted firstly in the currently selected category, i. e. when first clicking *Enter*. The previous behavior that searches the whole library is conducted after a second click on *Enter*. You can restore the previous behavior by setting the newly introduced configuration option *gtl_search_tree_dependent* to 0. (Default is 1, enabled)

When changing the search term, the direct search function starts again in the selected category.

Additionally, all searched terms of a Creo session are now visible in a dropdown list.



Search history of current Creo session

Automatic start of GENIUS TOOLS Parameter when creating new models (9.0.0.0)

The GENIUS TOOLS parameter dialog box can be set to open automatically after creating a new part, assembly or drawing, by listing the desired file types in the

gtp_start_gtp_after_model_creation configuration option, separated by commas. The parameter dialog does not open if you create a new file and insert it into an assembly in one step.

Filter instances in preview window by object status (9.0.0.0)

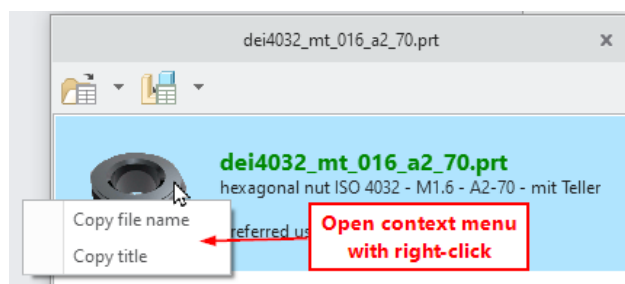
The selection tab of the preview window allows to search instances by object status filter. The pre-selection of the checkboxes is based on the selection in the object status filter in the tool menu. However, the selection set here does not affect the object status filter.

The object status can be displayed in the information area with the configuration option `gtl_detail_window_show_status_in_head_area=1`.

You can change the text for the description of the status, such as *avoid usage*, by using the configuration options `gtl_<StatusColor>_text`.

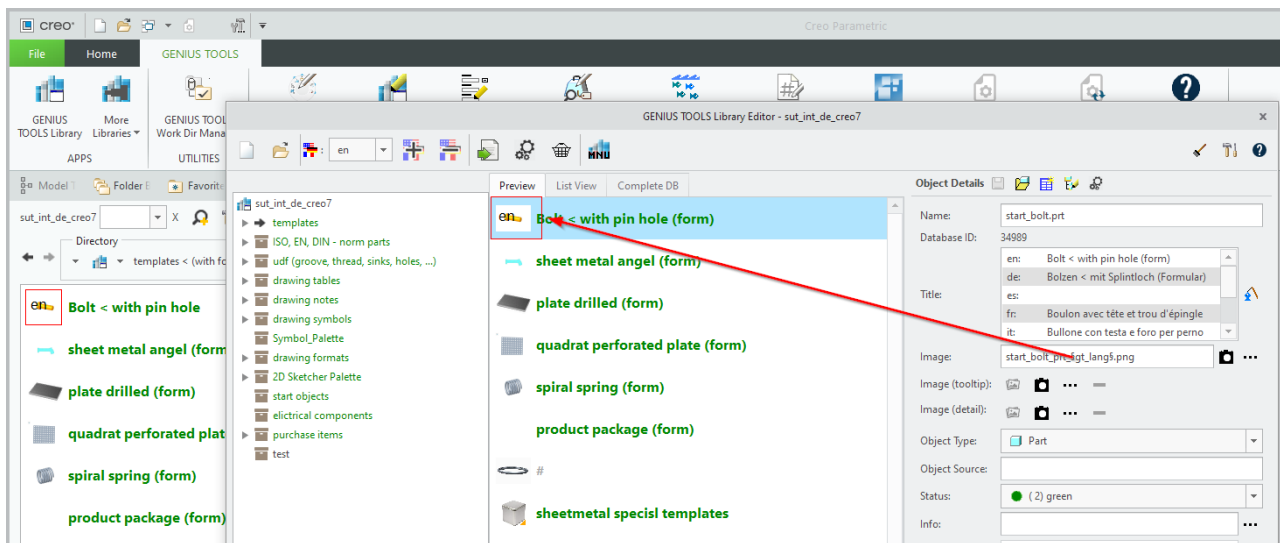
Copy file name and title (9.0.0.0)

In the detail window you can right-click to open the context menu for copying the file name and title to the clipboard.



Show preview picture dependent on language (9.0.0.0)

You can display images for object display ("preview pictures") language-dependently by adding to the image file a language abbreviation, which is output by the variable *gt_lang*, and specifying the variable in GENIUS TOOLS Library Editor in the notation *\$gt_lang\$* in the name of the file. If no file with the specified language abbreviation is found, the default file, i. e. the file without abbreviation, is displayed.



Insert tables into drawing frame (9.0.0.0)

Tables that are library objects can now be added to a drawing frame (FRM) with the action *Insert*.

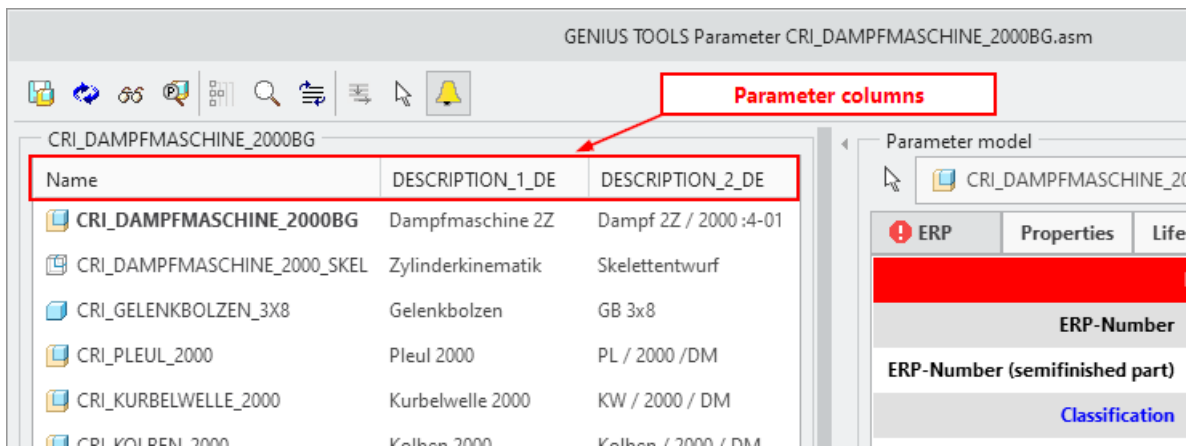
2.5 GENIUS TOOLS Parameter

Automatic start of GENIUS TOOLS Parameter when creating new models (9.0.0.0)

The GENIUS TOOLS parameter dialog box can be set to open automatically after creating a new part, assembly or drawing, by listing the desired file types in the *gtp_start_gtp_after_model_creation* configuration option, separated by commas. The parameter dialog does not open if you create a new file and insert it into an assembly in one step.

Better display of parameter columns (9.0.0.0)

The option *gtp_model_tree_column_width* allows you to specify the width of additional parameter columns, measured in the Windows standard width for a character. The default value is 10. You can add additional columns for parameters by entering the parameters needed, separated by comma, into the existing configuration option *gtp_model_tree_columns*.



Additional columns for the parameters *DESCRIPTION_1_DE* and *DESCRIPTION_2_DE*

Support for imbed models added (9.0.0.0)

GENIUS TOOLS Parameter now supports imbed models.

2.6 GENIUS TOOLS Quick Access

Background image in ring menu must not be updated manually with new path setting (9.0.0.0)

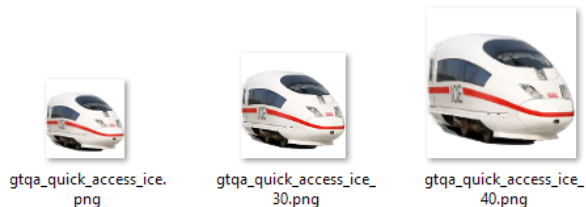
Specifications for the image file that can be placed in the center of the ring menu can now be made in the in the configuration option `gtqa_background_picture` by pointing to an image directory with the following path:

`<GT_RESOURCE_FOLDER>\quick_access\img_background\<imagename>.`

By using this directory, the user-specific image files – for example, the company logo or to indicate which project a user is currently in – are preserved when GENIUS TOOLS for Creo is updated. The directory must be created manually and named *img_background*.



> parametric > configuration > gt_resource_folder > quick_access > img_background



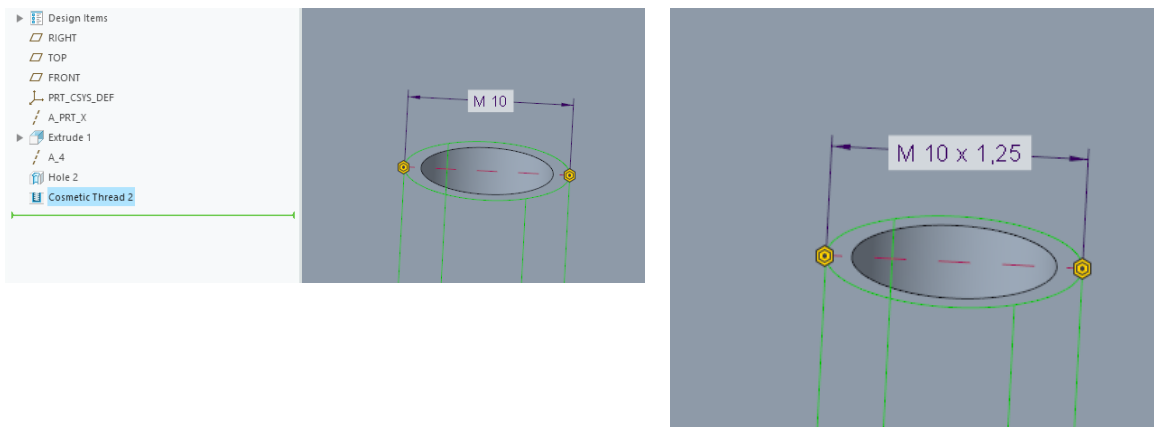
For entries with the above path or the path `<GTfC_install>\text\resource\<image name>`, the background image is also searched for a size-dependent version: At zoom level 1.4 - 1.8, the medium size file (`<image name>_30.png`) is used. For zoom level greater > 1.9, the large file (`<image name>_40.png`) is used.

You can save the image files at other locations but the zoom levels are not regarded there.

2.7 GENIUS TOOLS Utilities

Show pitch: available for thread features (9.0.0.0)

The Show Pitch function can now also be used for internal and external threads that are created with the feature Cosmetic Thread. If there are multiple cosmetic threads on a feature, the user must select a cosmetic thread first.



Display of the dimension before and after using the function Show pitch on an internal thread of a cosmetic feature

Show pitch: variables for fallback (9.0.0.0)

There are two new variables that can be used as a fallback in multilingual environments.

gtu_show_pitch_text_definition_fallback

This value has to be customized for GENIUS TOOLS Show Pitch to work with the set Creo language. The fallback is used if `gtu_show_pitch_check_param` can not be found. The default setting is `M @D x &PITCH:FID_@feat_thread_id@[.2]`

gtu_show_pitch_check_param_fallback

Defines a language-dependent feature parameter. If defined, it is checked if the parameter is existing.

Export Points: New configurations (9.0.0.0)

There are several new configuration options to define a template.

GENIUS TOOLS Utilities – Create tolerance table

gtu_tol_table_decimal_marker_follow_dtl

Changes the representation of numerical values from period to comma as decimal separator, if the DTL option `decimal_marker = COMMA` is set. Define, whether the DTL file should be read (1) or not (0). (Default is 1.)

gtu_tol_table_sort_order

Defines, whether the table is sorted in ascending or descending order.

gtu_tol_table_origin_at_bottom_right

Defines the origin of the table and the direction of its buildup (growth direction):

0 - The origin of the table is at the top left and it is built to the bottom right.

1 - The origin of the table is at the bottom right and it is built to the top left.

Please note: If the table is placed at the bottom of the drawing, reversing the growth direction is helpful. If the table is placed at the top edge, it makes sense to turn the growth direction downwards.

The selected growth direction of the table cannot be displayed in the preview
(`gtu_tol_table_creo_insert=1`).

2.8 GENIUS TOOLS Value Transfer

New variable for filter list (9.0.0.0)

In the criteria for filters for the search in subcomponents, the new variable `@is_embedded@` can be used. It returns "1" for embedded models, otherwise "0".

2.9 Javascript

Support of name generator (9.0.0.0)

The Javascript function `replaceVars` (Replace Variables) supports the name generator.

3 Configuration options

The following configuration options have been added, changed or deleted since version 6.0.2.

3.1 New configuration options (9.0.0.0)

GENIUS TOOLS Library

gtl_detail_window_show_status_in_head_area

Defines weather the status should be displayed inside the head area of the detail dialog. (0 - No, 1 - Yes)

gtl_search_tree_dependent

Defines weather the complete database or only categories/subcategories get searched. The search in categories doesn't show objects from selections. (0 - No, 1 - Yes)

gtl_gtp_start_gtp_after_model_creation

Defines the model types (prt, asm, drw), seperated by comma, that should start GENIUS TOOLS Parameter after model creation.

GENIUS TOOLS Parameter

gtp_model_tree_column_width

Defines the width of additionally shown parameters in standard character widths.

gtp_start_gtp_after_model_creation

Defines the model types (prt, asm, drw), seperated by comma, that should start GENIUS TOOLS Parameter after model creation.

GENIUS TOOLS Utilities – Full Back Up

gtu_full_backup_column_parameter

Defines the name of a model parameter whose content is displayed as an additional column.

gtu_full_backup_default_collect

Defines weather during start of GENIUS TOOLS Full Backup, models are automatically collected or not. (0 - No, 1 - Yes)

GENIUS TOOLS Utilities – Show pitch

gtu_show_pitch_text_definition_fallback

This value has to be customized for GENIUS TOOLS Show Pitch to work with the set Creo language. The fallback is used if `gtu_show_pitch_check_param` can not be found.

gtu_show_pitch_check_param_fallback

Defines a language-dependend feature parameter. If defined, it is checked if the parameter is existing.

GENIUS TOOLS Utilities – Create tolerance table**gtu_tol_table_sort_order**

Defines whether the table is sorted in ascending (ASC) or descending (DESC) order.

gtu_tol_table_origin_at_bottom_right

Defines the growth direction and origin of the table. (0 - The origin is at top left and the growth direction is to the bottom right. 1 - The origin is at the bottom right and the growth direction is to the top left.) These configuration affects the table placement with `gtu_tol_table_creo_insert = 0`.

3.2 Altered configuration options (9.0.0.0)**GENIUS TOOLS Forms**

Die following configuration option has been deleted.

gtf_lock_column_resize

Defines, whether the second and third column in GENIUS TOOLS Forms is re-sized automatically, after changing the size of the Forms dialog window. (0 - Yes, 1 - No).

GENIUS TOOLS Quick Access**gtqa_background_picture**

Defines the path or file name of the image that is used as logo in the middle of the ring menu in GENIUS TOOLS Quick Access. The image has to be saved as a PNG file in one of these folders:

PATHS ALLOWED SO FAR: `<GTQA_BACKGROUND_PICTURE>`

NEW PATHS AVAILABLE:

`<GT_RESOURCE_FOLDER>\quick_access\img_background\<GTQA_BACKGROUND_PICTURE>`

`<GTfC_install>\text\resource\<GTQA_BACKGROUND_PICTURE>`

GENIUS TOOLS Utilities

Die following configuration option has been deleted.

gtu_show_pitch_create_relation

4 Copyright

Copyright 2022 by:

INNEO Solutions GmbH

Rindelbacher Str. 42

73479 Ellwangen

Germany

This documentation is protected by copyright. All rights reserved.

Without prior written consent of an authorized representative of INNEO Solutions GmbH it must not be copied, photocopied, reproduced, translated, communicated or converted to electronic or machine readable form in whole or in part.

The unauthorized use of the documentation can lead to a claim for liquidated damages or legal 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:

Most of the software, hardware and trade names mentioned in this documentation are also registered trademarks of the respective software manufacturers.

Registered trademarks and trade names of INNEO Solutions GmbH:

GENIUS TOOLS, Startup TOOLS, INNEO