

**GENIUS TOOLS**<sup>®</sup> 

# Startup TOOLS

Release 7.0.2.0

## Release information

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# 1 Important information

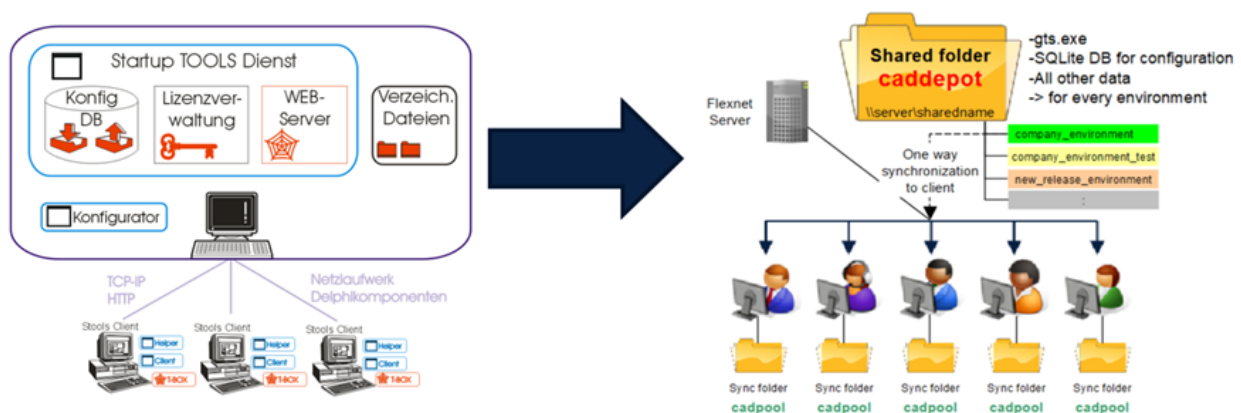
**Warning:** This document also contains separate release information sections on GENIUS TOOLS Starter and GENIUS TOOLS for Creo. Please take care to read the *Important information* sections for both products.

When updating the Startup TOOLS from an older version than Release 6.0, a migration process is necessary. There is a fundamental change in the software architecture. As of Release 6.0, the Startup TOOLS include the product GENIUS TOOLS Starter as configuration solution. The conversion results in additional effort in the update planning and execution.

**Please note:** Please refer to the document *Startup TOOLS Migration to version 6.pdf* for information on the impact of the new version.

The most important changes in philosophy are:

- Conversion from network drive to synchronization
- License conversion to standard technology FLEXNET



*New architecture without network drive: Everything is synchronized locally.*

## Advantages of the new Startup TOOLS 6.0

- Any number of Startup TOOLS releases and versions can be used in parallel in different operating environments.
- Operating environments can also be created as production, test, development or other environments.
- All relevant data is stored locally and is synchronized with the server. This has the following advantages:
  - Fastest possible Creo Parametric start.

- Business units with slow network connection can be included without parallel installations (e. g. at distributed locations).
- Convenient offline operation.
- Standard licensing via FLEXNET, licenses can be borrowed.
- Simple message system from administrator to user.
- Additional PTC desktop applications can be launched.

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**Tip:** The migration / update process can be performed in parallel. This means that the previous Startup TOOLS installation can still be used!

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## Updating to Startup TOOLS 7.0

- The set up requires .NET Framework 4.8.
- There is a new service for synchronizing data from the caddepot directory (of the administration computer) to the cadpool directory (of the user computer). It allows for faster data synchronization. If you plan to use the new service you need to install it on the computer with the caddepot.

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**Warning:** Use GENIUS TOOLS Environment Administrator for updating software in the operating environment but note that you have to update data in the configuration and data directories manually. When transferring files from the installdpot to the operating environment check for each file whether it affects the operating environment. Check specifically any changes in the resource folder `.\configuration\gt_resource_folder` when updating GENIUS TOOLS for Creo.

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## Functions depending on license type

Starting with Startup TOOLS 6.0.1, the product functionality depends on the type of license you are using. Find the list of functions that are limited to subscription licenses in the chapters "Important Information " in GENIUS TOOLS Starter and GENIUS TOOLS for Creo respectively.

## 2 Hardware and software requirements

GENIUS TOOLS Starter works on all computers that fulfill the requirements for Creo 4.0 to Creo 7.0.

	<b>GENIUS TOOLS Starter</b>	
<b>Version</b>	<b>6.0</b>	<b>7.0</b>
Operating system	64-bit only Windows 10 / 8.1 / 7	
.NET Framework	4.6.2 Delivered with Windows 10 -1607 (+8.1; +7) (May have to be installed separately on WIN7/8.1)	4.8 Delivered with Windows 10 -1903 (+8.1; +7) (May have to be installed separately on WIN7/8.1)
Minimum screen resolution	X=1280 Y=1024	
Flexnet	INNEO Licence Manager 1.0 M050 (Flexnet) and later	
Caddepot directory (Central storage location with UNC access)	circa 1 to 5 GB for each operating environment	
Cadpool directory (Storage location on the application computer)	Sufficient storage space to set up at least one operating environment	
Data synchronization using GENIUS TOOLS Starter Service	-	Windows computer where the Caddepot directory is located and where a service can be installed.
Operating satellites using GENIUS TOOLS Starter Service		Communication port for REST API on main server and satellites. Standard: 8092

	GENIUS TOOLS Starter	
		Satellites need the same storage space as the main server.

## Supported desktop applications

### 1. Programs starting with project configuration

- Creo 2.0-7.0
- Parametric
- Simulate
- Direct
- Layout
- Options Modeler

### 2. If installed, these programs will start automatically (autostart):

- Creo Illustrate
- Creo Schematics
- Mathcad Prime
- Creo Elements/Direct
- KeyShot
- Geomagic Design X

## Caddepot

Read access: All users need read access to the Caddepot for synchronization to work.

Write access: For some functions users need write access to individual directories of an operating environment in the Caddepot.

- GENIUS TOOLS Starter App feedback on the last synchronization  
... \serveronly\SyncResults\
- Central user configuration files  
... \userdata
- Common databases for GENIUS TOOLS for Creo name generation (has to be configured manually)  
... \serveronly\gt\_numgen

Warning: This functionality cannot be used offline.

## Cadpool

Read / write access: The user needs full write access to the local Cadpool for synchronization to work.

## Client computers

Write access: Write access needs to be granted to the following Creo installation directories

- if more than the standard key (e.g. *parametric.psf*) or the synchronization of the start key is wanted: to the directory that contains Creo startkeys,
- if the files *config.sup*, *config.pro*, *creo\_parametric\_admin\_customization.ui* need to be adapted: to the directory *..\CommonFiles\text*

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**Please note:** If Creo is installed into the Windows default program directory, you should not make any changes with GENIUS TOOLS Starter App. Install Creo into another directory, for example *C:\ptc*.

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## 3 GENIUS TOOLS Starter

GENIUS TOOLS Starter is the new configuration component of the Startup TOOLS for version 6.0 and later.

GENIUS TOOLS Starter is a separate software that can start local applications such as Creo Parametric using a central configuration, as well as synchronize data to the local computer.

You do not have to install GENIUS TOOLS Starter on the application computers. The clients only have to provide storage for the synchronized copies.

The local GENIUS TOOLS Starter App will update automatically from the central Caddepot directory.

The combination of a local application with a centrally-managed configuration is called a project. Whether a project is visible to a user is determined by the client setup as well as user permissions in GENIUS TOOLS Starter.

### Example project contents

- Creo release
- Startkey
- *config.pro*
- \*.iu
- Batch files
- Additional applications
- Files
- Drawing frames, symbols, UDF

All projects and data are managed within a operating environment. A operating environment corresponds to an individual Startup TOOLS installation from a prior version. You can now use any number of operating environments in parallel, for example to have a test and production environment.

### GENIUS TOOLS Starter package

- GENIUS TOOLS Starter App. The GENIUS TOOLS Starter App is the interface for the user, who can start the projects configured by the administrator.
- GENIUS TOOLS Project Configurator. GENIUS TOOLS Project Configurator is the tool for the administrator for configuring projects that the user can then start using the GENIUS TOOLS Starter App.

- GENIUS TOOLS Environment Administrator. GENIUS TOOLS Environment Administrator is the tool for the administrator to manage operating environments.

## 3.1 Important information

### GENIUS TOOLS Starter: Error in software update

When updating GENIUS TOOLS Starter on user computers, the file *Update.bat* can in some instances not be executed correctly. In this case, GENIUS TOOLS Starter App cannot be opened.

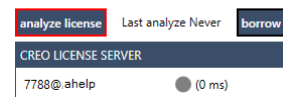
If you encounter this problem, open the file *GTS.exe* from the Caddepot of the installation computer (`\\<server name>\CADDEPOT\<operatingenvironmentname>\software\GTS.exe`). This triggers a new installation.

The update mechanism has been renewed in version 7.0.2. so that no problems will occur when updating from version 7.0.2 to higher versions. (See [New features in version 7.0.2](#))

### GENIUS TOOLS Starter App: Query on the availability of licenses and license servers has changed (new feature in version 7.0.1.0)

The license analysis no longer takes place automatically when GENIUS TOOLS Starter App is opened or updated. Only after clicking the *Analyze License* button in the Licenses tab will up-to-date information on the accessibility of Creo license servers be displayed together with information on all available licenses and extensions for the selected project. (See Free column). Also, the time passed since the last analysis is shown.

Info Licenses Config



The Analyze License function can be disabled by the administrator. Read more in [New features in version 7.0.1.0](#)

### GENIUS TOOLS Project Configurator: Behavior of license settings changed (7.0.2.0)

The following options can no longer be used. Please check your licenses.

The selection fields *Display Creo startkeys* and *Mode* have been deleted:

#### 1. *Display Creo startkeys* in the *Licenses* tab (*Projects > Licenses-tab*)

Startkeys available for selection for a project can either be only the startkeys set for this project or include startkeys set for higher-ranking groups or units.

**No selection (default):** Users can select from the startkeys generated by the general hierarchy.

**Additive:** User can choose from these startkeys as well as startkeys from superordinate groups and unit that contain the project.

**Overwrite:** User can choose from these startkeys. Startkeys from superordinate groups and unit are disregarded.

## 2. Mode in the section *Creo license servers (Configuration > Creo Settings > Application)*

The license server selected above can differ from the information in Creo startkey. Define here, how the selected Creo license server shall be used.

**No selection:** Same as option *PSF file (default)*.

**Overwrite:** The selected Creo license server overwrites the information from Creo startkey (PSF file.)

**Prepend:** The selected Creo license server is queried first. If it is not available, the license server set in the Creo startkey are used.

**Append:** The selected Creo license server is queried last, i.e. only if the license server(s) in the Creo startkey is/are unavailable.

**PSF file (default):** The license server(s) set in the Creo startkey are used.

## Different functionality depending on license type

Starting with version 6.0.1, perpetual licenses and subscription licenses come with different product functionality. The following functions will only be available with a subscription license.

The following functions are available with a subscription license for GENIUS TOOLS Starter.

Release	Function / module	Description
6.0.1.0	Dynamic access to Windows user management with LDAP/Active Directory (lightweight directory access protocol)	Creates access to Windows user management and enables live queries so that user assignment is always up-to-date. Users thus do not have to be created and maintained manually. ⇒ Less maintenance work
6.0.1.0	Configuring units	Adds a group element ("unit") that can easily reflect complex configurations such as for company sites and units. ⇒ Easier configuration for companies with many sites and/ or units ⇒ Allows for a reduction of projects

Release	Function / module	Description
6.0.1.0	Access to directory "users"	<p>Adds a group element ("users") that can easily reflect complex configurations for many users.</p> <p>⇒ Less maintenance work</p>
7.0.0.0	Selecting Creo startkey when starting a project	<p>Provides a project with a choice from several Creo startkeys (start command that opens Creo with a defined license package). Users can start a project with a default startkey or select another one when opening a project in GENIUS TOOLS Starter App.</p> <p>⇒ Allows the reduction of projects</p>
7.0.0.0	Apps projects	<p>Creates projects that run on any other program. Assigning a project directory and batch files is possible.</p> <p>⇒ GENIUS TOOLS Starter App can be made the central access point for users.</p>
7.0.1.0	Operating satellites in GENIUS TOOLS Starter Service	<p>Enables the connection of satellite servers to a main server and their automatic synchronization.</p> <p>⇒ Faster connection of user computers to a synchronized satellite server</p> <p>⇒ Reducing queries from network to main server</p>
7.0.1.0	Edit and compare config*.pro files.	<p>Release-dependent config.pro editor and graphic comparison tool</p> <p>⇒ Quick overview, comparison and editing of project-related config.pro files</p>
7.0.2.0	Company-specific project groups	<p>Start projects can be put together in defined project groups by the administrator.</p> <p>⇒ In many projects, these can be structured according to your own requirements.</p>

**Warning:** If you are using mixed licenses (perpetual and subscription) and configure functionality that is limited to subscription licenses, the projects in GENIUS TOOLS Starter App will no longer start if there is no subscription license available.

## Environment variables for use in mapkeys (new feature in version 6.0.2.0)

Starting with version 6.0.2.0 variables in configuration files are resolved. This means mapkeys that use environment variables with path specifications do not function anymore.

We therefore introduced new variants of environment variables to which escape characters are added. This prevents the variables from being erroneously resolved in mapkeys and so their use can be continued in mapkeys and elsewhere. The new variables have the suffix `_ESCAPED`:

- GTS\_DATA\_ESCAPED
- GTS\_ROOT\_DIR\_ESCAPED
- GTS\_SERVER\_DIR\_ESCAPED
- GTS\_SERVERONLY\_DIR\_ESCAPED
- GTS\_PLOT\_CONFIG\_DIR\_ESCAPED
- GTS\_TRAIL\_DIR\_ESCAPED
- GTS\_USER\_CONFIG\_DIR\_ESCAPED
- GTS\_UNIT\_DIR\_ESCAPED

## Changes to the configuration concept starting with version 6.0.1.0

In Version 6.0.1.0 the way configuration files determine project settings has changed.

### Configuration changes for all license types

All files that were previously used from the `..\configuration\projects` directory now have to be placed in the `..\configuration\standard` directory. This affects batch files (*start/stop\*.bat*), Creo configuration files (*config\_\*.pro/sup; \*.ui*), and GENIUS TOOLS for Creo configuration files (*\*.cfg*).

All files under `..\configuration\projects` will be copied to `..\configuration\standard` when you update from version 6.0.0 or migrate from a 20xx version. The entry in the *gt\_main.cfg* under `..\apps\gtfc\conf` will be set to  
*gt\_conf\_unit=%GTS\_ROOT\_DIR%\configuration\standard.*

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**Please note:** Remember to check the *gt\_main.cfg* after the update if you are not using a default installation.

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**Warning:** Check your batch files for references to the directory  
`..\configuration\projects` and change them to `..\configuration\standard`.

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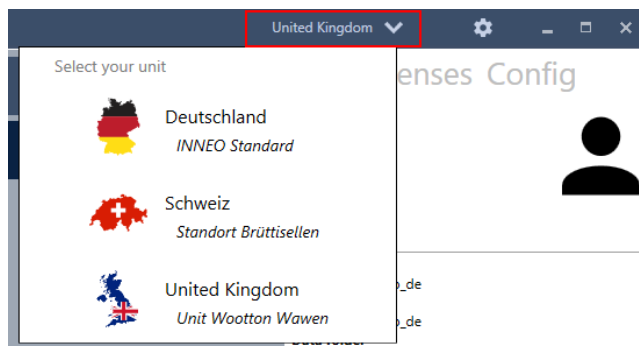
The directory structure of an operating environment will contain the following new directories.

..\configuration\standard	Purpose and content match the previous ..\configuration\projects directory.
..\configuration\units	Can contain a subdirectory for each unit that houses additional batch and configuration files.
..\configuration\users	Can contain a subdirectory for each user (the directory name is the Windows user name) that houses additional batch and configuration files.

### Configuration using units for subscription licenses

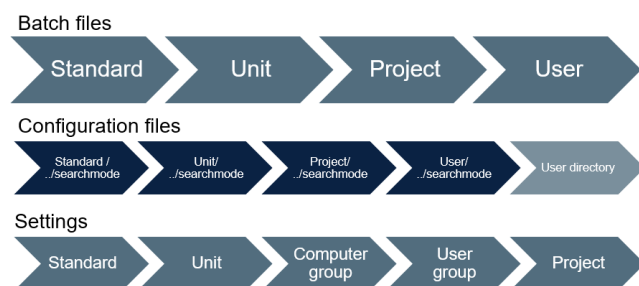
If you are using a subscription license, you can configure two additional layers for batch files and Creo configuration files: Units and Users. In larger installations, this makes it easier to configure different settings for different locations or business units.

A unit can be used to represent different concepts such as geographical or team assignment. If a user has access to multiple units, they can select their unit in the GENIUS TOOLS Starter App.



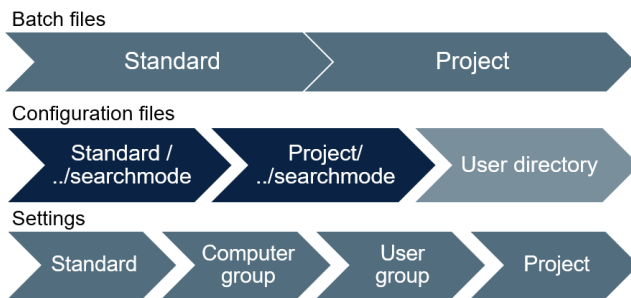
*Unit selection*

The following figure shows a schematic representation of the new configuration concept.



*Configuration concept from 6.0.1*

For reference, this is a schematic representation of the previous concept.



*Configuration concept 6.0.0*

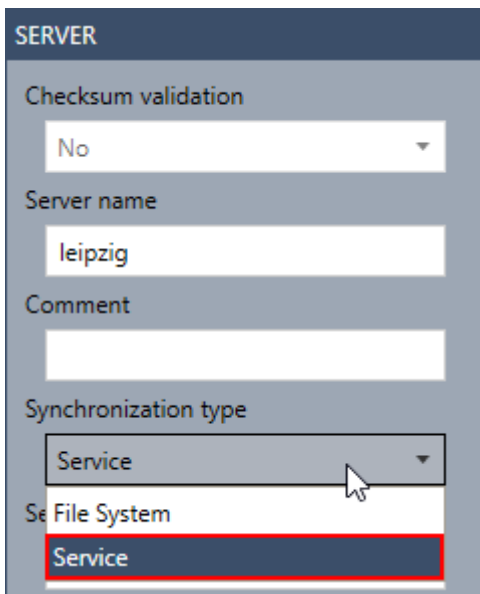
## 3.2 New features in version 7

### New service: GENIUS TOOLS Starter Service for faster data synchronization (7.0.0.0)

GENIUS TOOLS Starter Service is a service for faster data synchronisation between the caddepot directory of the installation computer and the cadpool directory of the user computer. The service checks files for changes and synchronizes only these changes instead of synchronizing all files. This reduces the synchronization time significantly and will be especially useful when connection speed is slow.

GENIUS TOOLS Starter Service can be installed on the installation computer with the software update to version 7.0.0.0 and later versions. It will be located in the *gts-service-latest* directory in the installdpot and will be updated automatically to the latest version. The service checks the caddepot for changes and writes these changes into the zip file *gts\_filetree\_structure.zip* in the operating environment.

After installing GENIUS TOOLS Starter App you need to open GENIUS TOOLS Project Configurator and switch the synchronization type to *Service* in *Configuration > Synchronization > Server*.



**Tip:** If you have not installed GENIUS TOOLS Starter Service during setup, start the file *registerService.cmd* in the directory *gtsa-service-latest* for installation. Administration rights are needed.

## New type of project: Apps projects (7.0.0.0)

An administrator can now offer users projects that run on any other program or just quick access to a single file. GENIUS TOOLS Starter App can thus be made a central access point for users.

Projects running on other programs are created and managed in the project lists in the menu item *Apps*. This opens a dialog with the following, simplified settings: general project settings, complete start command, startup directory, data directory and project directory where project-specific batch files can be stored.

## New resource: managing different license packages with Creo startkeys (7.0.0.0)

The main menu *Resources* now includes the possibility to create and manage Creo startkeys. A startkey is a configured start command that opens Creo with one or several defined licenses or license extensions. Startkeys can be managed in GENIUS TOOLS Project Configurator after creating them in the PTC installation assistant (when setting up or reconfiguring Creo) as PSF files in PTC's *bin* directory.



## Creo startkeys: Possibility to provide users with a selection of several startkeys (7.0.0.0)

Creo startkeys can be assigned to the standard settings, groups, units or individual projects in the new tab *Licences*. The tab is found directly in the main menu *Projects* and – for groups, units and standard – in *Configuration > Creo settings*.

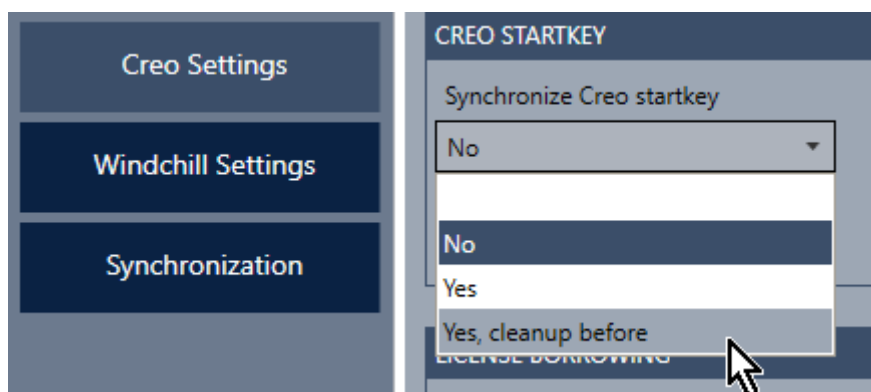
An administrator can provide users with a selection of several Creo startkeys for a project so that the quantity of projects can be minimized.

If several startkeys are made available to a project, users can select one of them in GENIUS TOOLS Starter App. Projects with a selection of startkeys can either be defined to have a startkey set on default or reuse the startkey that was last selected by the user.

In addition administrators can specify whether the startkeys to choose from should only be those assigned to the project or group or also include those from groups or units of higher order. Thus the choice of license packages can either be extended or be completely overwritten. (See behavior in the *Licences* tab: Additive vs Overwritten).

## Creo startkeys: cleaning up and synchronizing before starting a project (7.0.0.0)

There is a new option for synchronising Creo startkeys (start command). In the dialog *Configuration > Groups > Creo settings > Synchronize Creo startkeys* Creo startkeys can now be deleted from PTC's bin directory of the relevant Creo version, except *cocreatesim.psf* and *gts.psf*. This allows you to use startkeys with different license servers.



## Creo startup settings: enforcing data synchronization before project start (7.0.0.0)

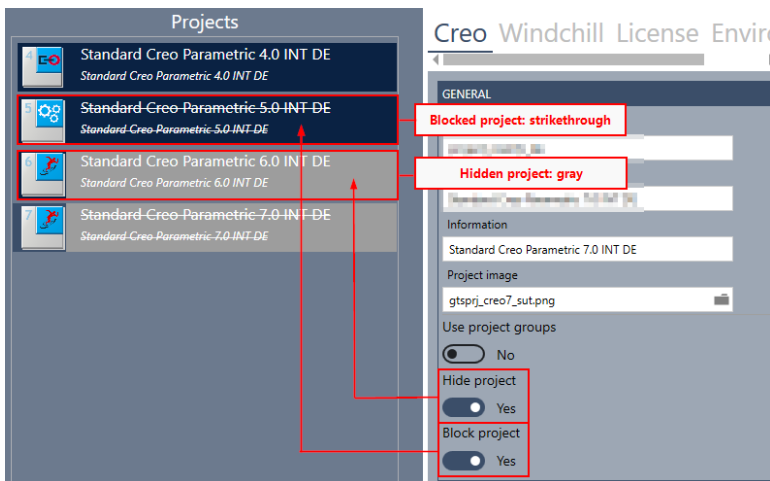
The behavior of Creo at project start can be changed so that all data is synchronized with project start, i. e. independent of the set synchronization interval. In the main menu *Configuration* go to *Creo settings > Synchronize with project start* and select:

**No (default):** No data is synchronized before opening a project.

**Yes:** Data is synchronized before project start, i. e. the following subdirectories in the *configuration* directory: *plot*, *standard*, *units*, *projects* and *users*.

## Projects in GENIUS TOOLS Project Configurator: improved status display (7.0.0.0)

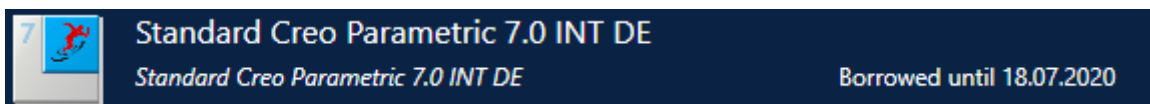
The status of a project can be better spotted: Blocked projects are displayed in gray in GENIUS TOOLS Project Configurator, hidden projects are stroked through. (In *Projects* > *Application Type* > *Projects* > *Tab: Creo* > *Block: General*.)



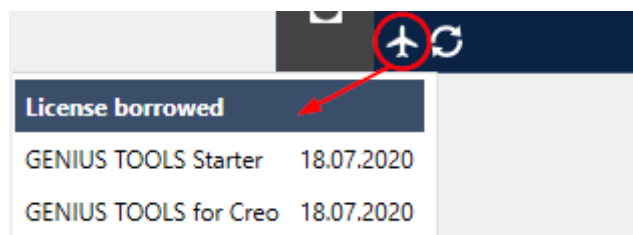
A hidden project is a project that is not listed in GENIUS TOOLS Starter App, but can still be started using a start parameter. A blocked project, by contrast, cannot be started using a start parameter.

## Projects in GENIUS TOOLS Starter App: improved display for license borrowing (7.0.0.0)

In the main window of GENIUS TOOLS Starter App projects with a borrowed license can now be quicker recognized by the note on the right which informs about the period a license is borrowed.



In the footer you can view in the tooltip of the plane button which GENIUS TOOLS licenses have been borrowed and for how long.



## GENIUS TOOLS Starter Service: Working with satellites (7.0.1.0)


With GENIUS TOOLS Starter 7.0.1.0 the data synchronization of GENIUS TOOLS Starter Service can be operated with satellites. The status of one or more working environments of a central main server is mirrored on a satellite.

Locations that have a slow connection to the main server can access a more accessible satellite instead. This significantly reduces the time needed for data synchronization.

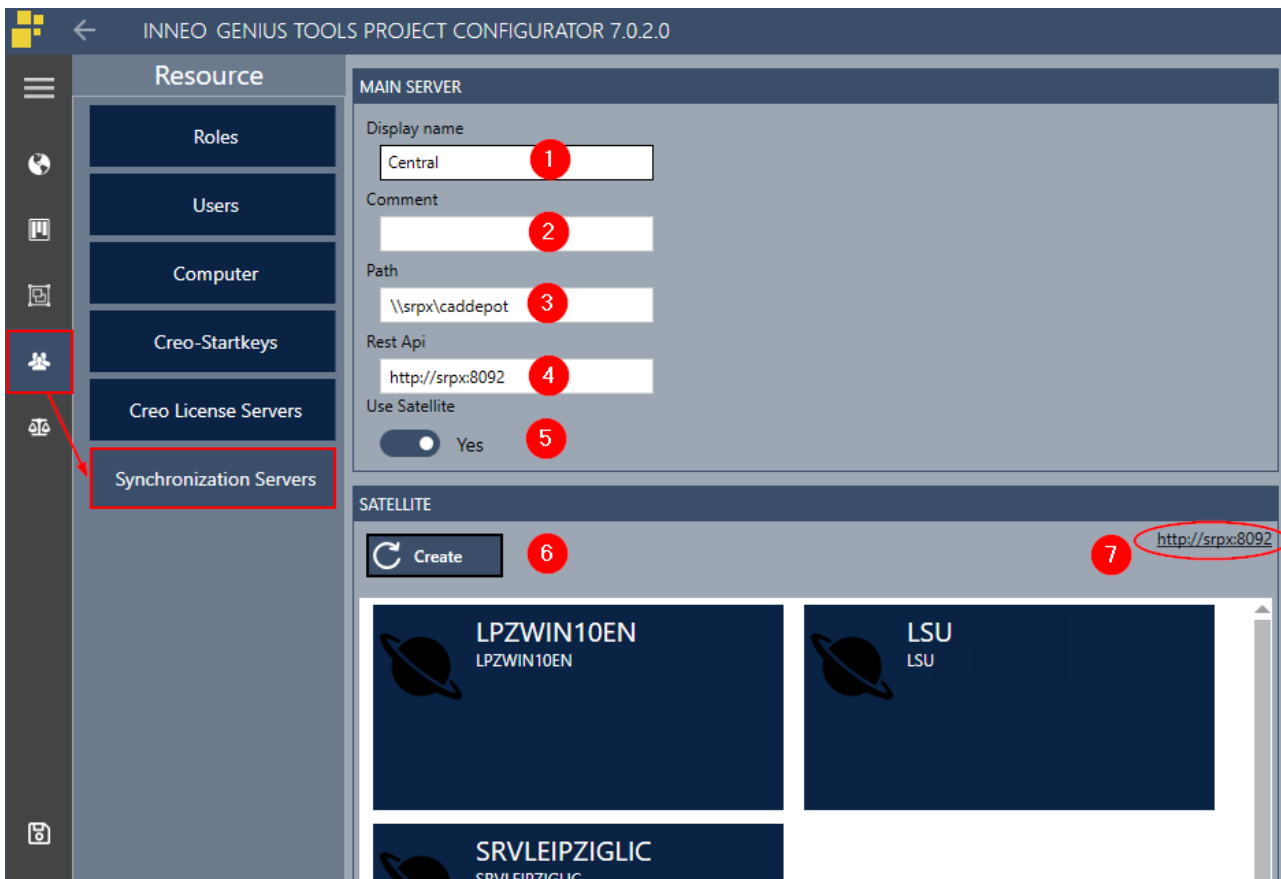
GENIUS TOOLS Starter App automatically determines which satellite or main server responds fastest based on the ping runtime. This is then used for synchronization.

Read the document *GENIUS TOOLS Starter Installation.pdf* > chapter GENIUS TOOLS Starter Service for information on how to set up satellites.

## GENIUS TOOLS Project Configurator: New resource synchronization servers (7.0.1.0)


In the *Resources* page  you can add synchronization servers that have been installed by using GENIUS TOOL Starter Service. (See above paragraph.)

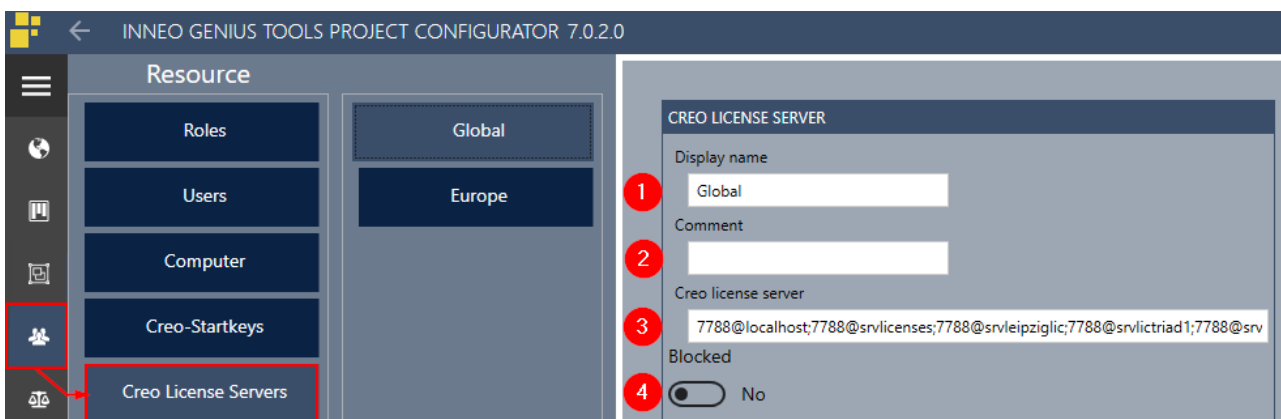
Fields 1-3 (Display, Comment, Path) show the information entered in the GENIUS TOOLS Environment Administrator. The Web URL (4) is taken from the configuration file you created for GENIUS TOOLS Starter Service. The action *Create* (5) connects GENIUS TOOLS Starter to GENIUS TOOLS Starter Service and displays all current satellites.



Linking satellites to GENIUS TOOLS Starter

## GENIUS TOOLS Project Configurator: New resource Creo license servers (7.0.1.0)

In the *Resources* page  you can group one or several license servers as one resource which you can then assign to a project, unit or group.

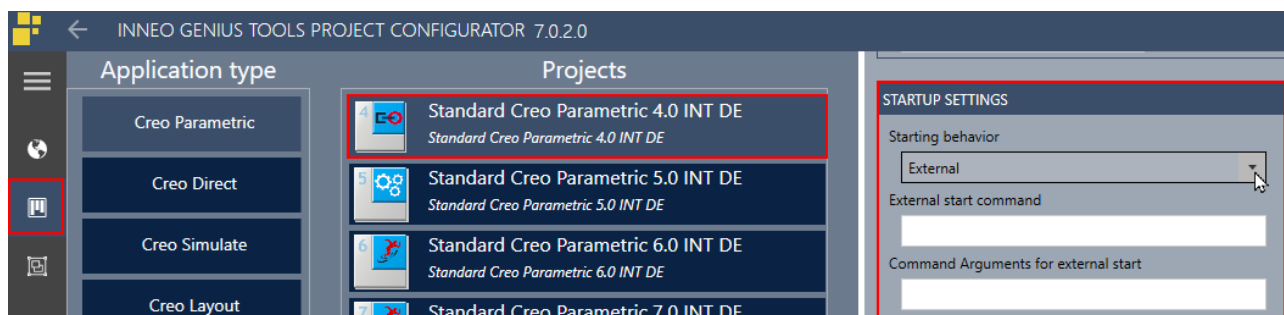


Managing Creo license servers in Resources

## GENIUS TOOLS Project Configurator: Open projects with external application (7.0.1.0)

GENIUS TOOLS Starter offers the possibility to open a Creo project with a user-defined command. You can use this option, for example, to link Creo projects with SAP (SAP Engineering Control Center interface to PTC Creo).

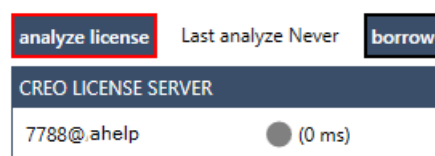
To use other applications that start a Creo project, change the start behavior of the project from Creo to External. (*GENIUS TOOLS Project Configurator > Projects > Creo tab > Startup behavior*)



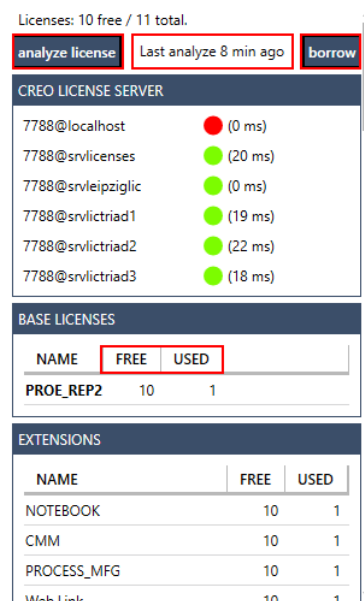
## GENIUS TOOLS Starter App: Query on the availability of licenses and license servers has changed (7.0.1.0)

The license analysis no longer takes place automatically when the GENIUS TOOLS Starter App is opened or updated. Only by clicking the *Analyze License* button will information on the accessibility of Creo license servers be listed as well as all available licenses and extensions for the selected project. (See Free column). Also, the time passed since the last analysis is shown.

### Info Licenses Config



### Info Licenses Config

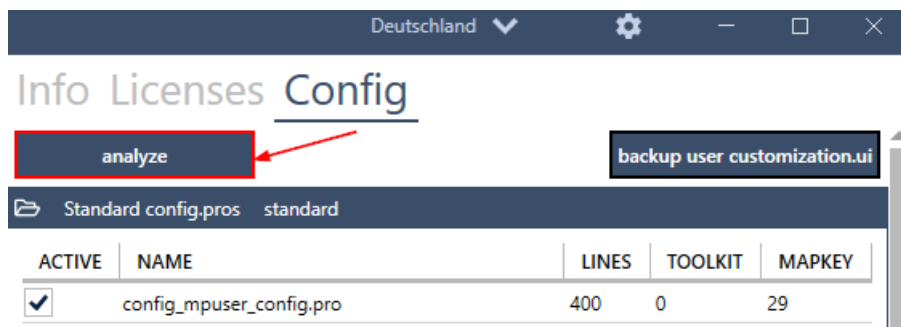


## GENIUS TOOLS Starter App: Disabling Analyze License function (7.0.1.0)

The *Analyze License* function can be disabled by the administrator. This will also delete details of the required license servers in the Licenses tab.

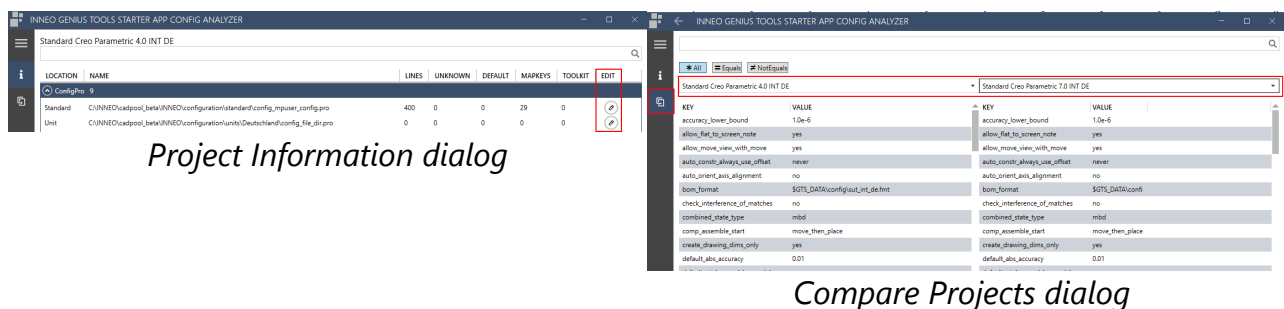
The display of Creo license server can be hidden together with the *Analyze License* function (1) in GENIUS TOOLS Project Configurator under *Access Rights > Function Access > Select: Access Group > Section: Function Access > Can see licenses*. Make sure that the option *Show Licenses in Configuration > Creo Settings > Tab: Application > Section: Licenses* is also set to Yes.

## GENIUS TOOLS Starter App Config Analyzer: analyze configuration files (7.0.1.0)



On the left of the Config tab the button analyze (1) opens GENIUS TOOLS Starter App Config Analyzer. In the *Project Information* dialog this tool lists all configuration and batch files that are need for a project as well as their locations. You can click on a file and edit it directly in the editor of the analyzer tool.

The dialog *Compare Projects* allows you to directly compare the configuration settings of two projects.



## GENIUS TOOLS Starter Service: using passive satellites (7.0.2.0)

Passive satellites are an alternative to working with active satellites. No server needs to be operated and no service needs to be added. The state of one or more working environments of a central main server is mirrored on a storage location of a computer (net share) without installing GENIUS TOOLS Starter Service. This reduces the network load.

Locations with a slow connection to the main server can instead access the more accessible passive satellite. This significantly reduces the time for data synchronization. GENIUS TOOLS Starter App automatically determines, based on the ping runtime, which satellite or main server responds fastest and uses this for synchronization.

Read the installation instructions for passive satellites in the document *GENIUS TOOLS Starter Installation.pdf* > chapter GENIUS TOOLS Starter Service.

## GENIUS TOOLS Starter Service: Initiate synchronization and stop service (7.0.2.0)

There are new functions in the web overview of GENIUS TOOLS Starter Service, which lists the satellites.

1. Sync: synchronize a satellite immediately regardless of the configured interval,
2. Restart: restart GENIUS TOOLS Starter Service on active satellites and
3. Stop: end GENIUS TOOLS Starter Service on active satellites. This action requires the service to be restarted at the satellite server.

The screenshot displays the GENIUS TOOLS Starter Service web interface. At the top, it shows the INNEO logo and the title 'GENIUS TOOLS Starter Service'. Below the title, it indicates 'Number of services: 6'. The interface is divided into five columns, each representing a different server or satellite:

- Main server:** SRVSUTDEV. It shows Version 7.0.2.0, Start time (UTC) 22.02.2021 11:51:15, Status Running, Last update (UTC) 22.02.2021 11:35:04, and Net share \\SRVSUTDEV\caddepot: C:\inneo\caddepot.
- Active satellites:** Two columns are shown. The first is LPZWIN10EN, and the second is SRVLEIPZIGLIC. Both show Version 7.0.2.0, Start time (UTC) 22.02.2021 11:55:38 AM, Status Synchronizing, Remaining Files 199 / 16.9 MB, Last synchronization (UTC) 22.02.2021 11:56:31, and Net share \\LPZWIN10EN\CADDEPOT: C:\INNEO\caddepot. A red box highlights the 'Non-automated actions' section with buttons for Sync, Restart, and Stop.
- Passive satellite:** NAS-LEIPZIG. It shows Version 7.0.2.0, Start time (UTC) 22.02.2021 11:51:15, Status Running, Last synchronization (UTC) 22.02.2021 12:18:15, and Net share nas-leipzig: \\nas-leipzig\notinbackup \caddepot\_develop.
- Satellite unavailable:** SATINDIA. It shows Version 7.0.2.0, Start time (UTC) 03.02.2021 08:53:11, Status Shutdown, Last synchronization (UTC) 03.02.2021 13:28:20, and Net share \\SATINDIA\CADDEPOT: D:\inneo-gts-service\caddepot.

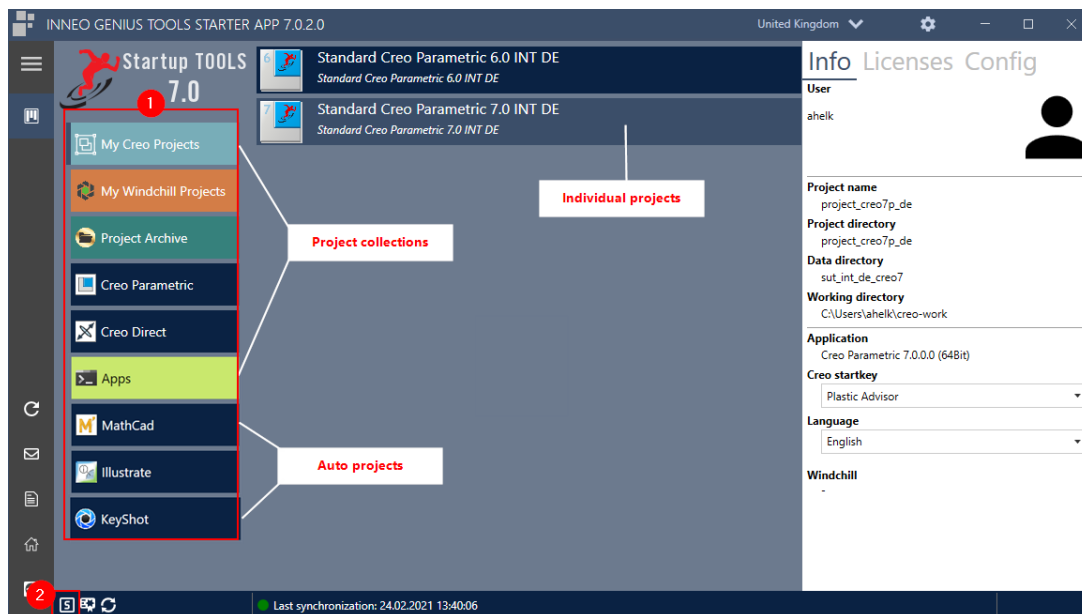
Browser window: Overview of Main server and all satellites

## GENIUS TOOLS Starter App: Changes to user interface (7.0.2.0)



Individual projects can now be organized into collections (1), which are displayed to users in GENIUS TOOLS Starter App. This is especially helpful for companies that work with many projects.

Additionally, auto projects are displayed in the new column. These are automatically generated projects that cannot be configured. Auto projects are generated from MathCad,

Illustrate, Creo Elements/ Direct Modeling, Creo Elements/ Direct Drafting, Schematics, Keyshot and GeomagicDesignX applications.



In addition, a new field has been added to the footer (2) that provides information about the status of the database.

-  Database requires a subscription license. Projects cannot be started when working with a permanent license.
-  Database has been created with a permanent license. It can be accessed by both permanent and subscription license.

## GENIUS TOOLS Project Configurator: Create project collections (7.0.2.0)

Individual projects can be combined in the new main menu item *Project Collections*. Project Collections are displayed to all users in GENIUS TOOLS Starter App. Within a collection, only the projects to which a user has access to are displayed. If a user does not have access to any of the projects, the button for the collection will not be displayed.

The order, both of the collections and of individual projects, can be set here using drag-and-drop. Each collection can be fitted with an individual color and an image.

There is a distinction between company-specific project collections, which can include any project, and application-specific project collections, which contain all projects of an application.

## GENIUS TOOLS Project Configurator: Behavior of license settings changed (7.0.2.0)

The following options can no longer be used. Please check your licenses.



The selection fields *Display Creo startkeys* and *Mode* have been deleted:

1. *Display Creo startkeys* in the *Licenses* tab (*Projects > Licenses-tab*)

Startkeys available for selection for a project can either be only the startkeys set for this project or include startkeys set for higher-ranking groups or units.

**No selection (default):** Users can select from the startkeys generated by the general hierarchy.

**Additive:** User can choose from these startkeys as well as startkeys from superordinate groups and unit that contain the project.

**Overwrite:** User can choose from these startkeys. Startkeys from superordinate groups and unit are disregarded.

2. *Mode* in the section *Creo license servers* (*Configuration > Creo Settings > Application*)

The license server selected above can differ from the information in Creo startkey. Define here, how the selected Creo license server shall be used.

**No selection:** Same as option *PSF file (default)*.

**Overwrite:** The selected Creo license server overwrites the information from Creo startkey (PSF file.)

**Prepend:** The selected Creo license server is queried first. If it is not available, the license server set in the Creo startkey are used.

**Append:** The selected Creo license server is queried last, i.e. only if the license server(s) in the Creo startkey is/are unavailable.

**PSF file (default):** The license server(s) set in the Creo startkey are used.

## GENIUS TOOLS Starter: New update mechanism (7.0.2.0)

The previous update mechanism, which was executed by the file *Update.bat* of the installed version, was faulty. With version 7.0.2, the software version that is to be installed takes over the update process. The file *Update.bat* in the *software* directory is replaced by the file *GTSUpdater.exe*.

## 4 GENIUS TOOLS for Creo

The following section contains information on news in GENIUS TOOLS for Creo.

### 4.1 Important information

#### License-dependent functions

Starting with GENIUS TOOLS for Creo 6.0.1, the product functionality depends on the type of license you are using.

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

Release	Function / module	Description
7.0.0.0	Load Save Converter	Converts Creo objects from previous Creo-, Wildfire- or Pro/ENGINEER versions to the currently used version. ⇒ Using models from older Creo versions
7.0.0.0	Inspect Revision	Stores all versions of inspection symbols on a drawing. Easily creates an overview of a revision history. (DIN 6770) ⇒ Revision history of inspection symbols
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. ⇒ Efficient construction of models
7.0.0.0	Extend Relations	Adds functions to model relations that define parameters for models and – in Creo 7.0 – also for bodies. ⇒ Efficient construction of models  GT_UpdateBodyParamMaterial: Body parameter retrieves material parameter  GT_CalculateBodyBoundingBox: Body parameter

Release	Function / module	Description
7.0.2.0		retrieves bounding box values
		GT_CalculateBoundingBox: Model parameter retrieves bounding box values
		GT_UpdateBodyParamMass: Body parameters are filled with body mass.
		GT_UpdateBodyParamVolume: Body parameters are filled with the body volume.
7.0.1.0		GT_DoubleToString: Rounds parameter values and converts the obtained numbers into strings. GT_Round: Rounds parameter values.
7.0.1.0	Select Surfaces By Color	Surfaces of the same color can be selected with one click and be colored or otherwise modified thereafter. ⇒ Efficient construction of models
7.0.1.0	CS Assembler	Automatically adds a number of components to an assembly by deploying a coordinate system (CS). ⇒ Efficient construction of assemblies
7.0.2.0	Extended Dimension Functions	Model dimensions can be increased or decreased very quickly with the mouse in a defined increment in the graphics window. ⇒ Efficient construction of models
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 in the first level has variants, these variants can be switched.

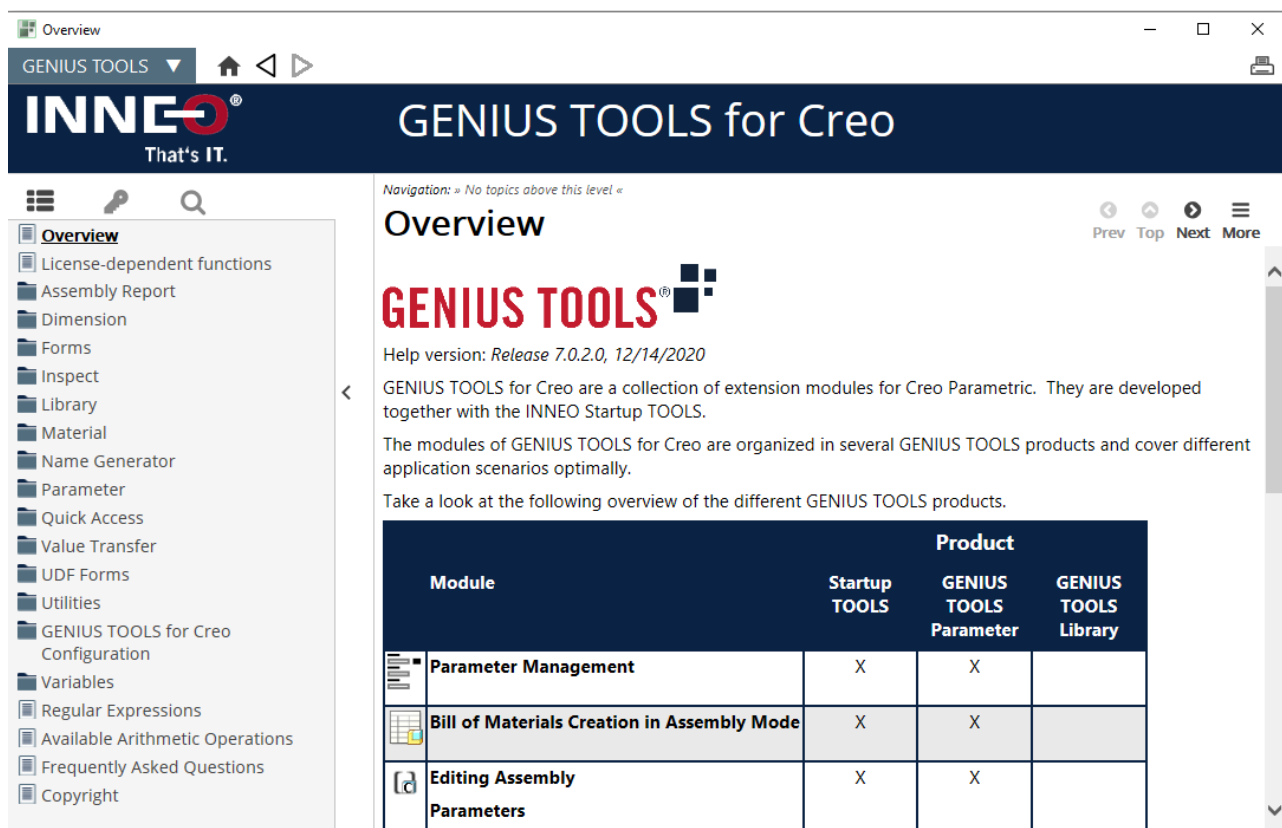
## 4.2 New features in version 7

### Program help: New format (7.0.2.0)

We have modified the internal program help for all components of GENIUS TOOLS for Creo. Instead of numerous separate HTML files which are displayed in a web browser, there is now only a single compact file that runs without any browser application. The new single file is a self-running Windows EXE file (*gtfc\_help.exe*) that contains both the publication data files as well as the application *eWriter Viewer*. This is a software from EC Software, the maker of the publishing software Help+Manual, which we have long used for publishing our help.

This format change reduces the time needed to synchronize data since the number of files falls from over 2,000 to just one.

Each call from the program to the help is displayed in the same window. The design is very similar to the familiar program help.

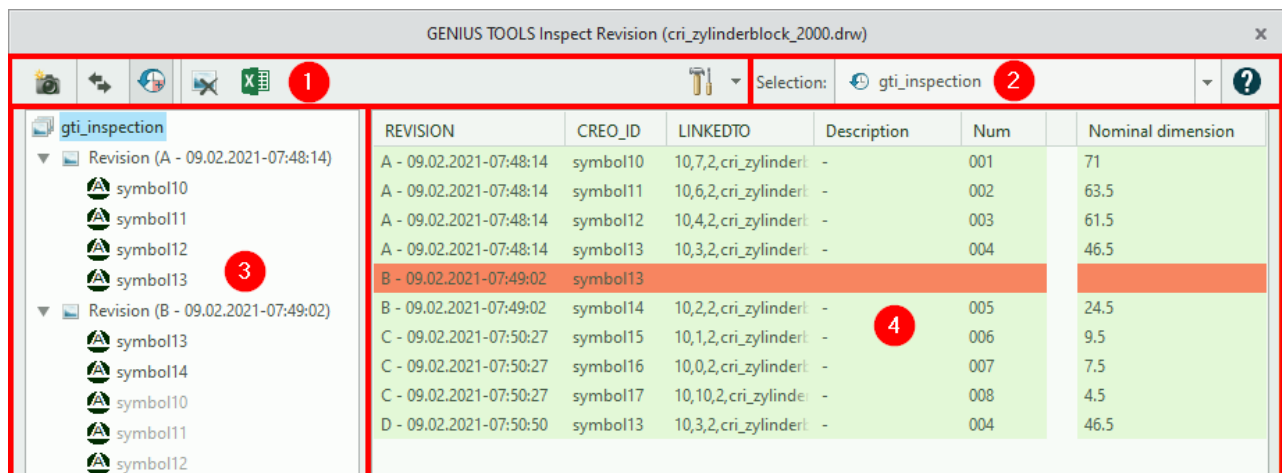


*Program help in the new eWriter format*

## 4.2.1 GENIUS TOOLS Inspect

### New component: GENIUS TOOLS Inspect Revision (7.0.0.0)

GENIUS TOOLS Inspect Revision allows you to create a snapshot of all inspection symbols on a drawing at a given time. Using a drawing revision parameter you can define the revision level of a drawing and generate a history of all revisions. Revision histories can be exported to Excel.



REVISION	CREO_ID	LINKEDTO	Description	Num	Nominal dimension
A - 09.02.2021-07:48:14	symbol10	10,7,2,cri_zylinder	-	001	71
A - 09.02.2021-07:48:14	symbol11	10,6,2,cri_zylinder	-	002	63.5
A - 09.02.2021-07:48:14	symbol12	10,4,2,cri_zylinder	-	003	61.5
A - 09.02.2021-07:48:14	symbol13	10,3,2,cri_zylinder	-	004	46.5
B - 09.02.2021-07:49:02	symbol13				
B - 09.02.2021-07:49:02	symbol14	10,2,2,cri_zylinder	-	005	24.5
C - 09.02.2021-07:50:27	symbol15	10,1,2,cri_zylinder	-	006	9.5
C - 09.02.2021-07:50:27	symbol16	10,0,2,cri_zylinder	-	007	7.5
C - 09.02.2021-07:50:27	symbol17	10,10,2,cri_zylinder	-	008	4.5
D - 09.02.2021-07:50:50	symbol13	10,3,2,cri_zylinder	-	004	46.5


User interface of GENIUS TOOLS Inspect Revision

**Please note:** GENIUS TOOLS Inspect Revision is only available with a subscription license for GENIUS TOOLS for Creo.

### GENIUS TOOLS Inspect Editor: Name of configuration file limited to 18 characters (7.0.0.0)

The name of the XML configuration file must not exceed 18 characters. Any configuration file that has been manually created with a longer name cannot be opened by GENIUS TOOLS Inspect. Older files with longer names have to be renamed manually.

### GENIUS TOOLS Inspect Revision: Show complete state (7.0.2.0)

There is a new button  in the command bar that displays all existing inspection characteristics at the time of the respective snapshot.

## 4.2.2 GENIUS TOOLS Library

### Compacting database (7.0.0.0)

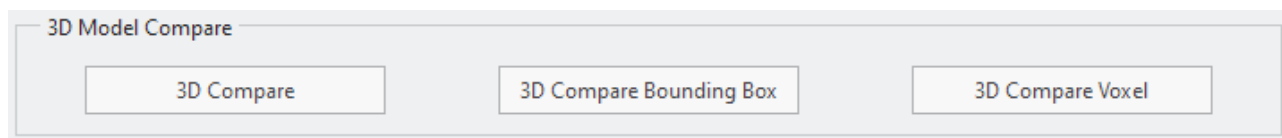
In GENIUS TOOLS Library Editor you can compact the active database by clicking on the broom icon (clean up).

### Changing image sizes (7.0.0.0)

The default sizes set for images in the object display (40 pixel) and the details window (100 pixel) can be changed with the configuration options `gtl_img_switch_size` and `gtl_img_detail_size` respectively.

### 3D Search (7.0.1.0)

If the selected library contains 3D-indexed objects, the section *3D Model Compare* for searching for 3D-like objects appears in the dialog box of the Advanced Search.





*Section "3D Model Comparison" in the Advanced Search dialog*


The search buttons correspond to the search operators *mdl3d*, *mdl3d\_bb* or *mdl3d\_vo* which you can alternatively enter directly in the search field.

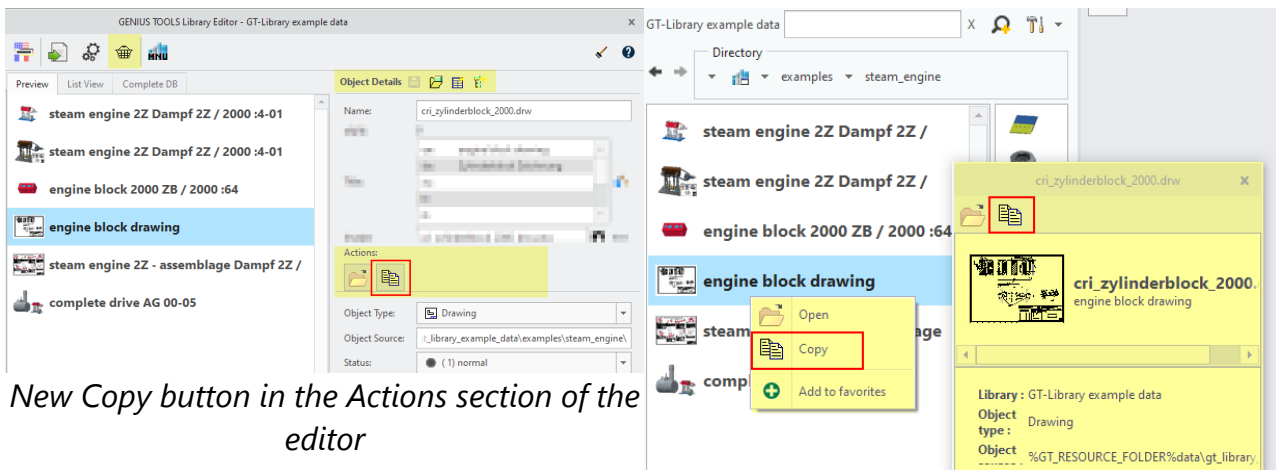
Objects are indexed in GENIUS TOOLS Library Editor in the *Batch Mode* dialog.

### New function: Copy drawings (7.0.2.0)

Drawings can be copied independently of the model. The function opens GENIUS TOOLS Name Generator and copies the drawing under a new name into the current working directory. The copy is opened in Creo.

To activate the function, click the *Copy* button  in the Library Editor – either in the *Object Details > Actions* for individual objects or in the *Object Collector* dialog  for multiple objects. This makes the action available in the details window and in the context menu of a drawing.

As with copying models, other drawings can also be copied. These are edited in the list of models to be copied with the  button.

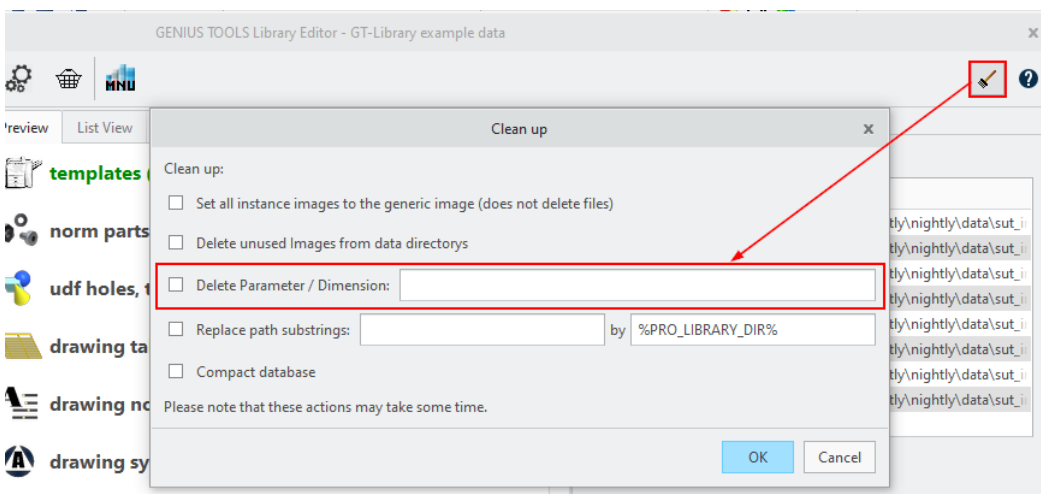


New Copy button in the Actions section of the editor

Display in the context menu (left) and the detail window (right) of an object

## Library Editor: Delete parameter / dimension in database (7.0.2.0)

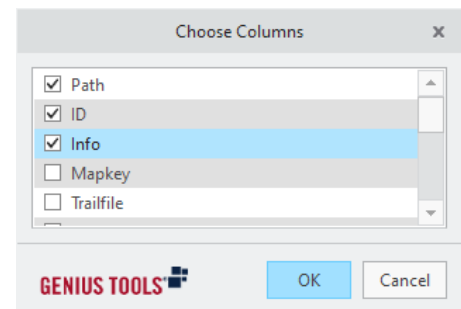
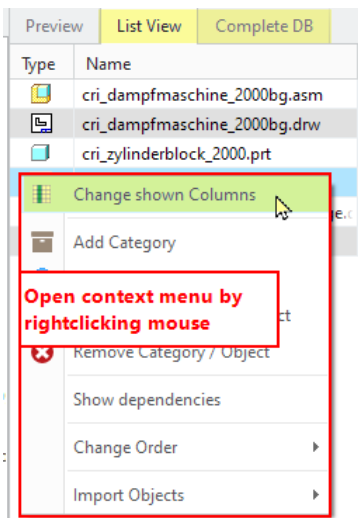
In the dialog *Cleanup data* of the Library Editor the action *Delete parameter / dimension* has been added. This deletes parameters and dimensions **from all models** in the database. It can be used to delete e. g. incorrect parameters or dimensions. Deleted data cannot be recovered.



## Library Editor: easier selection and saving of display columns (7.0.2.0)

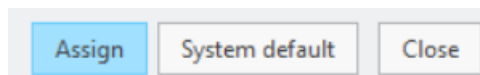
You can now select the column view in the List View and All Objects tabs by checking the corresponding checkboxes (instead of pressing the Control key). The selected columns are now automatically saved for the next Creo session.

The function can be found in the context menu of the category view under *Change displayed columns*.



## 4.2.3 GENIUS TOOLS Material

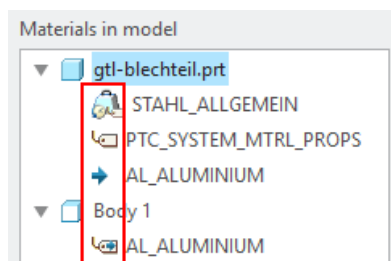
### New System default button (7.0.0.0)



The dialog box GENIUS TOOLS Material Selector Editor has a new function: *System default*. This function means:

- for parts: assigning the system material,
- for bodies: inheriting the assigned/ active material (master) from the part.

### Message icons displayed next to all materials (7.0.0.0)



GENIUS TOOLS Material Selector: Icons that show the status and the results of a material check are displayed next to all material names in a model in the left segment of the dialog box GENIUS TOOLS Material Selector.



## Subdirectories of material directory are included when uploading into database (7.0.0.0)

GENIUS TOOLS Material Selector Editor: When loading material files (MTL files) from the material directory into the database *material.db* subdirectories are also copied thus preserving the structure of the directory. This reduces loading time.

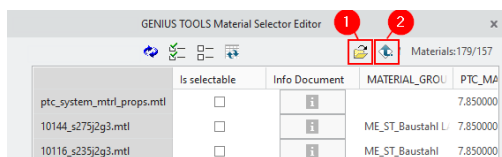
When loading MTL files from Windchill into a temporary file for editing, subdirectories are also preserved. The path to a material directory must be set to a windchill directory, e. g. *wtpub://\$SUT\_WCSRVNAME/Bibliotheken/materialien*.

## Editing MTL files in Windchill (7.0.0.0)

Material files (MTL files) in Windchill, which were edited in a temporary folder, can be uploaded into the workspace. There is a new button for this action in GENIUS TOOLS

Material Selector Editor: *Upload edited files*  (2).



For editing MTL files faster the new button *Open temporary folder*  (1) has been introduced.

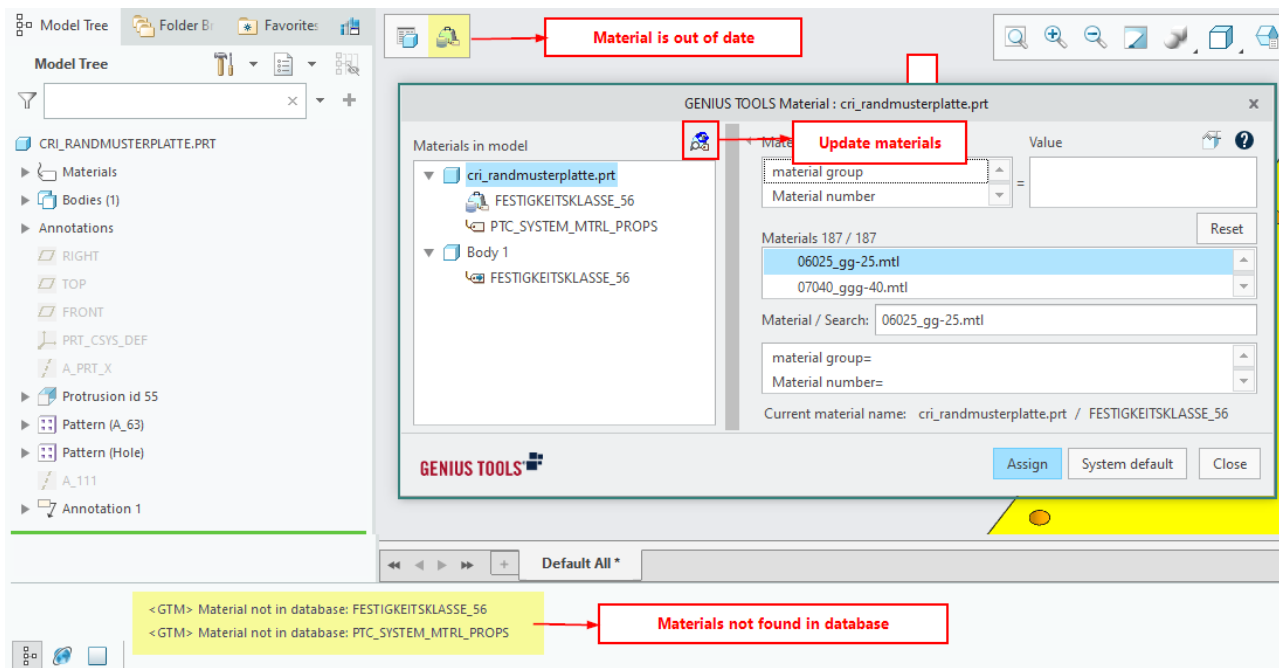


## Material check only for currently assigned material (7.0.0.0)

The configuration option `gtu_ui_change_check_only_current_material` was renamed to `gtu_ui_change_check_material_check_only_current_material`.

## Update materials (7.0.2.0)

If there are outdated materials in the model, the button  appears in the material selector. This function searches the material database for MTL files of the same name with a newer revision and automatically assigns these newer material files. Check whether the update was successful: If the assigned material was not found in the database, this will be visible in the main window by the  icon as well as in the Creo message bar.




*Materials cannot be updated if they are not in the database*

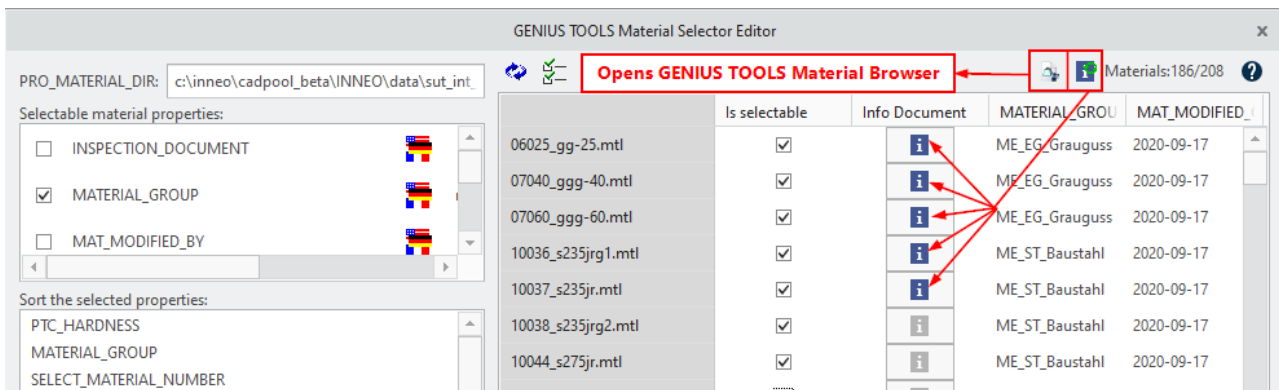
If you want to exclude certain materials from the update function, list the material names without file extension in the configuration option `gtm_exclude_material_from_update_all`. This can be important for materials with variable density or for free materials.

## Assigning an existing material (7.0.2.0)

If you want to assign a material that already exists in a part, you can click on the desired material in the model display on the left. This selects it in the material list on the right, hence, you do not have to search for the material in the material list. Proceed by assigning the material to the part as standard/master material or to a body by clicking the *Assign* button.

## New function in Material Selector Editor: Edit material files simultaneously (7.0.2.0)

You can now edit all material files (MTL files) directly via the Material Selection Editor at the same time, i.e. without opening each individual file. The button  opens the separate freeware application GENIUS TOOS Material Browser and displays all files in the material directory.




The button is displayed if GENIUS TOOLS Material Browser is installed and the path to the executable file *GT\_Material\_Browser.exe* is set correctly in the configuration option *gtm\_editor\_material\_browser\_path*.

From version 1.0.4.0 GENIUS TOOLS Material Browser opens the material directory in which they work. For older versions, the material directory must be entered manually.

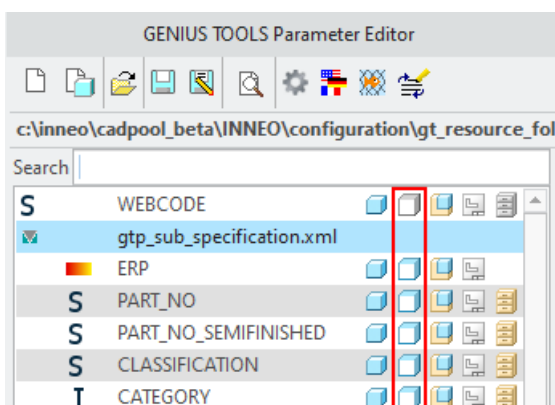
Information about the Material Browser can be found in the program in the help icon (1). The freeware can be downloaded free of charge from the download area of the Inneo website. (<https://www.inneo.de/de/services/technischer-support/genius-tools-downloads.html>)


## New function in Material Selector Editor: Automatically add info documents to materials (7.0.2.0)

The button  automatically loads all available information documents into the Material Selector Editor. The function searches for all documents whose name corresponds to the name of any material file. This function searches for documents of all file types in a specific folder. The path to this folder is set by the configuration option *gtm\_infoDoc\_folder*. (Default: %gt\_resource%\material\info).

## 4.2.4 GENIUS TOOLS Parameter

### Bodies: Support of new element (7.0.0.0)



In Creo 7.0 a new element has been added: “body” with the icon . GENIUS TOOLS Parameter supports the new element so that parameters can be assigned to bodies.


## 4.2.5 GENIUS TOOLS UDF Forms

### Bodies as placement reference (7.0.0.0)

In Creo 7.0 features can be assigned to bodies. User-defined features created in Creo 7.0 can include bodies as placement references. Bodies can be selected as placement references in GENIUS TOOLS UDF Forms.

## 4.2.6 GENIUS TOOLS Utilities

### New function: Open base model (7.0.0.0)


This function allows you to quickly open geometric base models that are reference sources for features. The function *GENIUS TOOLS (GT) Open Base Model*  can be found in the context menu – which opens when right-clicking – on all features that have a reference source.

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**Please note:** The function GENIUS TOOLS Open Base Model is only available with subscription licenses for GENIUS TOOLS for Creo.

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### New function: Select Surface by Color (7.0.0.0)


Use this function to select surfaces of the same color or uncolored surfaces. Selected surfaces are highlighted in the model and can thus easily be given a new color or be otherwise modified. The button  for GENIUS TOOLS Select Surfaces by Color is available in part mode in the segment UTILITIES in GENIUS TOOLS ribbon menu.

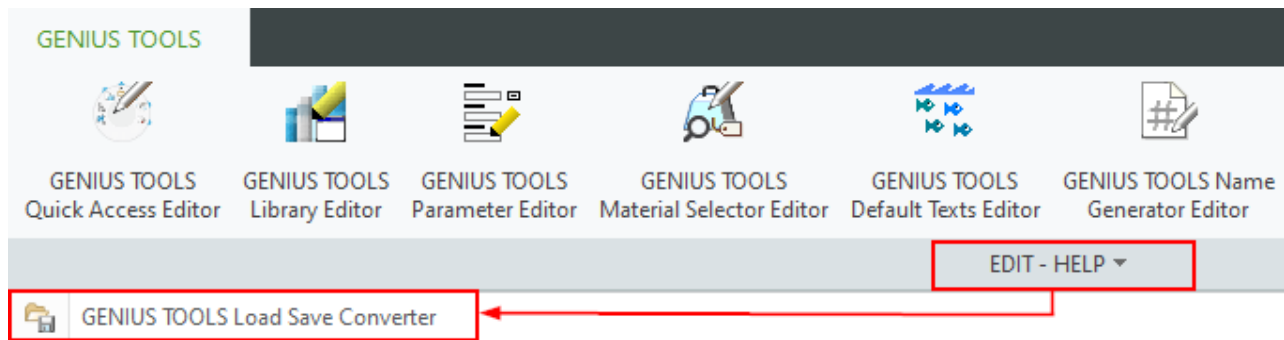
---

**Please note:** GENIUS TOOLS Select Surfaces by Color is only available with subscription licenses for GENIUS TOOLS for Creo.

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### New function: Load Save Converter (7.0.0.0)

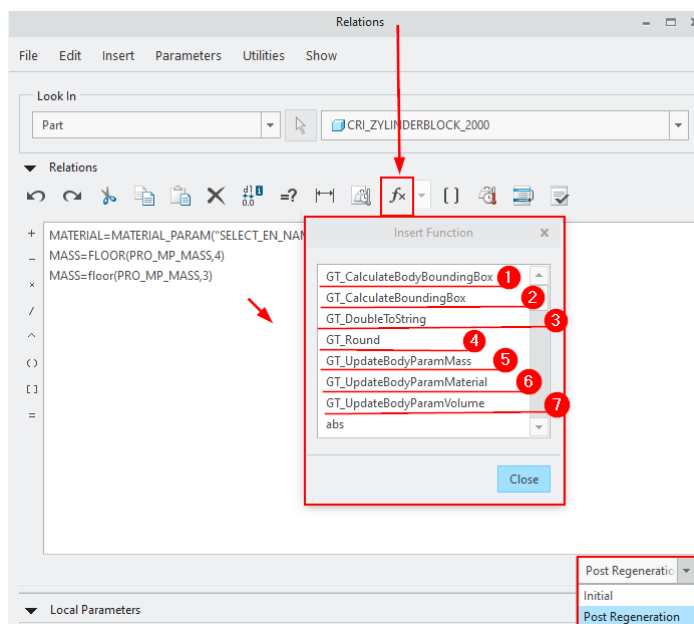
This functions allows you to convert objects, which have been created in older version of Creo, Wildfire or Pro/engineer, into the currently used Creo version. Also, you can convert to the student format or – if the necessary licenses are available – from student format to the current Creo version. The function Load Save Converter  is found in Creo standby mode in the segment EDIT-HELP in the GENIUS TOOLS ribbon menu.



**Please note:** GENIUS TOOLS Load Save Converter is only available with subscription licenses for GENIUS TOOLS for Creo.

## New function: Extend Relations (7.0.0.0)

With the Extend relations function you can add relations that define parameters for models and – in Creo 7.0 – also for bodies. The additional functions are listed in the *Insert Function* dialog which opens with the functions button  in Creo's *Relation* dialog in part and assembly mode.



### 1. GT\_CalculateBodyBoundingBox()

This parameter generates the values of a bounding box for each body in a model.

### 2.

### GT\_CalculateBoundingBox("BodyParameter")

This parameter generates the values of the bounding box of the model.

### 3.

### GT\_UpdateBodyParamMaterial("BodyParameter", "MaterialParameter")

This is a parameter on a body that generates the values of the material parameter of the body's material.

**Please note:** GENIUS TOOLS Extend Relations is only available with subscription licenses for GENIUS TOOLS for Creo.

## CS Assembler: changed default settings (7.0.0.0)

CS Assembler is a tool for automatically adding a number of components to an assembly. The name of the default coordinate system has changed in the configuration option `gtu_csassembler_component_cs_name` from `PRT_CS_DEF` to `PLACEMENT_CS`.

## CS Assembler: Configuring coordinate systems (7.0.0.0)

There are two new configuration options – one for multi level assembly and one for maximum number of assembling coordinate systems.

### **gtu\_csassembler\_multi\_level**

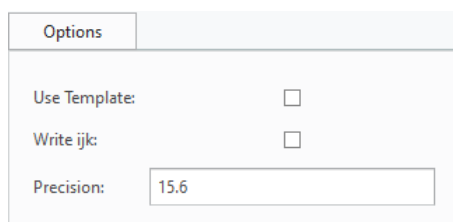
Defines whether coordinate systems from newly assembled components should be used as target coordinate system inside the same assemble task (1) or not (0). Standard: 1

### **gtu\_csassembler\_maximal\_cs\_count**

Defines the maximal number of coordinate systems that can be assembled into a model. Default: 5000

## Export Points: Creating template for export file (7.0.0.0)

In the *Options* tab of GENIUS TOOLS Points there is a new checkbox for customizing the output file by using a template. The output format is a DAT file.



Options	
Use Template:	<input type="checkbox"/>
Write ijk:	<input type="checkbox"/>
Precision:	<input type="text" value="15.6"/>

You can set up a template by defining the following configuration options:

### **gtu\_points\_write\_use\_template**

Defines whether a template should be used for outputting points values to a DAT file (1) or not (0). Presets the checkbox *Use templates* in the *Options* tab in GENIUS TOOLS Points. Standard: 0

### **gtu\_points\_write\_template\_names**

Defines whether names should be written to the output file. Default: 0

### **gtu\_points\_write\_template\_header**

Defines a header for the DAT file.

### **gtu\_points\_write\_template\_footer**

Defines a footer for the DAT file.

### **gtu\_points\_write\_template\_names\_fill\_up\_length**

Fills up the name to a defined number of characters. Default: 20

### **gtu\_points\_write\_template\_line\_left**

Defines the start of a line in the DAT file.

**gtu\_points\_write\_template\_line\_right**

Defines the end of a line in the DAT file.

**gtu\_points\_write\_template\_names\_split**

Replaces the defined string in the file name by a space character: Default: \_

## Select surfaces by color: Select quilts (7.0.1.0)

The function *Select Surfaces by Color* now also allows you to select colored quilts. Selected quilts are highlighted in the model and can thus easily be recolored or be otherwise

modified. The button  for GENIUS TOOLS Select Surfaces by Color is available in part mode in the segment UTILITIES in GENIUS TOOLS ribbon menu.

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**Please note:** GENIUS TOOLS Select Surfaces by Color is only available with subscription licenses for GENIUS TOOLS for Creo.

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## CS Assembler: Component coordinate system can be defined in XML file (7.0.1.0)

A target coordinate system, which is needed to add parts to an assembly, can in addition to the component parameters *CLASSIFICATION* and *SUBTYPE* now also be identified by an entry in the XML file that contains the assembling instructions. The name of the coordinate systems has to be given to the attribute *ics\_name* in the XML file.

This provides several possibilities to find a coordinate system. The combinations of attributes which are allowed are:

`classification` and `subtype`

`classification` and `ics_name`

Do not simultaneously use `classification`, `subtype` and `ics_name`.

## Extend relations (7.0.1.0)


There are two new functions which extend relations.

**GT\_DoubleToString**

Function rounds parameter values according to IEEE 754 and converts the received numbers into strings.

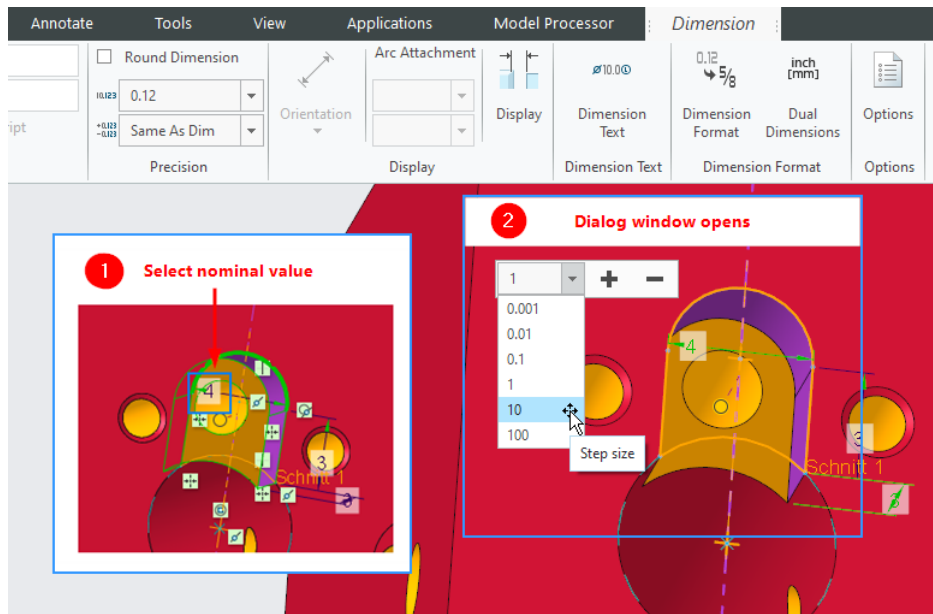
**GT\_Round**

Function rounds parameter values commercially and converts the received numbers into strings.

The functions are listed in the *Insert Function* dialog which opens with the functions button  in Creo's menu ribbon *Tools > Relation* in part and assembly mode.

## New function: Extended Dimension Functions (7.0.2.0)

If you select a value in part and assembly mode, which is not be a measured dimension and which is not controlled by a relation, a dialog opens that allows you to quickly increase or decrease the value by one in a given step size. The modification is made on the nominal value.




If the dimension is set by hand in the *Dimension* tab in the *Value* group, this can collide with the advanced dimension functions.

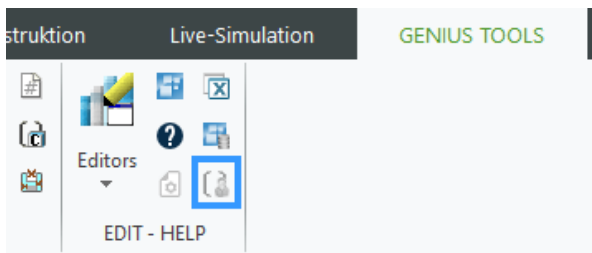
**Please note:** *Extended Dimension Functions* is only available with subscription licenses for GENIUS TOOLS for Creo.

## New function: Copy Component Parameter To Substitution Component Parameter (7.0.2.0)

This function copies all component parameters from the Master representation to the substitution component representation in simplified representations. The substituted components will be enhanced by the component parameters from the component from the Master representation at function runtime. If the parameters are not in existence yet, they will be created.

The button  can be found in the GENIUS TOOLS ribbon menu on the segment EDIT-HELP, if an assembly is opened as simplified representation, which was created by substitution.





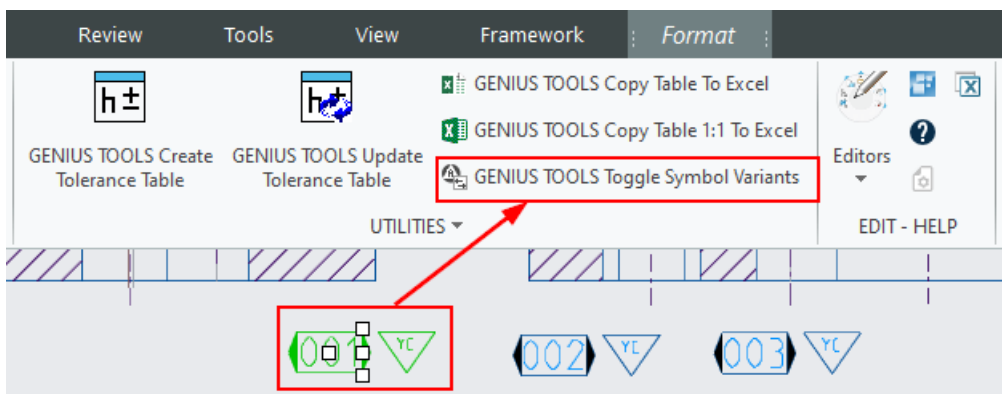
Start via GENIUS TOOLS ribbon menu

**Please note:** The function *GENIUS TOOLS Copy Component Parameter To Substitution Component Parameter* is only available with subscription licenses for GENIUS TOOLS for Creo.

## New function: Toggle Symbol Variants (7.0.2.0)

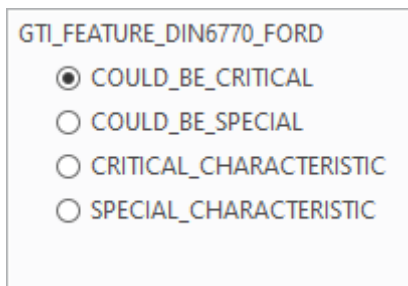
This function allows you to quickly switch between all variants of a grouped symbol. The order of the variants corresponds to the order in the SYM file that defines the symbol group.

The button  is located in the GENIUS TOOLS ribbon menu in the segment Utilities.



The following conditions must be fulfilled:

- a symbol must be selected,
- the selected symbol must only have one variant level, i. e. no sub groups. For symbols with sub groups the button is greyed.




Symbol with one variant level

**Please note:** The function *Toggle Symbol Variants* is only available with subscription licenses for GENIUS TOOLS for Creo.

## Close All Other Windows: Save before closing (7.0.2.0)

The function *GENIUS TOOLS Close All Other Windows* can be configured in the way that all models will be saved before closing. Set the configuration option

`gtu_close_all_windows_save_changed_models` to 1. (Default is 0=No automatic saving).

The button  for this function is located in the segment EDIT-HELP in the GENIUS TOOLS ribbon menu and can also be opened via GENIUS TOOLS Quick Access ([<] key).


## “Annotation Value Input” is renamed “3D note form” (7.0.2.0)

The name of the component *Annotation Value Input* has been changed to *3D Note Form*. This component opens a dialog box which allows you to modify dimension and parameter values of all 3D notes in a model comfortably at once, i. e. without having to open each 3D note separately.

The names of the configuration options for this component change as follow:

Invalid name of the configuration option	New name
<code>gtu_start_annotation_value_input</code>	<code>gtu_start_3d_note_form</code>
<code>gtu_annotation_value_input_filter_with_input_panels</code>	<code>gtu_3d_note_form_filter_with_input_panels</code>
<code>gtu_annotation_value_input_pagesize</code>	<code>gtu_3d_note_form_pagesize</code>

## Extend Relations: New functions (7.0.2.0)

Es gibt zwei neue Funktionen. The functions are listed in the *Insert Function* dialog which opens with the functions button  in Creo's *Relation* dialog.

### GT\_UpdateBodyParamMass ("BodyParameter",optMultiplier,optDecimalPlaces)

A body parameter with the value of the body mass is created and updated for each body.

Example: `GT_UpdateBodyParamMass ("MASSE", 0.001, 2)`

- multiplies the body mass by 0.001 (the multiplier 0.001 is used to convert the default setting "kg" to "g")
- rounds to 2 decimal places
- writes the result into the parameter "MASS"

### GT\_UpdateBodyParamVolume ("BodyParameter",optMultiplier,optDecimalPlaces)

A body parameter with the value of the body volume is created and updated for each body.

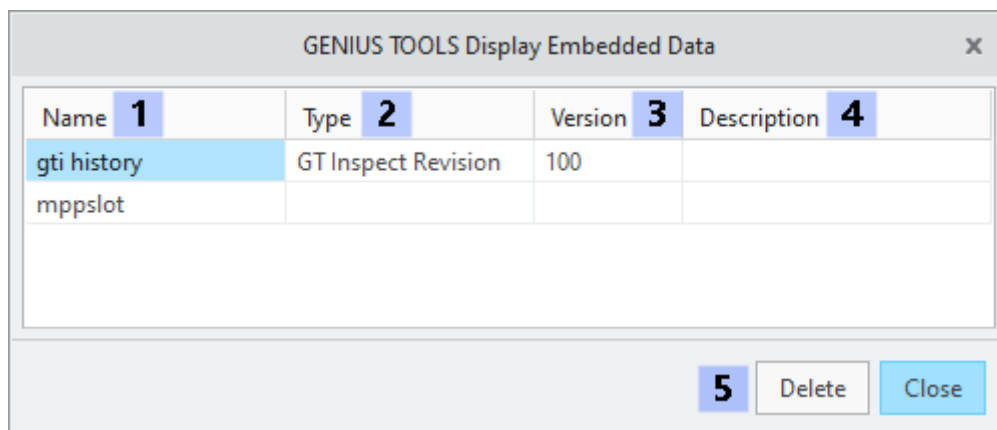
Example: GT\_UpdateBodyParamVolume ("VOLUME")

The entries *optMultiplier* and *optDigitsAfterComma* are optional. If they are not defined, *optMultiplier* is 1.0 and *optDigitsAfterComma* is not rounded.

## 4.2.7 Embedded Data


### New function: Display and delete embedded data (7.0.2.0)

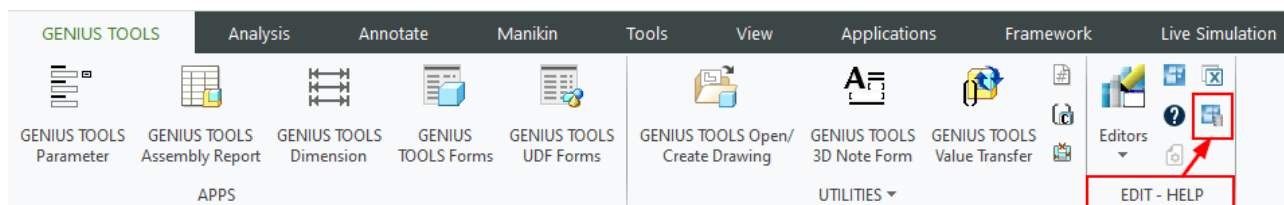
Embedded Data are information on a model that have been generated by GENIUS TOOLS components Assembly Report, Forms, UDF Forms and Inspect Revision. This data can be displayed and deleted in the current model.



Overview of embedded data

Select a line for a GENIUS TOOLS for Creo-module and click *Delete*. This opens another dialog for deleting.

The button  for the function is located in the segment EDIT-HELP in the GENIUS TOOLS ribbon menu.



## 4.2.8 Java Script Editor

### New function: PostLoadFromFile (7.0.1.0)

The function PostLoadFromFile will be automatically executed after loading a value table (CSV/XML).

```
function PostLoadFromFile() {  
  ...  
}
```

It is executed after the function PostLoad, if PostLoad defined.

## 4.3 Configuration options

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

### 4.3.1 New configuration options (7.0.0.0)

#### GENIUS TOOLS Library

##### **gtl\_img\_switch\_size**

Defines the size of an image in the object display section. (Default: 40 pixel)

##### **gtl\_img\_detail\_size**

Defines the size of an image in the details window. (Default: 100 pixel)

#### GENIUS TOOLS Material

##### **gtm\_show\_body\_selection**

Defines whether the left segment Material in model is expanded by default when opening the dialog box GENIUS TOOLS Material Selection (1) or not (0). Default: 1

##### **gtm\_close\_at\_set\_material**

Defines whether the dialog GENIUS TOOLS Material Selection closes after assigning a material (1) or whether it remains opened (0). Default: 1

## GENIUS TOOLS Utilities: CS Assembler

### **gtu\_csassembler\_multi\_level**

Defines whether coordinate systems from newly assembled components should be used as target coordinate system inside the same assemble task (1) or not (0). Standard: 1

### **gtu\_csassembler\_maximal\_cs\_count**

Defines the maximal number of coordinate systems that can be assembled into a model. Default: 5000

## GENIUS TOOLS Utilities: Extend Relations

### **gtu\_start\_relationExtension**

Defines whether the utility with the relation extensions is available (1) or not (0). Default: 1.

### **gtu\_relationextension\_calculateBoundingBox**

Defines whether the commands GT\_CalculateBodyBoundingBox() and GT\_CalculateBoundingBox() are available in the relations (1) or not (0). Default: 1.

### **gtu\_relationextension\_updateBodyParamMaterial**

Defines whether the command GT\_UpdateBodyParamMaterial() is available in the relations (1) or not (0). Default: 1.

## GENIUS TOOLS Utilities: Load Save Converter

### **gtu\_start\_loadSaveConverter**

Hides the Load Save Converter button in the segment EDIT-HELP in the GENIUS TOOLS ribbon menu. (Default is 1=On/not hidden)

## GENIUS TOOLS Utilities: Open Base Model

### **gtu\_start\_openGeomOrigin**

Switches off the display of the function Open Base Model in the context menu. (Default: 1=On)

## GENIUS TOOLS Utilities: Export Points

### **gtu\_points\_write\_use\_template**

Defines whether a template should be used for outputting points values to a DAT file (1) or not (0). Presets the checkbox Use templates in the Options tab in GENIUS TOOLS Points. Standard: 0

### **gtu\_points\_write\_template\_names**

Defines whether names should be written to the output file. Default: 0

**gtu\_points\_write\_template\_header**

Defines a header for the DAT file.

**gtu\_points\_write\_template\_footer**

Defines a footer for the DAT file.

**gtu\_points\_write\_template\_names\_fill\_up\_length**

Fills up the name to a defined number of characters. Default: 20

**gtu\_points\_write\_template\_line\_left**

Defines the start of a line in the DAT file.

**gtu\_points\_write\_template\_line\_right**

Defines the end of a line in the DAT file.

**gtu\_points\_write\_template\_names\_split**

Replaces the defined string in the file name by a space character: Default: \_

## GENIUS TOOLS Utilities: Select Surface by Color

**gtu\_start\_selectSurfaceByColor**

Hides the Select Surfaces by Color button in GENIUS TOOLS ribbon menu. (Default is 1=On/not hidden)

### 4.3.2 New configuration options (7.0.1.0)

## GENIUS TOOLS Inspect

**gti\_excel\_export\_file**

Defines the default name of an exported report file. You can use the GENIUS TOOLS for Creo variables. (For example: ""=%PART\_NO%\_%CAD\_REVISION%\_%CAD\_CREATED\_ON%"")

**gti\_excel\_export\_path**

Defines the default path for saving reports.

## GENIUS TOOLS Inspect Revision

**gt\_start\_inspect\_revision**

Defines whether GENIUS TOOLS Inspect Revision can be started by users (1) or not (0). Standard: 1

**gti\_revision\_excel\_export\_file**

Defines the default name of an exported report file. You can use the GENIUS TOOLS for Creo variables. (For example: ""=%PART\_NO%\_%CAD\_REVISION%\_%CAD\_CREATED\_ON%"" )

**gti\_revision\_excel\_export\_path**

Defines the default path for saving reports.

## GENIUS TOOLS Library

**gtl\_editor\_use\_black\_on\_white\_for\_screenshots**

Defines, whether preview images in the batch mode will be created with the system colors "Black on White" (1) – i. e. the images will have a white background – or with the current color settings (0).

### 4.3.3 New configuration options (7.0.2.0)

## GENIUS TOOLS Library

**gtl\_action\_open\_defined\_simp\_rep**

Defines the simplified representation that is opened by "Open / Insert simplified graphics".

## GENIUS TOOLS Material

**gtm\_editor\_material\_browser\_path**

Defines the path at which GT Material Browser get searched. If it is found, it could be started from GENIUS TOOLS Material Editor. At version 1.0.4.0 also path transfer is supported (Temppath if Windchill connection is set).

**gtm\_exclude\_material\_from\_update\_all**

Defines one or several materials that will be excluded from the function " Update all materials" (without extension).

## GENIUS TOOLS Utilities: Start options

You can deactivate these new functions by setting the following configuration options to 0.

Function	configuration option
Extend Relations: Command "GT_UpdateBodyParamMass"	gtu_relationextension_updateBodyParamMass
Extend Relations: Command "GT_UpdateBodyParamVolume"	gtu_relationextension_updateBodyParamVolume
Copy Component Parameter To Substitution Component Parameter	gtu_start_copyCParamToSubsCParam
Extended Dimensions Function	gtu_start_extendedDimensionFunctions
Toggle Symbol Variants	gtu_start_toggleSymbolGroups

## GENIUS TOOLS Utilities: Close All Other Windows

### **gtu\_close\_all\_windows\_save\_changed\_models**

Defines, if the models inside the closed windows will be saved before closing. (Default is 0=No automatic saving)

## GENIUS TOOLS Utilities: 3D-Notizwerteingabe/3D-Notizformular

The name of the component *Annotation Value Input* has been changed to *3D Note Form*. The names of the configuration options for this component change as follow:

Invalid name of the configuration option	New name
gtu_start_annotation_value_input	gtu_start_3d_note_form
gtu_annotation_value_input_filter_with_input_panels	gtu_3d_note_form_filter_with_input_panels
gtu_annotation_value_input_pagesize	gtu_3d_note_form_pagesize

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