

GENIUS TOOLS[®] 

for Creo

Release 6.0.2.0

News

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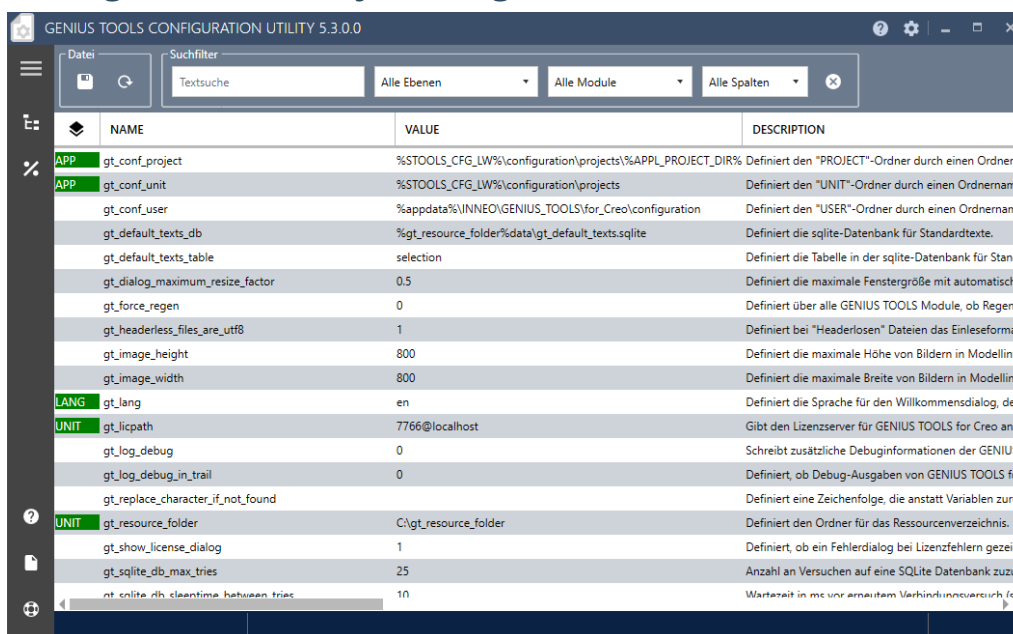
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1 Important information

Version GENIUS TOOLS for Creo 6.0.0.0 based on GENIUS TOOLS for Creo 5.0 M030

GENIUS TOOLS for Creo 6.0.0.0 have been developed based on version 5.0 M030. All changes listed for version 6.0.0.0 are changes from this base version.

Configuration Utility redesign (6.0.0.0)



The Configuration Utility has been redesigned and also includes the following new functionality:

- module independent filters
- saving changes to module settings
- simplified view using table design

The module configuration files (*gt*_main.cfg*) have been replaced by a new configuration file (*gt_modules.cfg*). Old configuration files will be converted automatically when configuration changes are saved.

A function to reread the configuration is now available, but has not been included in the Creo Parametric Ribbon in the standard configuration.

Inspect Create / Change Mark-Tag (Symbol) (6.0.0.0)

'Due to new, improved functionality in Inspect, old symbols need to be adapted.

The symbols now have to contain three variable texts */num/*, */LinkedTo/* and */descr/*.

For more information on variable texts for Inspect symbols, please refer to the help at Inspect / Configuration / Creating a mark tag.

GT Show information - Changed syntax for line breaks (6.0.1.0)

Line breaks in information texts can only be written as `
`. Using `\n` is no longer supported.

2 New features in Version 6

Creo Compatibility

The GENIUS TOOLS for Creo are based on the (Object)Toolkit from PTC and are available for Creo 4.0 to 6.0.

Autoselection of standard texts (6.0.0.0)

The autoselection of titles or descriptions for attributes, parameters, library objects or similar objects is now supported in the modules Assembly Report Editor, Forms Editor, Library Editor, UDF Forms Editor and Parameter Editor.

You can start it with the  button.

The column *key* has been added to the database table for standard texts. If this column is not present in the current database table, it is added automatically.

Improvements in JavaScript support (6.0.1.0)

The JavaScript functionality for GENIUS TOOLS now includes a function for reading the OID of a Creo model (`creoMdlOIDGet`).

Also, the `runHttpRequest` function was enhanced so that you can define for each HTTP request whether the user running it should be prompted for login credentials.

Database Version Control (6.0.1.0)

In version 6.0.1.0, the new Database Version Control utility has been added to GENIUS TOOLS for Creo. Database Version Control is an administration tool for updating the databases to the current version that fits the software version in use.

Open Database Version Control from the user interface of the GENIUS TOOLS for Creo

Configuration Utility by clicking the icon under *Apps*.



Insert user input as variable value (6.0.2.0)

In every place in GENIUS TOOLS for Creo where you can use variables, you can also prompt the user to input text and use that text as a value, e.g., in JavaScript functions, intelligent mapkeys, or when generating file names.

To cause a prompt (text box) to be displayed to the users, use the format `==LabelText==`. The text enclosed by double equal signs is displayed in the input prompt. This text, including the equal signs, is then replaced by the text entered by the user.

Example for generating a file name:

```
@date@_==Please enter descriptive name==_@mdl@
```

The label text for a user prompt may also contain variables marked with @ signs, which will be resolved if the users do not change them in their input.

2.1 GENIUS TOOLS Parameter

Additional configuration options for separators (6.0.1.0)

The button for filling in parameter values automatically (hammer symbol) used to be displayed for all separators whose parameters had field functions defined. In the current version, a new setting on the separator element lets you define whether the hammer button should be available.

Additionally, separators can be hidden. Hidden separators help structure the view in the Editor, they are not displayed to the users.

Bug fix for multiple hits in a database (6.0.1.0)

If values for parameters are set automatically, the first row of a value list that contains the defined value will be used. For value lists from databases, the software used to display the information that there were multiple hits in the value list and that the first hit would be used, but the value was not set. This error has been fixed in the current version.

Bug fix for resetting fields (6.0.2.0)

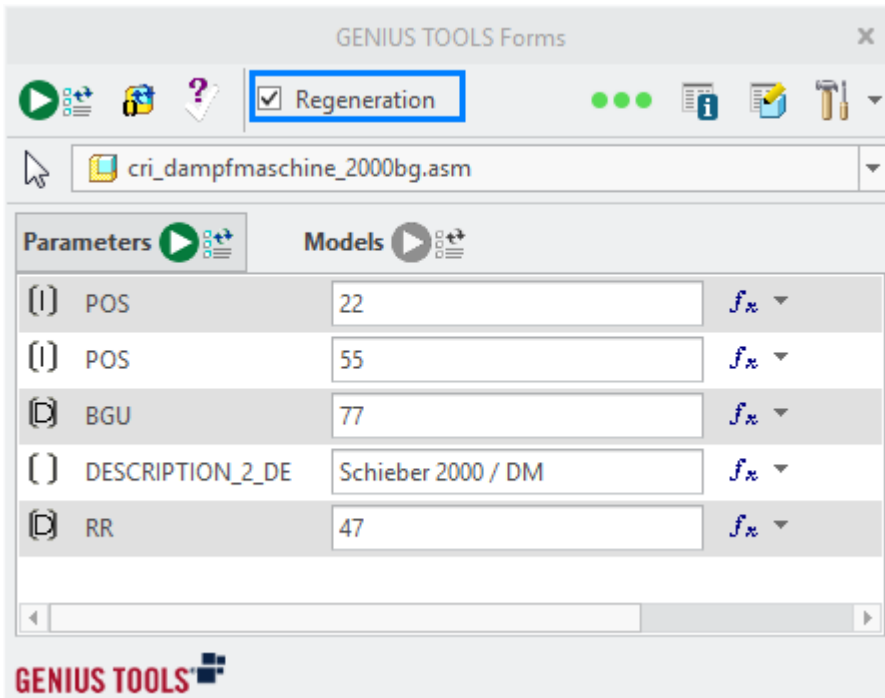
When characters are entered into a field that has a value list, a list of valid values is displayed and filtered according to the input.

When resetting fields (broom button), this filter was not reset together with the input value, so that the list of valid values that was displayed after resetting was not complete. This error has been fixed. The list of valid values is now correctly displayed after resetting fields.

2.2 GENIUS TOOLS Forms

Surface regeneration adjustable (6.0.0.0)

The UI of the module GENIUS TOOLS Forms now includes a function to regenerate the model after saving.



Checkbox	Label	Value	Unit
<input type="checkbox"/>	POS	22	f _z
<input type="checkbox"/>	POS	55	f _z
<input type="checkbox"/>	BGU	77	f _z
<input type="checkbox"/>	DESCRIPTION_2_DE	Schieber 2000 / DM	f _z
<input type="checkbox"/>	RR	47	f _z

Regeneration adjustable

Status dialog if PreSave returns false (6.0.1.0)

If the JavaScript function PreSave returns `false` and the user cancels the saving process, the status dialog is displayed automatically. This makes it easier to check the messages from the PreSave function.

Warnung on trying to set unavailable values (6.0.1.0)

A warning message is displayed in the status dialog if values in the model are not contained in the list of allowed values for a selection field or radio button.

XML files without IDs for form elements can be imported (6.0.1.0)

When values are imported into a form from an XML file, the values are assigned to the correct form elements using IDs.

With version 6.0.1.0., the values can be assigned using the form element names if IDs are not present in the file.

Compare form values to CSV file (6.0.1.0)

The current values of the active form can be compared to the values in a CSV file using a new function of the tools menu.

File name suggestion on CSV and XML export (6.0.1.0.)

When you export form values to CSV or XML, the name of the selected model is automatically suggested as the file name.

More comfortable management of form elements in the editor (6.0.1.0)

In the element list of the Forms Editor, multiple elements can be selected and moved in one step.

The context menu includes a new action to move one or more elements into an existing group or directly into a new group.

Language-dependent names for groups (6.0.1.0)

The names of groups (tabs) in forms can be entered in multiple languages in the *Title* input field.

Automatically add all dimensions with user-defined names (6.0.1.0)

When you add Form elements, you can now add all dimensions with user-defined names from a feature or from a model into your Form definition in one step.

Automatically write new feature IDs in interchange assemblies to model (6.0.1.0)

If an interchange assembly is selected via a Form, the new IDs for the features are automatically written to the model. Forms does no longer display a confirmation dialog.


Helper parameters for use in JavaScript (6.0.2.0)

Helper parameters have been introduced as a new type of form element.

Helper parameters are not present in the model and cannot be saved. Their only purpose is to be used in JavaScript functions. They represent input values, intermediate steps or output values of calculations programmed as JavaScript functions.

Helper parameters can have any of the four available data types and can be configured to use different types of form fields.

Importing instances for replacements (6.0.2.0)

When you configure a replacement element in a form and define a list of values, you can import the instances from the family table of the selected model. To do so, click *Import instances* .

Manage data for selection lists and variant tables as external CSV files (6.0.2.0)

You can store data for selection lists or variant tables in CSV files. Any changes to the linked CSV file will automatically be taken up by the corresponding selection or variant table. In this way, you can use the same data in different form elements or different forms without having to manage it multiple times.

2.3 GENIUS TOOLS Library

Set webcode using the collector (6.0.0.0)

The collector has a new option for the webcode.

More space for search input (6.0.1.0)

The search input field in the *Complete DB* tab of Library Editor was limited to 31 characters. This limitation has been removed so that 240 characters can now be input as a search string.

Easier navigation in search results (6.0.1.0 and 6.0.2.0)

6.0.1.0: For search results in the *Complete DB* tab of Library Editor, the number of result pages is now displayed in addition to the current page number (e.g., *Page: 1/4*).

6.0.2.0: For search results in the *Complete DB* tab of Library Editor, the number of results per page can now be selected in the same way as in the Library Browser (e.g., ≤ 100).

Bugfix in batch processing (6.0.1.0)

An error led to a Creo crash if a generic part already in the Creo session was treated by the batch processing functionality. This error has been fixed in version 6.0.1.0.

Save batch processing configuration (6.0.1.0)

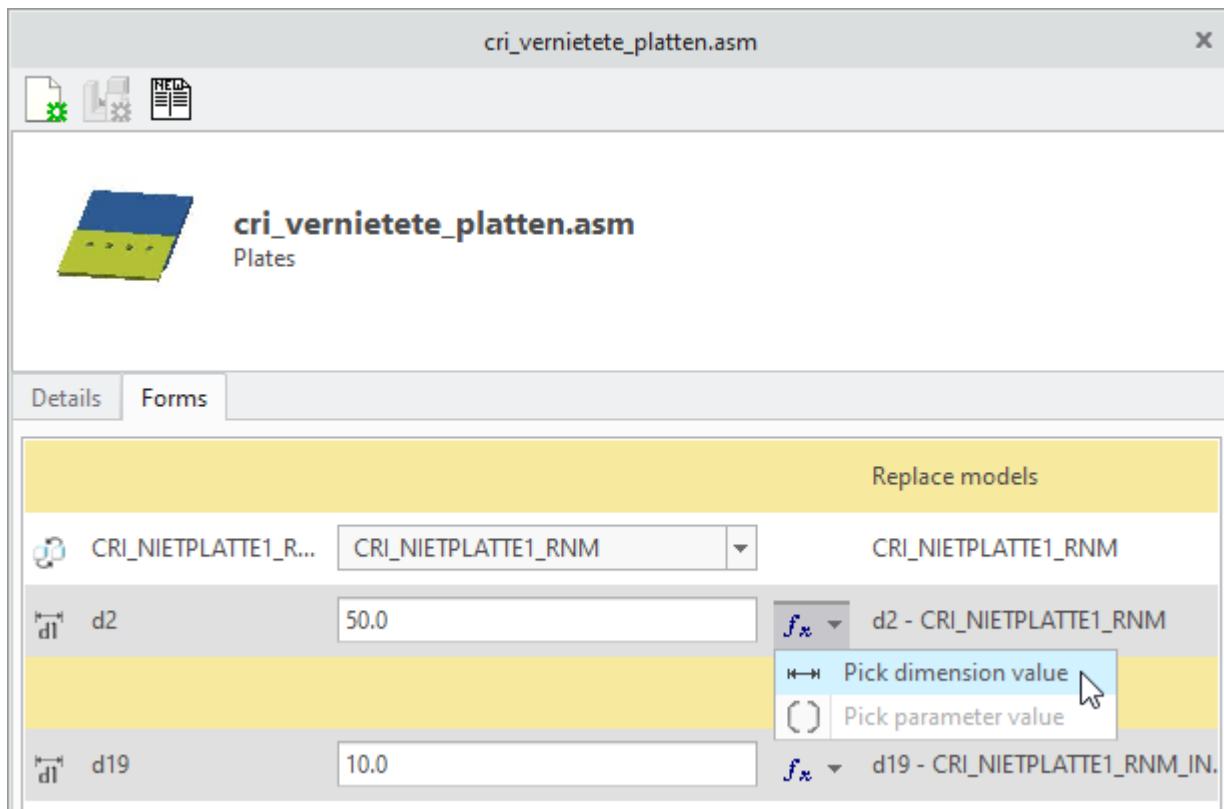
The configuration for a batch processing job can now be saved and loaded again. In this way, recurring jobs can be run more easily, and configuration variants can be managed.

Read dimensions from Creo model (6.0.1.0)

Dimensions that should be displayed for a library object can be read from the current Creo model in Library Editor. In the previous version, this was only possible for parameter values.

Using dimensions and parameters from a model in the Forms tab (6.0.1.0)

The functionality for transferring dimension and parameter values from the model into a Form used to be available only via the user interface of GENIUS TOOLS Forms. In the current version, this functionality is also available from the *Forms* tab for library objects.



Read detail image size from graphic file (6.0.1.0)

Formerly, the size of detail images for library objects had to be specified with a fixed value in the configuration options `gtl_detail_window_detail_image_height` and `gtl_detail_window_detail_image_width`. In the current version, the image size will be read automatically from the PNG file if both configuration options are set to 0 (default value).

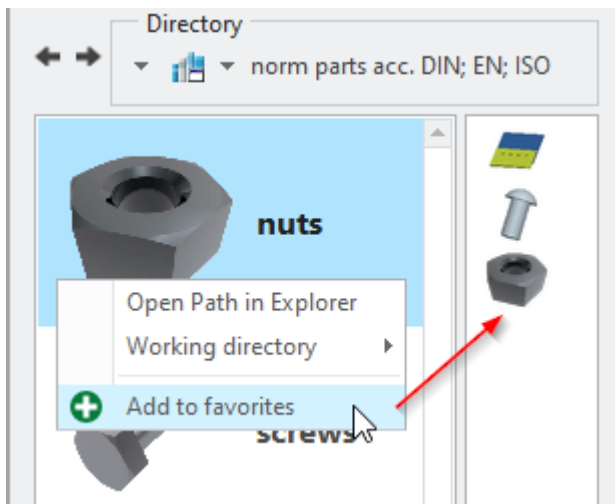
Support for UNC paths (6.0.1.0)

Library objects can now be opened, inserted, copied and merged from locations specified as UNC paths.

It is no longer required to map all locations for library objects as network drives on the client computers.

Select and display favorites (6.0.1.0)

You can display library objects that you frequently need in a favorites bar in the library browser. The favorites bar can be shown or hidden to match your current view requirements. You can mark both individual library objects and categories as favorites.



Additional actions for sheet metal parts (6.0.1.0)

When a sheet metal part is opened in Creo, library objects can be inserted as a die, as a punch, or as a copy geometry.

The new actions are available in Library Editor and can be configured for library objects.

Additional status values (6.0.2.0)

The list of available status values for library objects has been extended to include the values *Blue*, *Lilac* and *Teal* in order to allow a more fine-grained status management.

Improvement to search and filter functions (6.0.2.0)

If objects were contained in a search result in the Library Browser, but blocked from display by an object filter, the search result list used to show empty slots. This error has been corrected and the coordination of the search function with the object filter improved in the process.

If a search does not include criteria for the object status, both the search criteria and the object filter are applied. If you explicitly define search criteria for the object status, the object filter is not applied in addition to the search criteria.

Also, a button for deleting the search criteria has been added.

Multiple values for one parameter (6.0.2.0)

The new configuration option `gtl_parameter_multiple_value_separator` defines a character that separates multiple values in parameters for library objects.

Library objects that contain multiple character-separated values in one parameter will be found in a search for either of the parameter values.

Multiple selection for assigning library objects to categories (6.0.2.0)

In the category view of Library Editor, you can select multiple objects and move or link them using drag-and-drop, as well as unlink them from categories or delete them.

If you drag objects from the tabs *Preview* or *List view* from the current category to another one, the selected objects will be moved.

From the tab *All objects*, you can link objects to multiple categories.

You can also use drag-and-drop to put objects into the object collector dialog.

Tooltip images (6.0.2.0)

When you hover the mouse over a library object in the Library Viewer, an enlarged image of the object can be displayed as a tooltip.

The image must have the same name as the object, using the pattern

`<OBJECT_NAME>_<OBJECT_EXTENSION>.png` (e.g., `dei4032_mt_020_8.prt` > `dei4032_mt_020_8.prt.png`), and be stored in the directory `gtl_tooltip_image_folder`.

Bug fix for deleting objects with family tables (6.0.2.0)

When deleting library objects with nested family tables, only the instances of the first level used to be deleted with the main object. This error has been corrected and all instances are now included when deleting.

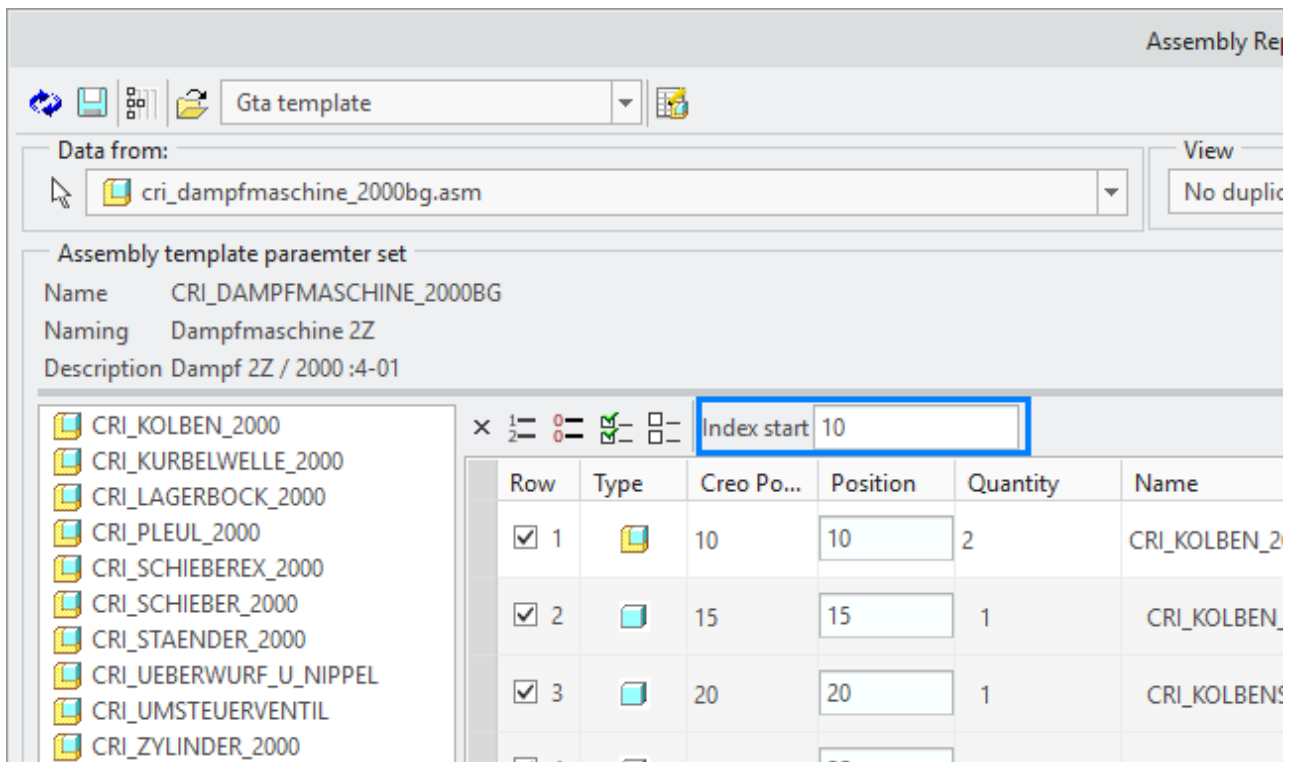
Accessing information documents from the Forms tab (6.0.2.0)

If an information document has been defined for a library object, this document can now be accessed from the *Forms* tab of the details window. In previous versions, the button for displaying the document was not displayed in this tab.

2.4 GENIUS TOOLS Assembly Report

Set start index via UI (6.0.0.0)

The start index for the current numbering can be set in the user interface.



Input field for the start index

Drag-and-Drop multiple lines in the report table (6.0.1.0)

You can now select multiple lines on the same hierarchy level and drag them to the desired position in the report table.

Select and deselect all lines without an index parameter (6.0.1.0)

In previous versions, the buttons for selecting or deselecting all lines were not available if the report table did not have an index parameter.

These buttons are now also available if you do not manage position numbers in the report, which makes it easier to use GENIUS TOOLS Assembly Report for managing component parameters.

Icon shows report definitions in model (6.0.1.0)

If a model contains a report definition, the corresponding icon is displayed in the Creo main window. Click on the icon to open Assembly Report.



Export format XLS (6.0.1.0)

When exporting a report table to Excel, the XLS file format is supported to enhance compatibility with existing systems.

Enhanced report definitions with calculated values (6.0.1.0)

When defining report parameters, two new types of parameters are available.

The type *Generic* returns the name of the generic part for a model.

The type *Relation* lets you define calculation rules for the values shown in the report. Each calculation rule is entered as one line using JavaScript syntax. This allows you to combine multiple parameters into one value using complex logic. A calculation rule can return a text value, a Boolean value or a number.

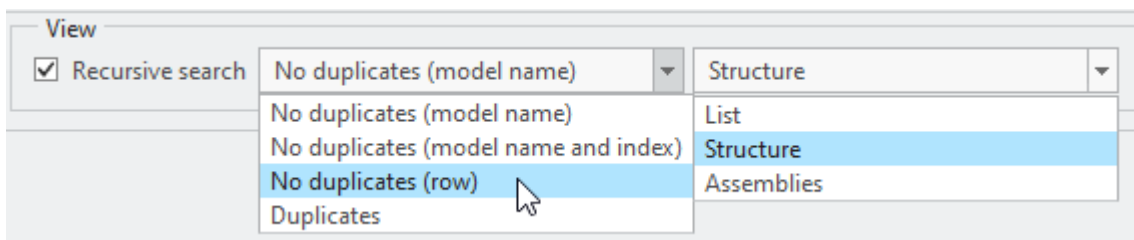
Additionally, a row giving the sum total for parameters with number values (Integer or Double) can now be added to the report table.

Extended view settings (6.0.1.0)

The settings for merging rows that share values and for displaying a flat list or a tree structure can not be selected independently of each other.

The following options are available for merging rows that share values:

- No duplicates (model name): Models with the same name are displayed in one row, one row is displayed per model name.
- No duplicates (model name and index): Models with the same name but different position numbers (index) are displayed in one row per position number.
- No duplicates (row): Only rows that have the same values in all columns are considered as duplicates and combined into one row.
- Duplicates: Always shows separate rows, regardless of whether rows share values.



Support for flexible parts (6.0.1.0)

Assembly Report supports flexible parts and shows the correct parameter values for them. If different parameter values occur for models displayed in the same table row, this is marked as a conflict and the affected cell highlighted in red.

Open Assembly Report for drawings (6.0.1.0)

Assembly Report is not only available in assembly mode, but can also be opened for a drawing of an assembly.

2.5 GENIUS TOOLS UDF Forms

Default values for value tables (6.0.0.0)

When the UDF Forms are started, the default values of the elements are entered in all fields. This is now also done for value tables, but without triggering the mechanism for value table entries. The editor must ensure that all default values match.

Parameters for UDFs assembled with Creo (6.0.1.0)

When a UDF is placed with Creo, not using UDF Forms, no parameters for the UDF variables are created on the UDF group. In the new version, the required parameters are created when the UDF is saved in UDF Forms.

Assign values from UDF Forms on UDF creation (6.0.1.0)

UDFs whose default values are not compatible with the current model can be adapted in UDF Forms and then placed. The values from UDF Forms are automatically assigned on creating the UDF.

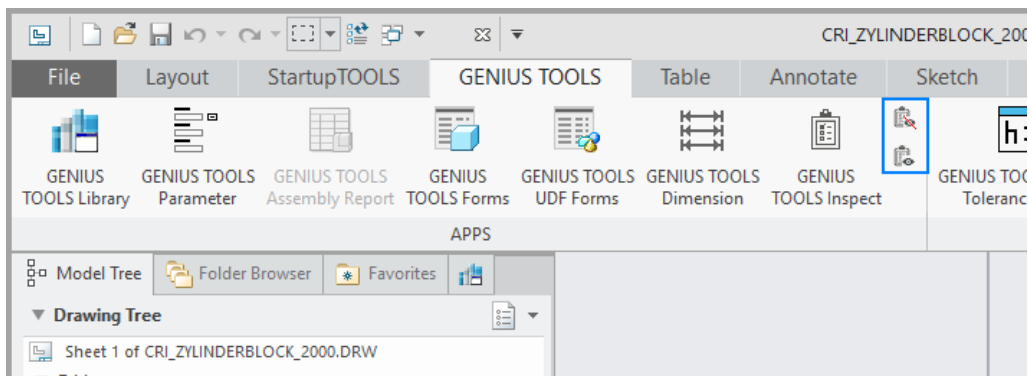
Manage data for selection lists and variant tables as external CSV files (6.0.2.0)

You can store data for selection lists or variant tables in CSV files. Any changes to the linked CSV file will automatically be taken up by the corresponding selection or variant table. In this way, you can use the same data in different form elements or different forms without having to manage it multiple times.

2.6 GENIUS TOOLS Inspect

Hide / Unhide symbols and tables (6.0.0.0)

Using Creo Parametric 4.0 or later, symbols and tables from Inspect can be hidden and unhidden.



GT Inspect - Ausblenden und Einblenden

Tables sorted by inspect number (6.0.0.0)

Inspect symbols in placed report tables are now sorted by the inspect number.

Switching between configurations via the UI (6.0.1.0)

Inspect lets you create different configurations with separate sets of symbol and table definitions as well as view settings. In the current version, users can switch between the configurations via the Inspect interface, without having to open the Editor.

Bug fix for switching between the Placement and Overview tabs (6.0.2.0)

Switching to the *Overview* tab used to reduce the size of the Inspect window, which disrupted usability. This bug has been fixed.

















Multiple selection when defining the overview table (6.0.2.0)

In the *Overview* tab of Inspect Editor, you can select multiple table columns to be hidden or displayed in one step.

Use of symbols with groupings (6.0.2.0)

You can use symbols with groupings to place specified variants of a symbol with Inspect. To use symbols with groupings, create a separate inspection symbol definition for each required symbol variant. The inspection symbol definition is assigned specific grouping settings in addition to the symbol file.

This feature allows, for example, to place symbols with different pointer directions or with different texts.

		Preview	Name	Grouping
			 Ford - Could be critical	COULD_BE_CRITICAL;
			 Ford - Could be special	COULD_BE_SPECIAL;
			 Ford - Critical Characteristic	CRITICAL_CHARACTERISTIC;
			 Ford - Special Characteristic	SPECIAL_CHARACTERISTIC;

Additional parameters as variable texts on symbols (6.0.2.0)

To enhance an inspection symbol with additional information, you can define supplementary variable texts on the symbol you use. These texts will be displayed as parameters, that is, table columns in Inspect. You can assign the values of drawing or model parameters to the variable texts dynamically (with automatic update) or statically (at a fixed point in time).


2.7 GENIUS TOOLS Value Transfer

Unlock multiple models (6.0.0.0)

In Value Transfer, several models can be marked and unlocked in one step.

Table of results

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valid	name	() CUSTOMER	() PROJECT_NO	<-> DIAMETER	CATEGORY
<input type="checkbox"/>	CRI_D912M2L6<CRI_DIN912>.prt	-	-	20	
<input type="checkbox"/>	CRI_D912M3L16<CRI_DIN912>.prt	-	-	20	
<input type="checkbox"/>	CRI_D912M3L20<CRI_DIN912>.prt	-	-	20	
<input type="checkbox"/>	CRI_D912M3L30<CRI_DIN912>.prt	-	-	20	
	Unlock model CRI_DIN912>.prt	-	-	20	

Process

Multiple unlocks

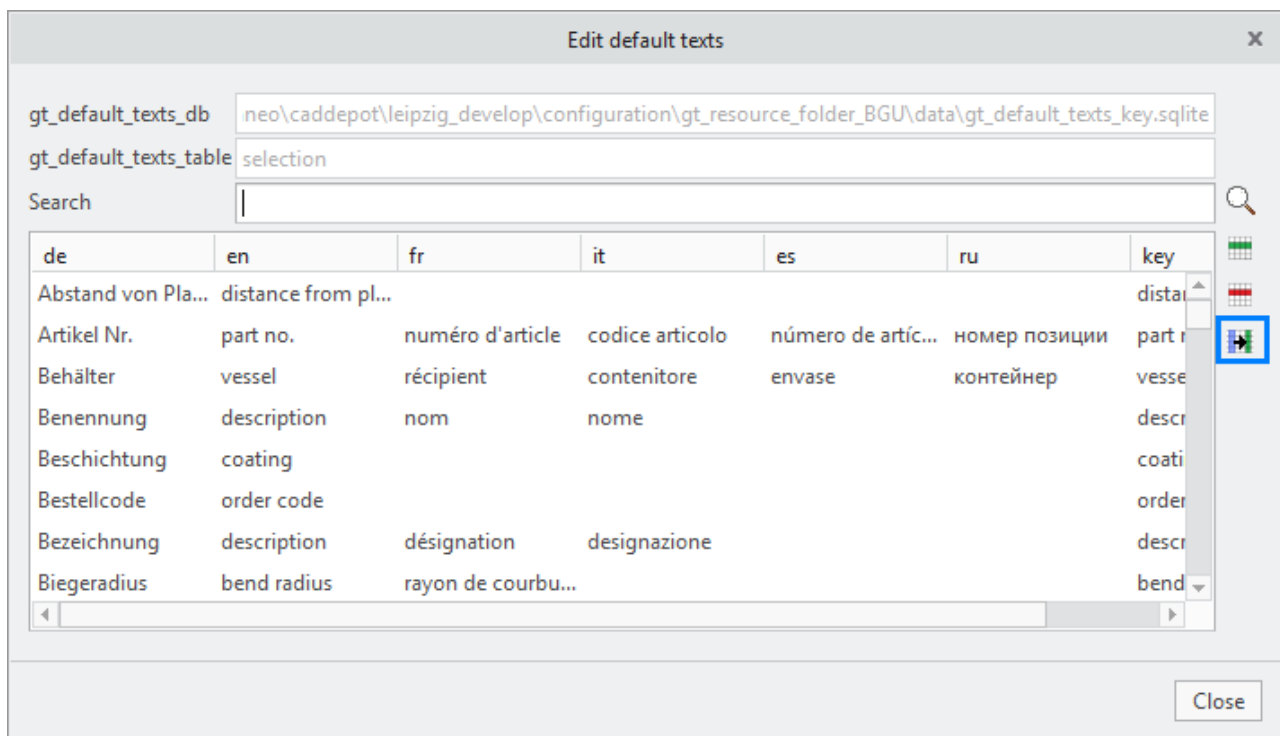
Highlighting of restricted parameters (6.0.1.0)

Parameters and dimensions that are controlled by a relation are highlighted in yellow in the result table. Parameters with access restrictions are also highlighted in yellow.

2.8 GENIUS TOOLS Utilities

Enhancement of the Standard Text Editor (6.0.0.0)

In the editor for managing standard texts, values from one column (language or key) can be copied to another column.



Button for copying column values

GT Points - Remove multiple definitions of points (6.0.0.0)

Points selected more than once (via direct selection or group selection) can be filtered from the output. If activated, only the first selection of a point is written into the PTS-file.

GT Table to Excel - New configuration options (6.0.0.0)

You can now deactivate the check for a running excel-instance (`gtu_table_to_excel_run_check`). Also you can define whether a newly exported Excel file should be opened automatically (`gtu_table_to_excel_open_export`).

GT Points - Select pattern (6.0.1.0)

The *Points* tool for exporting PTS files has been enhanced so that you can now select single-level patterns for export.

Standard Toolkit Commands for opening the current Windchill Commonsense and Workspace (6.0.1.0)

The current version includes toolkit commands so that you can display buttons in the Creo toolbar for opening the current Commonsense and the current Workspace.

New CS Assembler module (6.0.1.0)

Please note: CS Assembler is only available with subscription licences for GENIUS TOOLS for Creo.

CS Assembler is a tool for automatically adding a number of components to an assembly.

The target assembly and the component models have to have corresponding coordinate systems defined. The assembling process works by fitting corresponding coordinate systems to each other.

The assembling instructions are defined in an XML file which assigns a target coordinate system in the assembly to each component model and submodel.

Automatic simplification of paths in the configuration editor (6.0.2.0)

In Configuration Utility, paths within the *gt_resource_folder* are simplified automatically on input by inserting the variable *%gt_resource_folder%*.

In this way, a path within the *gt_resource_folder* can be copied from an external source, for example from Windows Explorer, and the value stored in the configuration editor will be conveniently shortened.

Create tolerance table - bug fix for column headers (6.0.2.0)

The function *Create tolerance table* lets you define column header texts as configuration options. Using */n*, you can define line breaks in the column headers. In previous versions, the cell height was not adapted for multi-line headers. This bug has been fixed.

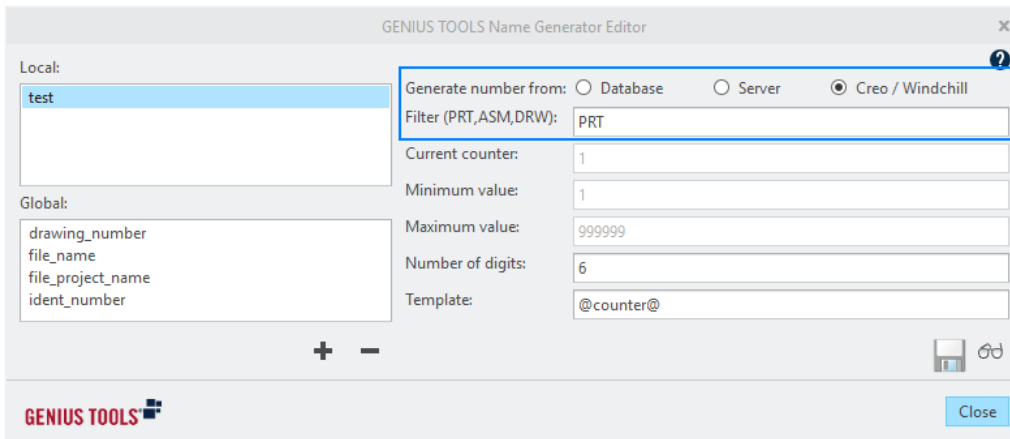
Additional information in point files (6.0.2.0)

When exporting point files (PTS) you can write the point names as well as IJK information into the exported files.

2.9 GENIUS TOOLS Name Generator

Request numbers from Windchill without a customization (6.0.0.0)

Numbers can now be requested from Windchill without installing a customization on the Windchill-Server. The functionality uses the currently connected server and the current Creo user.



Show model name for library objects (6.0.1.0)

When you select a name configuration for a library object, the file name is displayed in the title bar of the Name Generator. In this way, you can easily select the correct name configurations for a list of models to be copied together.

2.10 Configuration options

The following configuration options have been added, changed or deleted since version 5.0 M030:

2.10.1 New configuration options (6.0.0.0)

General

`gt_application_name_for_restart`

Defines the name of the application as in the creotk.dat.

Library

`gtl_green_color`

Defines the green color used in GENIUS TOOLS Library.

`gtl_yellow_color`

Defines the yellow color used in GENIUS TOOLS Library.

`gtl_red_color`

Defines the red color used in GENIUS TOOLS Library.

Utilities

`gtu_table_to_excel_run_check`

Defines whether to check for an open Excel instance.

`gtu_ui_change_show_info_color`

Defines the color for the text in GENIUS TOOLS Utilities Show Info.

`gtu_table_to_excel_open_export`

Defines whether a newly exported Excel file should be opened automatically.

`gtu_points_remove_double_selected_points`

Defines whether multiple selections of points should be removed from the saved file.

2.10.2 New configuration options (6.0.1.0)

Forms

`gtf_default_folder`

Defines the default folder location for data from GENIUS TOOLS Forms.

Assembly Report

`gta_struct_insert_space`

Defines the number of space characters used to indent each level in the structure view of a report table, taking a number from 0 to 10.

Utilities: Toolkit commands

`gtu_start_pdm_commands`

Defines whether the toolkit commands for opening the current Windchill Commonsplace and Workspace should be available.

Utilities: CS Assembler

Please note: CS Assembler is only available with subscription licences for GENIUS TOOLS for Creo.

`gtu_start_csassembler`

Defines whether the CS Assembler module should be available.

`gtu_csassembler_component_cs_name`

Defines the name of the coordinate system which is used to fit component models into the target assembly.

`gtu_csassembler_xml_path`

Defines the start path for selecting an XML file with assembling instructions.

2.10.3 New configuration options (6.0.2.0)

Library

`gtl_parameter_multiple_value_separator`

Defines a character that separates multiple values in parameters for library objects.

`gtl_tooltip_image_folder`

Defines the directory for library object images to be shown as tooltips on mouse-over.

`gtl_show_tooltip_image`

Defines whether tooltip images should be displayed on mouse-over in the Library Viewer (0/1).

`gtl_retrieve_run_batch`

Specifies the path to a batch file that should be called if Library has failed to retrieve a model. After the batch file has run, Library again tries to retrieve the model data. In the batch file, the variables `@name@` for the model name and `@path@` for the model path can be used.

Forms

`gtf_external_data_folder`

Defines the directory for lists of data for selection lists and variant tables to be managed as CSV files.

Utilities

`gtu_points_write_ijk`

Defines whether IJK information should be written into exported PTS files.

`gtu_points_write_names`

Defines whether point names should be written into exported PTS files.

3 Copyright

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