GENIUS TOOLS®

INNEO®
That's IT.

GENIUS TOOLS Starter

12.0.1.0

Manual

© 2025 INNEO Solutions GmbH

www.inneo.com

1 Overview 9

1.1 GENIUS TOOLS Starter philosophy ... 9
1.2 Component modules ... 10
1.3 Advantages of using GENIUS TOOLS Starter ... 11
1.4 License-dependent features ... 12

2 Basics 18

2.1 Important terms ... 18
2.2 Workflow and synchronization ... 19
2.3 Operating environments ... 20
2.4 Directory structure ... 21
2.5 Defining settings ... 24

3 Starter projects 26

3.1 General procedure ... 28
3.2 Data packages ... 30
3.3 Configuration blocks ... 30
3.4 Batch files ... 32
3.5 PDM directories ... 34
3.6 Configuration concept ... 34
3.6.1 Configuration layers ... 34
3.6.2 Call sequence for files ... 36
3.6.3 Call sequence for settings ... 39
3.7 Testing project configuration locally ... 39
3.8 Conditional configuration blocks and batch files ... 41

4 GENIUS TOOLS Environment Administrator 43

4.1 User interface ... 43
4.2 Creating an operating environment ... 46
4.3 Adding components to an operating environment ... 50
4.4 Updating software ... 55
4.5 Modifying settings ... 58
4.6 Create Git repository ... 61

5 GENIUS TOOLS Project Configurator 65

5.1 Starting GENIUS TOOLS Project Configurator ... 65
5.2 User interface and navigation ... 68
5.2.1 Main menu ... 69
5.2.1.1 Organization ... 69
5.2.1.2 Configuration ... 70
5.2.1.3 Projects ... 71
5.2.1.4 Project collections ... 72

5.2.1.5 Resources ... 72
5.2.1.6 Satellites ... 72
5.2.2 User menu ... 72
5.2.3 Saving changes ... 74
5.2.4 Footer ... 75
5.3 Organizational structure ... 77
5.3.1 Working with units ... 77
5.3.2 Creating units ... 77
5.3.3 Mapping an organization ... 79
5.3.4 Unit types ... 81
5.3.4.1 Grouping units ... 81
5.3.4.2 Last unit ... 82
5.3.4.3 Special unit: Breakpoint ... 84
5.3.5 Assigning unit directories ... 84
5.3.6 Deactivating units ... 85
5.3.7 Using unit tag IDs ... 86
5.3.7.1 Project options with several unit tag IDs ... 88
5.3.8 Call hierarchy for subunits ... 89
5.3.9 Displaying units in GENIUS TOOLS Starter App ... 90
5.3.10 User and computer groups ... 93
5.4 Roles ... 94
5.4.1 Usage of roles ... 95
5.4.1.1 Use case: Usage of roles ... 96
5.4.2 Adjusting default roles ... 97
5.4.3 Creating roles ... 98
5.4.3.1 Adding static entries to a role ... 98
5.4.3.2 Adding dynamic entries to a role ... 99
5.5 Granting function access rights ... 103
5.5.1 Assigned roles for function access ... 107
5.5.2 Free roles for function access ... 108
5.6 Creating projects ... 109
5.6.1 Creating a new project ... 110
5.6.2 General project settings ... 110
5.6.3 Hiding and blocking projects ... 111
5.6.4 Copying a project ... 112
5.7 Restricting project access ... 113
5.7.1 Cross-unit visibility ... 115
5.7.2 Unit-specific visibility ... 118
5.7.3 Divided unit-specific visibility ... 120
5.7.4 Project access - overview ... 121
5.8 View users rights ... 123
5.9 Resources ... 124
5.9.1 Creating users ... 125

5.9.1.1 Action: Create user entry with image ... 128
5.9.2 Creating computers ... 129
5.9.3 Importing users and computers from Excel ... 130
5.9.4 Importing users with authentication provider ... 132
5.9.5 Creo startkeys ... 132
5.9.6 Creo license servers ... 134
5.10 Global settings: Standard ... 134
5.10.1 Authentication ... 135
5.10.1.1 Authentication provider ... 136
5.10.1.2 Creating your own authentication provider ... 137
5.10.1.3 Authentication for Windchill users ... 139
5.11 Configuring heterogeneous environments ... 142
5.11.1 Inheritance of the settings ... 143
5.11.2 Deviations from the standard configuration ... 143
5.11.2.1 Defining Creo language for specific users ... 143
5.12 Unit settings ... 144
5.12.1 GENIUS TOOLS Starter App ... 144
5.12.1.1 Authentication ... 144
5.12.1.2 Configuring the desktop link ... 145
5.12.1.3 Support link and logging ... 146
5.12.1.4 General display of projects ... 147
5.12.1.5 Operating environment clean-up ... 147
5.12.2 Additional environment variables ... 147
5.12.3 Synchronization ... 148
5.12.4 GENIUS TOOLS License Manager ... 149
5.12.5 Network connections ... 150
5.12.6 CAD applications ... 151
5.12.7 Windchill settings ... 151
5.13 CAD-specific project settings ... 151
5.14 Making use of project options ... 153
5.14.1 Language ... 154
5.14.2 Company-specific project options ... 155
5.14.2.1 Single project options ... 157
5.14.2.2 Combined project options ... 162
5.14.2.3 Switch project options ... 166
5.14.2.4 Overview of project options by application ... 169
5.14.3 Special cases ... 170
5.14.4 Arranging checkboxes ... 170
5.15 Apps-Projects: Creating projects of other applications ... 171
5.16 Auto projects ... 173
5.17 Project collections ... 174
5.18 Presenting projects to users ... 177
5.18.1 Marking faulty projects ... 178

5.18.2 Customizing project information ... 179
5.18.3 Displaying license information ... 181
5.18.4 Editing configuration blocks ... 183
5.18.5 User-driven configuration ... 184
5.19 AutoCAD ... 185
5.19.1 Project settings ... 186
5.19.1.1 Essential specifications ... 186
5.19.1.2 Start behavior ... 187
5.19.1.3 Environment variables ... 187
5.20 Creo Parametric ... 187
5.20.1 Configuration and batch files ... 189
5.20.1.1 Creo configuration files ... 189
5.20.1.2 Configuration blocks ... 190
5.20.1.3 User-driven configuration for Creo Parametric ... 192
5.20.2 Use in complex organizations ... 193
5.20.3 Allocating Creo licenses with GENIUS TOOLS Starter ... 194
5.20.3.1 Basic information ... 195
5.20.3.2 Determining license servers ... 197
5.20.3.3 Optimally assigning licenses ... 197
5.20.3.4 Automatic distribution of Creo startkeys ... 201
5.20.4 Installing Creo on user computers ... 201
5.20.5 Unit settings ... 206
5.20.5.1 Application ... 207
5.20.5.2 Start ... 208
5.20.5.3 Cleanup ... 213
5.20.5.4 Write ... 214
5.20.5.5 Installing ... 216
5.20.6 Project settings ... 217
5.20.6.1 Settings for Creo projects ... 218
5.20.6.2 Creo data packages ... 219
5.20.6.3 Defining start behavior for a project ... 219
5.20.6.4 Language of a Creo project ... 220
5.20.6.5 Default settings for license borrowing ... 221
5.20.6.6 Environment variables ... 222
5.20.6.7 Installing Creo ... 222
5.20.6.8 Assigning Creo licenses to projects ... 222
5.20.6.9 Assigning Creo license extensions to projects ... 224
5.20.6.10 Workspace for Windchill ... 225
5.20.7 Displaying projects in GENIUS TOOLS Starter App ... 227
5.20.7.1 Defining project options ... 228
5.20.8 Linking Creo projects with SAP ... 230
5.20.9 Customizing Creo user interface ... 231
5.20.9.1 creo_parametric_customization.ui ... 231
5.21 Creo Elements/Direct Modeling ... 233

5.21.1 Project display in GENIUS TOOLS Starter App ... 233
5.21.2 Unit settings ... 234
5.21.2.1 Application ... 234
5.21.2.2 Start ... 235
5.21.2.3 Cleanup ... 236
5.21.3 Project settings ... 237
5.21.3.1 Essential specifications ... 237
5.21.3.2 Startup behavior ... 238
5.21.3.3 Environment variables ... 238
5.22 Inventor ... 238
5.22.1 Configuration principles ... 239
5.22.1.1 Project configuration with GENIUS TOOLS Starter ... 240
5.22.1.2 Configuration blocks for Inventor ... 242
5.22.1.3 User-driven configuration for Inventor ... 244
5.22.2 Unit settings ... 244
5.22.2.1 Application ... 245
5.22.2.2 Start ... 245
5.22.2.3 Cleanup ... 246
5.22.2.4 Write ... 247
5.22.2.5 Libraries ... 248
5.22.3 Project settings ... 249
5.22.3.1 Essential specifications ... 250
5.22.3.2 Start behavior ... 250
5.22.3.3 Libraries ... 251
5.22.3.4 Environment variables ... 251
5.22.4 Read-only mode ... 251
5.22.5 Project display in GENIUS TOOLS Starter App ... 252
5.23 Solidworks ... 253
5.23.1 Configuration blocks für Solidworks ... 254
5.23.2 Unit settings ... 256
5.23.2.1 Application ... 256
5.23.2.2 Start ... 257
5.23.2.3 Cleanup ... 258
5.23.2.4 Write ... 259
5.23.3 Project settings ... 259
5.23.3.1 Essential specifications ... 259
5.23.3.2 Start behavior ... 260
5.23.3.3 Environment variables ... 261
5.23.4 Project display in GENIUS TOOLS Starter App ... 261
5.24 Working with satellites ... 262
5.24.1 Creating satellites ... 262
5.24.2 Monitoring satellite status ... 264
5.24.3 Managing satellites ... 264
5.24.4 Editing satellite configuration ... 265

5.25 Working with Windchill ... 265
5.25.1 Object search hierarchy in Creo ... 266
5.25.2 Using a Windchill library ... 266
5.25.3 Automatic Windchill server rename ... 267
5.25.4 Automatic Windchill server registration ... 267
5.25.5 Project-specific Windchill settings ... 269
5.25.6 Integration in Windchill Worker ... 269
5.25.7 Freely configurable debug mode ... 270

6 GENIUS TOOLS Starter App 271

6.1 Starting GENIUS TOOLS Starter App ... 271
6.2 Login ... 271
6.3 User interface ... 272
6.4 Sidebar ... 273
6.5 User menu ... 274
6.6 Footer ... 276
6.7 Selecting a unit ... 278
6.8 Display of projects ... 278
6.8.1 Info symbols ... 279
6.8.2 Warnings ... 281
6.8.3 Invalid projects ... 282
6.9 Project options ... 282
6.10 Custom projects ... 284
6.11 Favorites ... 285
6.12 Creating backup copies ... 286
6.13 Tabs for all applications ... 286
6.14 Tabs: Creo Parametric ... 289
6.14.1 Borrow licenses ... 289
6.14.2 Licenses tab ... 291
6.14.3 Config tab ... 294
6.14.4 Backup tab ... 295
6.15 Tabs: Creo Elements/Direct Modeling ... 296
6.15.1 Licenses ... 297
6.15.2 Backup ... 297
6.16 Tabs: Solidworks ... 297
6.16.1 Licenses ... 298
6.16.2 Config ... 298
6.16.3 Backup ... 298
6.17 Tabs: Inventor ... 299
6.17.1 Config ... 299
6.17.2 UI ... 300
6.17.3 Backup ... 300

6.18 Sending messages to the users ... 301
7 GENIUS TOOLS Config Editor 302
7.1 Introduction ... 302
7.2 Starting the program ... 302
7.3 User interface ... 304
7.4 User menu ... 306
7.5 Display of files ... 308
7.6 Supported files ... 309
7.7 Configuration files for Creo Parametric ... 310
7.7.1 Display of configuration options ... 311
7.7.2 Info area ... 312
7.7.3 Comparing versions ... 313
7.7.4 Comparing config.pro files ... 314
7.7.5 Analyzing config.pro files ... 315
7.8 Editing config files ... 317
7.9 Batch mode ... 319
8 Working with Git 321
8.1 Connecting operating environments to Git ... 321
8.2 Checking in changes to Git ... 321
8.3 Further information ... 323
9 GENIUS TOOLS Git Utility 325
9.1 Introduction ... 325
9.2 Starting the program ... 325
9.3 User interface ... 326
9.4 Checking in changes: Git commit ... 327
9.5 History of commits ... 330
9.6 Comparing file versions ... 331
9.7 Cleaning up operating environment ... 332
10 Appendix 335
10.1 Start parameters ... 335
10.2 Environment variables ... 336
10.3 Regular expressions ... 341
10.4 GTS config variables ... 345
10.5 Start values in Startup TOOLS ... 348
10.6 GENIUS TOOLS Starter: part of Startup TOOLS ... 349
11 Glossary 350
12 FAQs 357

13 Copyright 358

1 Overview

GENIUS TOOLS Starter® is used to start locally installed applications using a centrally managed configuration. All required data is synchronized from a central storage location (Caddepot) to the local computer (Cadpool). The software offers global administration capabilities for heterogeneous IT landscapes and user-specific adaptation options.

1.1 GENIUS TOOLS Starter philosophy

GENIUS TOOLS Starter lets you manage centrally configured operating environments. Typically, a company uses one productive operating environment. This operating environment can be synchronized to all user computers. An operating environment can contain any number of Starter projects, which are configured with just a few mouse clicks and distributed to either all or only to specific users.

GENIUS TOOLS Starter can provide for multiple operating environments, so that test environments or environments with customer-specific configurations can be configured with little effort. Also, GENIUS TOOLS Starter can integrate publicly available configurations.

Using synchronization between the administration computer and a number of client computers, you can manage large and complex installations, distribute central configuration settings to each workstation and also distribute the required data. Changes to the configuration are thus automatically made available to all users. Configurations can differ between users by organizing them in units.

The following procedure applies to all programs:

1. the environment can be cleaned first and
2. GENIUS TOOLS Starter settings are made.

Supported applications

With GENIUS TOOLS Starter, users can start all programs on the user's computer.

1. Administrators can create projects with object data and predefined configuration settings for the following CAD applications:

- AutoCAD, AutoCAD Architecture, AutoCAD LT und AutoCAD Mechanical 2021 - 2026
- Creo Elements / Direct Modeling 17.0 - 20.8
- Creo Parametric 10 - 12
- Inventor 2021 - 2026

© 2025 INNEO Solutions GmbH

– SolidWorks 2020 - 2025

2. The following applications will be automatically detected if they are installed on the user computer (autostart). The latest version will be opened.

– Creo Elements / Direct Drafting
– Creo Illustrate
– Creo Schematics
– Creo View
– Geomagic Design X
– KeyShot
– Mathcad

3. Projects without configuration settings can be created for all applications located on the user computer.

1.2 Component modules

GENIUS TOOLS Starter provides user-friendly graphical interfaces for easily managing CAD installations as well as any other program. It consists of four components:

– GENIUS TOOLS Environment Administrator for managing operating environments
– GENIUS TOOLS Project Configurator for configuring projects in an operating environment
– GENIUS TOOLS Starter App for starting configured projects
– GENIUS TOOLS Config Editor for editing configuration blocks
– GENIUS TOOLS Git Utility for checking in to Git and version management

GENIUS TOOLS Environment Administrator

GENIUS TOOLS Environment Administrator provides functionality for managing operating environments. Use GENIUS TOOLS Environment Administrator to

– create new operating environments
– change properties of an operating environment
– update GENIUS TOOLS Starter and GENIUS TOOLS for Creo in an operating environment
– configure license servers and synchronization settings

GENIUS TOOLS Environment Administrator is a stand-alone administrative tool. The executable file *gtsa.exe* is located in the Installdepot directory.

© 2025 INNEO Solutions GmbH

GENIUS TOOLS Project Configurator

GENIUS TOOLS Project Configurator provides functionality for configuring different projects with only a few mouse clicks. End users can thus start projects with an application using specific configuration settings. Use GENIUS TOOLS Project Configurator to

- define adaptable configuration settings for homogeneous or heterogeneous CAD landscapes
- define unit-specific settings
- manage different projects.

GENIUS TOOLS Project Configurator is started from the user menu of GENIUS TOOLS Starter App, but the administrator may deny users access.

GENIUS TOOLS Starter App

The configured projects are listed in GENIUS TOOLS Starter App for the users, who can select a project with a specific configuration. The user interface also displays additional information, e. g., available licenses, working directory and error messages.

GENIUS TOOLS Starter App is a stand-alone tool. The executable file *gts.exe* is located in the Caddepot directory under *Software*.

GENIUS TOOLS Config Editor

Administrators can edit configuration settings with GENIUS TOOLS Config Editor as well as compare them in different versions for Creo Parametric.

GENIUS TOOLS Config Editor is a stand-alone tool. The executable file *GTConfigEditor.exe* is located in the *tools* directory, which is a directory in both the installation computer as well the user computer.

GENIUS TOOLS Config Editor also starts by clicking a config file in GENIUS TOOLS Starter App, though administrators may deny users access.

1.3 Advantages of using GENIUS TOOLS Starter

The use GENIUS TOOLS Starter offers the following advantages:

- project-oriented workflow
- creating projects that unite the program to be launched, required licenses, specific configuration and related data
- support for different working environments
- easy handling through graphical user interface

© 2025 INNEO Solutions GmbH

– central configuration of application computers
– synchronization based on a configurable interval
– organization of users into units and subunits
– role-based permission concept
– management of configuration blocks (component files of a configuration)
– blocking access to projects
– support for multiple languages

For CAD applications, the following advantages are added:

– fastest possible startup of CAD application, as all data is stored locally
– licensing with FlexLM, fail-safe mode and license borrowing supported
– creation of project options which users can select
– easy configuration of a CAD landscape
– license management
– easy offline work using license borrowing
– Windchill integration
– database-driven management of Creo Parametric configuration settings

1.4 License-dependent features

Starting with GENIUS TOOLS Starter 6.0.1, the product functionality depends on the type of license you are using. From the year 2020 onwards, GENIUS TOOLS Starter is only sold with subscription licenses.

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

Subscription function	Description	Release
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

© 2025 INNEO Solutions GmbH

Subscription function	Description	Release
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	6.0.1.0
Access to directory “users”	Adds a group element (“users”) that can easily reflect complex configurations for many users. ⇨ Less maintenance work	6.0.1.0
Selecting Creo startkey when starting a project	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. ⇨ Allows the reduction of projects	7.0.0.0
Apps projects	Creates projects that run on any other program. Assigning a project directory and batch files is possible. ⇨ GENIUS TOOLS Starter App can be made the central access point for users.	7.0.0.0
Operating satellites in GENIUS TOOLS Starter Service	Enables the connection of synchronization servers to a main server and their automatic synchronization. ⇨ Faster connection of user computers to a synchronized satellite ⇨ Reducing queries from network to main server	7.0.1.0

© 2025 INNEO Solutions GmbH

Subscription function	Description	Release
Edit and compare configuration blocks	Release-dependent config.pro editor and graphic comparison tool („Config Analyzer", discontinued in version 12.0.1.0) ⇨ Quick overview, comparison and editing of project-related configuration blocks (config_*.pro files)	7.0.1.0
Company-specific project collections	Start projects can be put together in defined project groups by the administrator. ⇨ In many projects, these can be structured according to your own requirements.	7.0.2.0
Selectable project options	Projects can be started with multiple, individually defined configuration blocks, e. g.for license extensions or additional programs.	8.0.0.0
Reproducing organization structure with units and subunits	Subordinate units (subunits) can be created to provide additional configuration levels for project settings. ⇨ Better mapping for locations, subunits etc. and the resulting complex project configurations ⇨ Allows for further reduction of projects	8.0.1.0
Combined project options	Users can select a project option in GENIUS TOOLS Starter App, which activates multiple configuration options which are located in different directories and configuration levels, e. g. for license extensions and add-on applications. ⇨ Number of projects can be minimized	8.0.1.0
Edit config.pro files in GENIUS TOOLS Config Editor	Creo configuration options can be edited faster with auto-completion and color coding. ⇨ Easier comparison and editing of configuration options, also in batch mode.	8.0.2.0

© 2025 INNEO Solutions GmbH

Subscription function	Description	Release
Auto projects	Settings for auto projects (e. g. Keyshot) can be specified for the configuration levels standard, unit, project and user. ⇨ Company-specific configurations possible	9.0.0.0
Create and migrate Creo Elements/Direct Modeling projects	For Creo Elements/Direct Modeling projects, settings can be specified for the configuration levels standard, unit, project and user, and project settings and data packages can be added or migrated. ⇨ Integration of an additional CAD application	9.0.0.0
Create SolidWorks projects	Projects for SolidWorks can be configured in the layers standard, unit, project and user. Project settings can be specified and data packages added. ⇨ Integration of an additional CAD application	9.0.1.0
Create Inventor projects	Projects for Inventor can be configured in the layers standard, unit, project and user. Project settings can be specified and data packages added. ⇨ Integration of an additional CAD application	9.0.2.0
Create AutoCAD projects	For the applications AutoCAD, AutoCAD Architecture and AutoCAD Mechanical, projects can be created for a specific release and be assigned project and data directories. ⇨ Integration of an additional CAD application	9.0.2.0
Support of AutoCAD LT	Projects can be created for AutoCAD LT.	10.0.1.0

© 2025 INNEO Solutions GmbH

Subscription function	Description	Release
Select alternative authentication	Users can authenticate against a system other than Windows. Windchill user data can be imported with GENIUS TOOLS Project Configurator. For other systems, e. g. SAP, a self-created file can be used. ⇨ Compatibility of Starter projects with other authorization systems, e. g. Windchill	10.0.1.0
Unit-specific visibility of projects	Access to a project can be restricted to a specific unit (in addition to being restricted to a role). ⇨ Use of units for project access	11.0.0.0
Install Creo projects	Synchronize Creo Parametric setups to user computers, from which they can be started manually or automatically.	11.0.0.0
SSO-Authentifizierung	Windchill user data can be authenticated with an existing Windchill server with SSO (single sign-on) setup. ⇨ Login process in GENIUS TOOLS Starter omitted	11.0.1.0
Synchronization with GitSynchronization with Git	Operating environments can be synchronized with the version control system Git. ⇨ Synchronization server can be accessed with URL address	11.0.1.0
Checking in changes to GitChecking in changes to Git	Software component GENIUS TOOLS Git Utility for checking in changes made in an operating environment to the version control system Git and the history of these changes. ⇨ Intuitive graphical user interface	12.0.0.0

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.

© 2025 INNEO Solutions GmbH

User can see whether projects include subscription functions S by consulting Data base mode in the footer of GENIUS TOOLS Starter App.

For information on managing PTC license packages, please refer to Assigning Creo licenses to projects.

Falsely activating a subscription function

When activating a subscription function, a backup copy of the configuration database *sut.db* is created. Use this backup copy, if you want to undo an activation of any of the above functions so you can work again with permanent licenses.

Procedure:

1. On the installation computer, go to the backup directory: .. *caddepot*\<*operatingenvironmentname*>*configuration**database**BackupBeforeUpgrade*
2. Copy the backup file *sut.db* from the *BackupBeforeUpgrade* folder.
3. Paste this file into the *database* directory.

© 2025 INNEO Solutions GmbH

2 Basics

GENIUS TOOLS Starter allows users to launch projects from different applications, with settings made centrally by the administrator.

2.1 Important terms

The **administration computer** is a computer on which the administrative user has full write access to the Caddepot directory in order to manage all data on the file system level.

The user computer is the computer on which the end user of an application opens configured projects with GENIUS TOOLS Starter App. The required applications must be installed.

Caddepot is a directory on the installation computer that can contain any number of operating environments. It is the source of synchronizing the local operating environments on user computers, that is, the source for the local **Cadpool** directories. The Caddepot directory must shared to be accessible for distributed work.

An **operating environment** is a directory in the Caddepot that contains all the data required for working with the desktop application. This includes configuration data, libraries, templates and additional applications. The operating environment also contains a database with all configured projects. An operating environment can contain an arbitrary number of projects.

If you work across a network, the directory for the operating environment is the Caddepot on the administration computer and the Cadpool on the application computers.

The operating environments contains the software components GENIUS TOOLS Starter, GENIUS TOOLS Starter App and GENIUS TOOLS Project Configurator of a defined version.

A **Starter project** combines specifications that are made in GENIUS TOOLS Project Configurator, namely

– the program to be started,

– the required licenses,

– the project directory and

– the associated data,

with configuration settings that can be made in the configuration levels using manually created configuration blocks.

It can be selected by users in GENIUS TOOLS Starter App and starts with locally available

© 2025 INNEO Solutions GmbH

data and the configuration settings defined centrally by the administrator.

For the configuration of a project GENIUS TOOLS Starter reads out different component files, the so-called **configuration blocks**. These files can be stored together with batch files in different configuration levels.

2.2 Workflow and synchronization

Standard workflow: Working locally with synchronization

As of version 6.0 of Startup TOOLS, Creo users work with all data locally on their computers. This ensures the fastest possible access to the data and also allows users to work offline.

Local data (the operating environments) are located in the Cadpool directory and are synchronized from the central Caddepot directory at a configurable interval, i. e. the data is copied from Caddepot to Cadpool.

Data synchronization means that local modifications to a configuration will be overwritten in the synchronization process. Local changes that are to apply to all users – e. g. entries in a configuration block (config_*.pro file) – must be copied manually to the Caddepot. Synchronization must be suspended while you are making local changes. To pause synchronization, open GENIUS TOOLS Project Configurator and select *Pause synchronization* from the user menu .

> **Please note:** For data synchronization to work, users need access to the Caddepot directory. We recommended granting read access only, if you do not want users to change settings by themselves.

The setup for working locally with synchronization is created by GENIUS TOOLS Starter by default. If you start the GTS.exe file, it will open from the local Cadpool directory, or create the Cadpool directory, if it does not exist yet (initial synchronization).

The following applies to **operating environments without version control**: If local changes are to apply to all users – e. g., entries in configuration blocks (Config_*.pro files) – they must be copied manually to the Caddepot. Synchronization must be suspended while you are making local changes. To do this, go to GENIUS TOOLS Project Configurator or GENIUS TOOLS Starter App in the user menu and select *Pause synchronization*.

In **git-versioned operating environments** all changes are made and checked in to the Cadpool, see Saving changes.

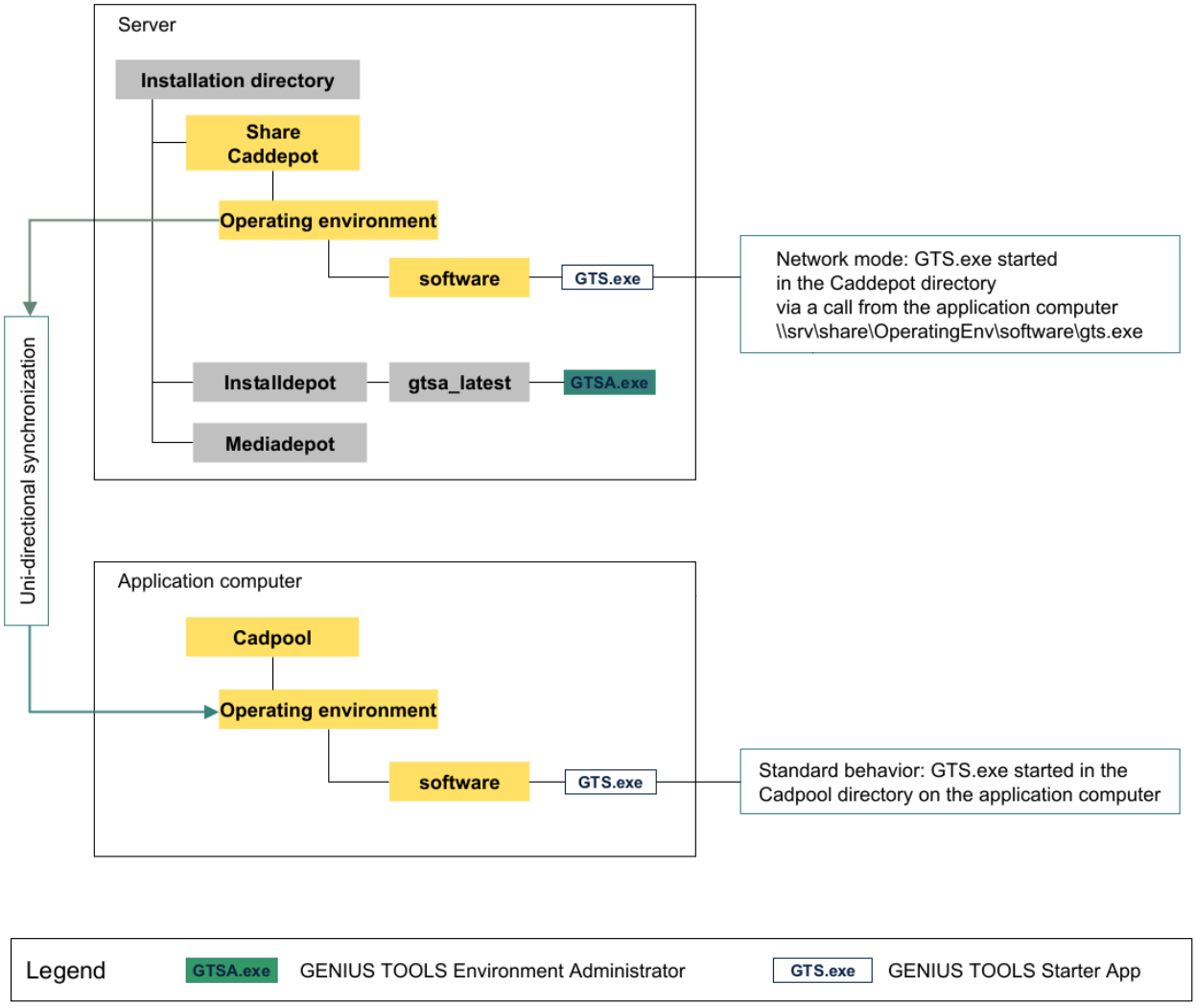
Network mode: Working without synchronization

You can work locally with the data in the Caddepot and without synchronization within a computer network. To do so, the standard behavior of GENIUS TOOLS Starter has to be

© 2025 INNEO Solutions GmbH

changed and set to network mode, meaning that the file *GTS.exe* will be started in the Caddepot directory.

To set access rights for network mode, open GENIUS TOOLS Project Configurator and set *Access rights* > *Function access* > *Select unit* > *Function access* > *Prevent switch to local installation: Yes*.



Synchronization and network mode in GENIUS TOOLS Starter.

2.3 Operating environments

You can manage any number of operating environments with GENIUS TOOLS Starter. This means that you can have both a test and a production environment installed and manage environments for different clients.

Each operating environment contains a set of projects, the required data and the GENIUS TOOLS Starter software. Each operating environment is fully independent of the others.

© 2025 INNEO Solutions GmbH

The directory for the operating environment contains configuration data, libraries and templates, additional applications as well as the database for project-specific configuration settings, see Directory structure.

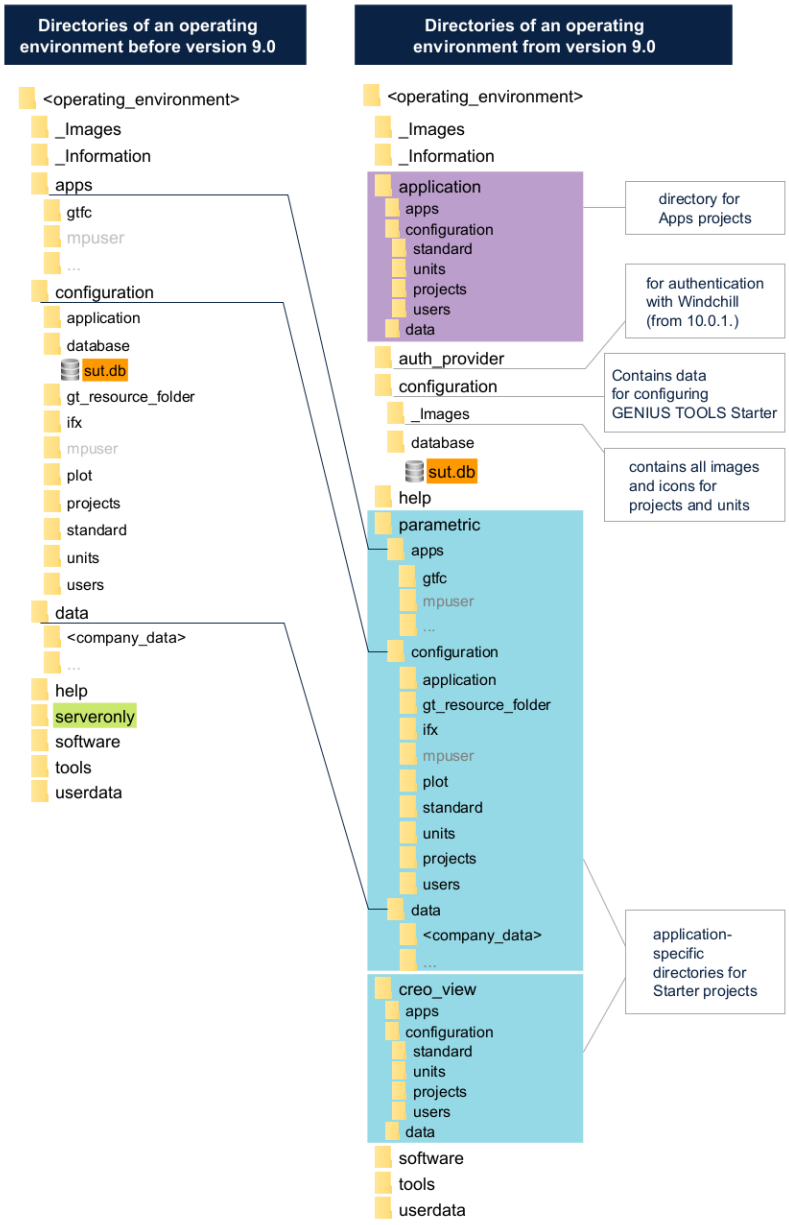
Software updates of an operating environment are managed by using GENIUS TOOLS Environment Administrator. Data in an operating environment – such as GENIUS TOOLS Starter software, additional applications like GENIUS TOOLS for Creo, configuration files, or standard parts – cannot be changed by setup programs. This gives the IT administrator better control over which data is to be changed or updated in an operating environment.

2.4 Directory structure

With GENIUS TOOLS Starter you can create projects for Creo Parametric as well as Creo Elements/Direct Modeling, Inventor and SolidWorks. In order to be able to include data for other CAD systems, the entire directory structure has been changed in version 9.0.0.

Warning: Due to these new features in GENIUS TOOLS Starter, the directory structure and the software are no longer backward compatible, which means that after updating an operating environment to version 9.0.0.0 or newer, it is no longer possible to revert to an older version. Read the chapter *Important information* in the News document before updating.

© 2025 INNEO Solutions GmbH



System directories of the first level

_Images contains images (JPEG, PNG, SVG) for the operating environment as well as the start icon (ICO). See also chapter *Configuring*Configuring the desktop link.

_Information contains messages to the users as text files. See also Sending messages to the users.

application directory for applications of App projects, e.g. Model Processor.

auth_provider contains the executable files *Auth_Windchill.exe* and *Auth_Windchill_SSO.exe* for authenticating against Windchill (authentication provider).

configuration contains images and icons for units and projects, and the *sut.db* database which stores the configuration settings of an operating environment.

© 2025 INNEO Solutions GmbH

help contains the manuals and installation instructions for GENIUS TOOLS for Creo, GENIUS TOOLS Starter and Startup TOOLS.

satelliteonly is located in the caddepot of the main server and all satellites. It can contain data specific to satellites.

serveronly is located in the caddepot directory of the main server only. It contains additional tools such as GENIUS TOOLS Comma-to-dot or GENIUS TOOLS Purge. The subdirectory *_ErrorLog* contains log files for errors.

software contains the GENIUS TOOLS Starter software.

tools contains the software component GENIUS TOOLS Config Editor and Requirement Check, a tool which returns a log file with a list of all available applications.

userdata contains user-defined settings, e. g. mapkeys and user images. The name of a subfolder corresponds to the login name. See Create user with image.

In contrast to the directory in *configuration/Users*, this directory can be managed by the user themselves. See chapter User-driven configuration

The following application-specific directories are created:

auto_cad AutoCAD, AutoCAD Architecture, AutoCAD LT und AutoCAD Mechanical

ced_drafting Creo Elements/Direct Drafting

creo_view Creo View

elements_direct Creo Elements/Direct Modeling

geomagic_design_x Geomagic Design X

illustrate Creo Illustrate

inventor Inventor

key_vr KeyVR

keyshot Keyshot

mathcad Mathcad

parametric contains data packages, standard projects and add-on applications for Creo Parametric

schematics Creo Schematics

solid_works SolidWorks

For some applications, only one Starter project can be created: so-called auto projects.

Please note: Empty directories are not synchronized.

© 2025 INNEO Solutions GmbH

Directories of the second level for the various applications

Each of the above listed application-specific directories has three sub-directories for data, configuration settings and add-on applications.

apps contains all additional applications.

- For Creo Parametric: the GENIUS TOOLS for Creo products Library and/or Parameter (gtfc) and the freeware tool GENIUS TOOLS UI File Loader (ui).
- It is represented by the variable GTS_APPS_DIR.

configuration contains configuration settings for system-wide standards, units, projects, users as well as further directories.

- For Creo Parametric: *gt_resource_folder*.
- It is represented by the variable GTS_CONFIGURATION_DIR.

data contains all data packages (subdirectories) available in a project, e.g., libraries, materials, ModelCheck configuration files etc.

- A subdirectory of *data* is represented by the variable GTS_DATA.

install contains all data and setup files for installing Creo Parametric on user computers.

2.5 Defining settings

The settings for an operating environment are made in different locations and are saved as follows.

Information on synchronisation and licence server
These properties of an operating environment are specified in GENIUS TOOLS Environment Administrator in the Modify function and when creating an operating environment.

Information on the configuration of a CAD application
Configurations for a CAD application and configuration instructions are specified in configuration blocks and batch files.

Storage location:
caddepot\<*operatingenvironment*>\<*application*>*configuration*\<*configurationlayer*>

Changes to these files must be made in operating environments without version control in the caddepot. Any changes to files located in the cadpool are overwritten by data synchronization. If you do want to edit files in the cadpool you have to pause synchronization in the user menu of GENIUS TOOLS Project Configurator and copy the files to the caddepot manually.

© 2025 INNEO Solutions GmbH

Please note: If you make changes to files in an operating environment that is versioned with Git, you must first open GENIUS TOOLS Project Configurator, see Connecting operating environments to Git.

Information on the configuration of GENIUS TOOLS Starter App

Settings for projects, users and units are made in GENIUS TOOLS Project Configurator and saved in the database *sut.db* on the installation computer, i. e. the computer which contains the caddepot.

Storage location: *caddepot*\<*working environment name*>*configuration**database**sut.db*

A backup of the database is created in the database directory every time GENIUS TOOLS Project Configurator is closed.

Changes made with GENIUS TOOLS Project Configurator are saved with the function *Save database*. Before saving, changes can be discarded in the user menu via *Revert changes*.

In git-versioned operating environments, the Save function is replaced by the Git check-in button, which checks in both the sut.db database and all changes to files in the cadpool, e. g. configuration blocks and batch files, into Git. Detailed information can be found in the Connecting operating environments to Git chapter.

Warning: All users who are allowed to start GENIUS TOOLS Project Configurator are contributors and can check in changes to Git. Therefore, make sure that changes to the operating environment are not made by several users simultaneously. This can lead to merge conflicts during check-in.

Settings made in configuration blocks, batch files and GENIUS TOOLS Project Configurator define the behavior of Starter projects, see next chapter.

© 2025 INNEO Solutions GmbH

3 Starter projects

A **Starter project** combines specifications that are made in GENIUS TOOLS Project Configurator, namely

– the program to be started,

– the required licenses,

– the project directory and

– the associated data,

with configuration settings that can be made in the configuration levels using manually created configuration blocks.

It can be selected by users in GENIUS TOOLS Starter App and starts with locally available data and the configuration settings defined centrally by the administrator.

An administrator can thus make GENIUS TOOLS Starter App the central starting point at work for users.

The setup of a Starter project requires object data, which are located in the data directory, as well as configuration blocks, which can be located in the configuration directories *standard, units, projects* and *users*. The separation of the object data from the configuration data and additional applications ensures that objects of an operating environment can be used for several projects.

A Starter project can be created with the following components:

– start variables (supported by GENIUS TOOLS Starter)

– environment variables (GTS)

– configuration blocks (GTS)

– previously started programs (defined by batch files)

– Windows registry (GTS)

– settings (GENIUS TOOLS Project Configurator)
for units and individual projects:

  · servers

  · licenses

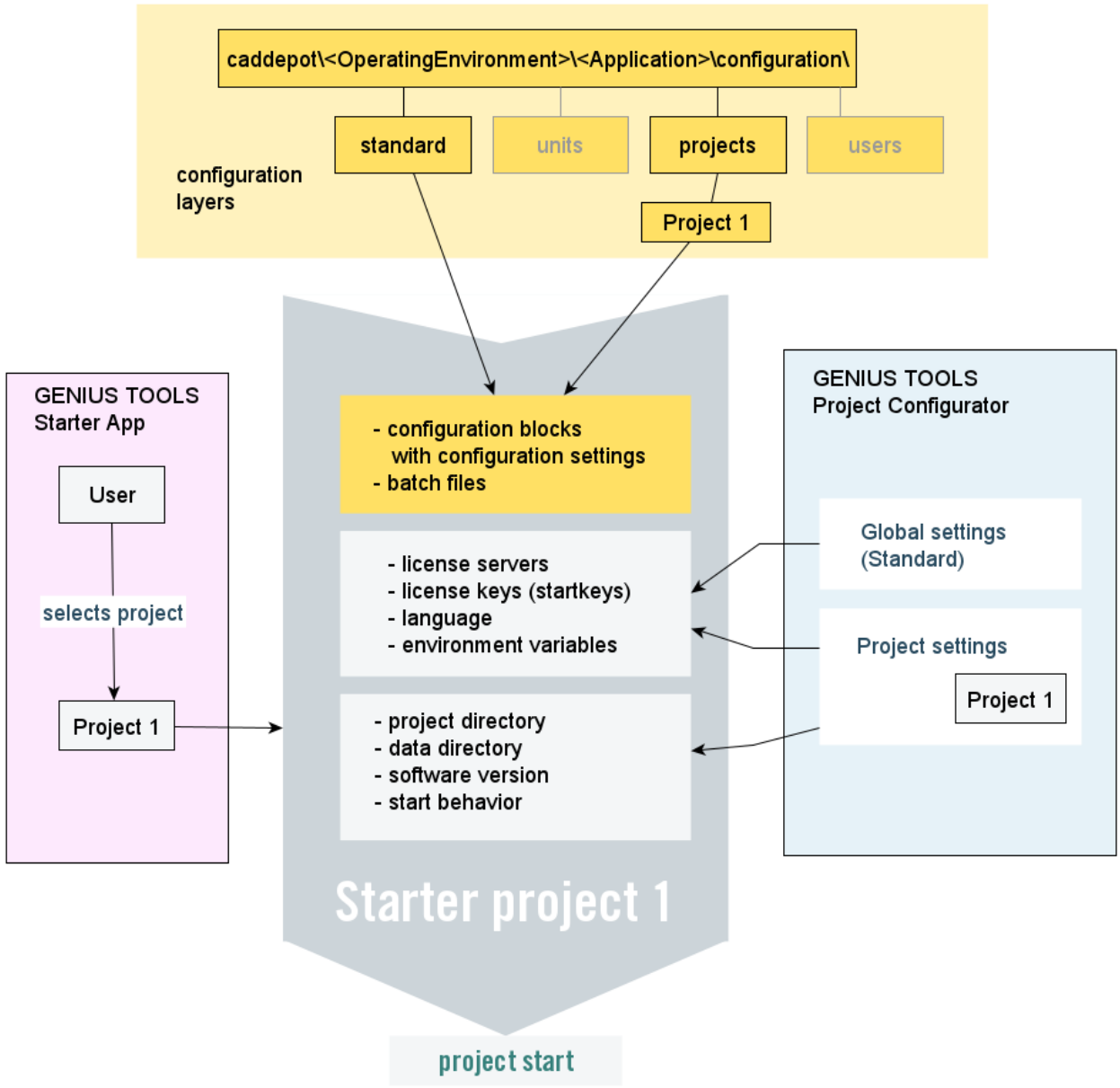
  · language and license key (as project options)

  and additionally for users:

  · access rights

  · visibility and presentation of projects

© 2025 INNEO Solutions GmbH



Structure of a Starter project set up with standard settings and project settings

Starter projects can be created for all applications. Each project can be assigned a project directory and a data directory. The first, general steps are described in the General procedure chapter.

The license to start a CAD application / Starter Core license is returned after 120 minutes of runtime, unless the CAD application is closed before. After this runtime, the CAD starter license is free again and can be used by the next user.

For CAD applications, you can additionally define startup behavior, license server and environment variables. Accordingly, the settings for these applications are more in-depth and are described in the respective chapters:

– AutoCAD

© 2025 INNEO Solutions GmbH

– Creo Elements/Direct Modeling

– Creo Parametric

– Inventor

– SolidWorks

3.1 General procedure

There are two types of starter projects, general and CAD specific. The created starter projects are displayed to the users in GENIUS TOOLS Starter App.

To configure a general starter project, you can follow the procedure below. The additional options that apply to CAD-specific projects are described in the respective chapters.

BASIC PROCEDURES

1. Set up operating environment
Questions: How should the operating environment be set up?

Procedure: Create operating environment with GENIUS TOOLS Environment Administrator and define license and synchronization server(s).

2. Define organizational structure

Questions: How complex is the structure of your company? Will you be working with subordinate business units, e. g. Construction as a subunit of Italy?

Procedure: Map the organizational structure in GENIUS TOOLS Project Configurator.

CROSS-PROJECT PROCEDURES

3. Create configuration blocks
Questions: Which configuration options should be predefined for users on a starter project? Which configuration settings, mapkeys and project options should apply company-wide and which should apply to a unit or specific project?

Procedure: Write application-specific configuration blocks (config files) and place them in the appropriate directories of the configuration layers.

> **Hint:** We recommend defining settings and configuration options in the highest possible configuration level, i.e. as few as necessary for individual projects. For example, individual projects may contain the version-specific settings.

4. Set environment variables
Questions: Do the various configuration layers require different environment variables?

Procedure: Environment variables can be assigned and defined in GENIUS TOOLS Project Configurator for each configuration layer.

© 2025 INNEO Solutions GmbH

5. Include additional programs
Questions: Which other programs should be started with the application?

Procedure: Make specifications in batch files.

6. Define global settings and unit settings
Questions: Which license server(s), which synchronization settings should apply? How should projects be displayed in GENIUS TOOLS Starter App?

Procedure: Define global settings as well as settings for units in GENIUS TOOLS Project Configurator.

7. Display project information for users
Questions: Which information about the project should be available to users?

Procedure: Information displayed in GENIUS TOOLS Starter App can be restricted, see chapter Granting function access rights.

PROJECT SPECIFIC PROCESSES

8. Create a project
Questions: Which project and data directory should be assigned to the project?

Procedure: Define project settings in GENIUS TOOLS Project Configurator.

9. Define language or make it available for selection
Questions: Should users be able to choose the language of the application?

Procedure: Set language in GENIUS TOOLS Project Configurator or create as project option.

10. Display project
Questions: Should the project be accessible for all or certain users?

Procedure: Restrict access for defined user groups (roles), see chapter Restricting project access.

CAD-SPECIFIC PROCESSES
Projects of the CAD applications can furthermore be provided with:

– additional project options, e. g. for license extensions, add-ins, see chapter Making use of project options,

– additional information in the tabs of GENIUS TOOLS Starter App, e. g. on the configuration blocks used, see Customizing information panes,

– the possibility to borrow licenses, see chapter Displaying license information.

Creo Parametric projects can be used to assign license packages to individual workstations or users, see chapter Assigning Creo licenses to a project.

© 2025 INNEO Solutions GmbH

3.2 Data packages

The directory data is the system directory of an application, under which the files related to an operating environment can be found. All object data are stored in the subdirectories, the data packages:

<GTS-working-environment>\<application>\data\<data-package>

For example, for Creo Parametric: *<GTS_ROOT_DIR>\parametric\data\sut_creo9*.

Please note: Data packages are subdirectories in the system directory *data* of an application.

A reference to a data directory from a configuration block is made with the variable `$GTS_DATA`.

Hint: If possible, always work with variables.

For Creo Parametric, object data is provided with the Startup TOOLS product package, see Creo data packages.

3.3 Configuration blocks

Most software programs do not allow to make specific settings for different user groups, projects and locations. To provide this possibility, GENIUS TOOLS Starter creates a specific configuration from different configuration component files, the configuration blocks. Configuration blocks are created manually and stored at the desired configuration layers. This provides company-wide settings as well as settings per department, location, project etc.

A configuration block

– is a text file that contains one or more configuration options, i. e. settings for the application,

– must be given an application-specific name (see table below),

– is one of many configuration files that are read by GENIUS TOOLS Starter to create the configuration of a Starter project,

– can be arranged as project option (Making use of project options).

© 2025 INNEO Solutions GmbH

Please note: For the correct display of German umlauts in GENIUS TOOLS Starter App, configuration blocks must be written in UTF8.

You can conveniently create and modify configuration blocks and Config.pro files using the add-on program GENIUS TOOLS Config Editor, which features color highlighting, auto-completion as well as error messages and which allows you to compare entries of two configuration blocks.

Configuration blocks have to be named as follows for the respective applications.

Configuration block		Content	Example
Creo Parametric			
1	config_*.pro (also: Config file)	All settings (configuration options) for running the application	*config_sut_de_c6p_dir_file.pro* *config_c5p_mapkeys.pro*
2	config_*.sup	Settings that cannot be modified by the user	*config_design_de.sup*
SolidWorks			
3	config_*.sldreg	All settings, Embedding of additional applications (add-ins)	*config_addin_compose.sldreg*
Inventor			
4	config_*.xml	General settings	*config_dir_file.xml*
5	ui_*.xml	Settings for the user interface	*ui_customization.xml*
6	*.addin	Embedding of additional applications (add-ins)	*AdditiveMFG.inventor.addin*

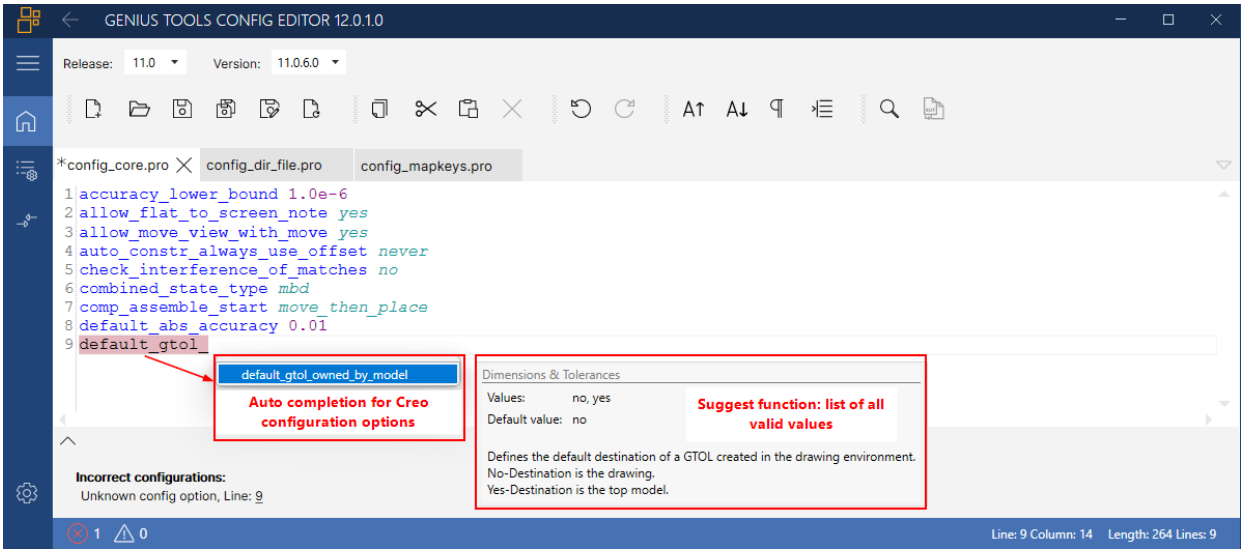
Basic configuration blocks

Configuration blocks are read in different ways, depending on whether they are basic or conditional configuration blocks. Basic configuration blocks are created as follows. Conditional configuration blocks contain conditions that control how they are read, see Conditional configuration blocks and batch files.

© 2025 INNEO Solutions GmbH

Example: Creating a basic configuration block for Creo configuration options

1. Create a text file named *config_core.pro*.
2. Open the file with an editor. We recommend GENIUS TOOLS Config Editor, as it has a suggestion function for all Creo configuration options and their permitted values.
3. Write the desired configuration settings to the file, e.g., `accuracy_lower_bound 1.0e-6`



4. Decide to which users the configuration settings should be available. The subdirectories *standard, units, projects*, and *users* are available in the configuration directory, see configuration layers.
5. Go to the desired configuration directory, e.g., *<working environment>\<application>\configuration\standard*, if the settings are to apply company-wide.
6. Note that all values of the configuration block are evaluated according to the call hierarchy for files.

3.4 Batch files

Batch files are used to execute configuration commands at different times.

If you want to execute additional instructions before an application is started or when changing to another project, you can place unit or project-specific batch files in the corresponding directories of the configuration layer. You can also use batch files to set additional environment variables or copy additional data. Batch files are subject to the same call hierarchy as configuration files. Unlike configuration files, however, batch files cannot be located in the PDM directory.

Batch files can be created as project options, see Single project options.

© 2025 INNEO Solutions GmbH

Types of batch files

Batch files that configure the CAD applications Creo Parametric, Inventor und Solidworks have to start with one of the following prefixes.

For all other applications, e. g. Creo Elements/Direct Modeling, Apps projects and Auto projects, only start batch files can be executed.

Prefix	Start time	Comment
prestart_	Started before the configuration is created.	When a project is started, GENIUS TOOLS Starter calls the *prestart_* batch files before the *config.pro* files for the project are assembled.
poststart_	Started after the application has been started.	This type of batch file can be used for accessing the running Creo session with the help of additional programs.
start_	Started before the application is started.	When a project is started, GENIUS TOOLS Starter assembles the *config.pro* files for the project, then calls the *start_ batch* files.
stop_	Started after the application is closed.	Please note that *Enable stop batches* has to be set to *Yes* in the Project Configurator under *Configuration* > *(Select unit)* > *Creo Settings* > *Startup Settings*.

Warning: What if Creo Parametric does not start? The most common cause is that a batch file causes the Creo call to stop. If there are start issues, first check which batch file could cause the Creo call to stop.

User or computer-specific batch files

GENIUS TOOLS Starter can call batch files depending on which user or computer starts a project. These batch files and their call sequence do not differ from the general batch files.

Use the following prefixes and be careful not to use special characters.

© 2025 INNEO Solutions GmbH

Batch file	Prefix (without the characters <>)	Beispiel
User-dependent	U_<WindowsUSername>_	`U_MUELLER_stop_copy_workspace.bat`
Computer-dependent	C_<WindowsComputername>_	`C_CAD13_start_map_drive.bat`

Please note: User and computer groups are converted into units when updating to version 11.0.0.0 and later. Configuration blocks that were created for user or computer groups (*UG_<nameofusergroup>_config.pro* or *CG_<nameofcomputergroup>_config.pro*), will be migrated into a new unit directory of the same name.

3.5 PDM directories

The PDM directory will be included into the call hierarchy for files when you are working with a PDM system, e. g. Windchill. It contains additional settings that are defined on starting the PDM system, as well as commented-out settings for Starter projects. Settings that are commented-out are stored in the file *exclude.txt*.

As soon as the PDM system is activated, the PDM directories within all configuration directories relevant to a project will also be included into the configuration call hierarchy. All configuration blocks located in the PDM directories will be used.

Please note: The *PDM* directories were named *SEARCHMODE* until version 9.0.1.

3.6 Configuration concept

All data for the configuration of a starter project are located in an operating environment in the system directory *configuration* of the respective application. When a project is started, all configuration and batch files from the subdirectories *standard, units, projects* and *users* are taken into account, i. e. from the configuration layers.

3.6.1 Configuration layers

The task of GENIUS TOOLS Starter is to perform configuration settings on different configuration levels. These levels are:

– Standard (global settings)

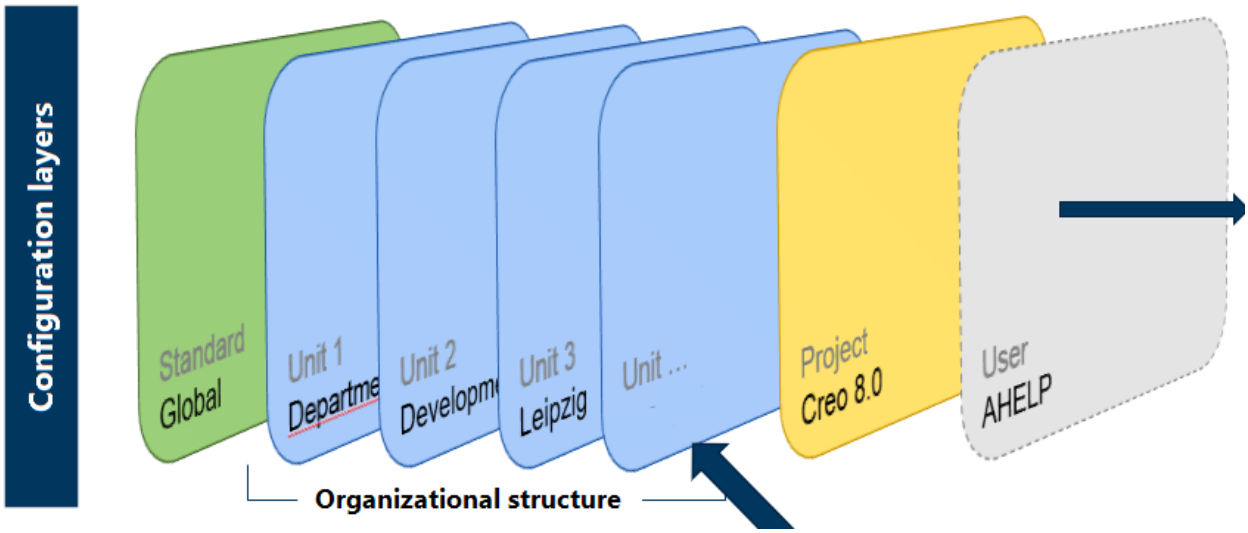
– Units (departments / locations)

© 2025 INNEO Solutions GmbH

– Projects

– Users

All configuration blocks and batch files for an application are stored in these configuration levels and processed according to the call sequence for files, see next chapter. If you work with subunits, the configuration of a starter project is additionally determined by the organizational structure.



Directories of the configuration layers

The following directories are available for the configuration layers. They are located in the system directory *configuration*.

1. Standard directory:
   <GTS-OperatingEnvironment>\<Application>\configuration\standard
2. Unit directory / directories: subdirectory /subdirectories of *units*
   <GTS-OperatingEnvironment>\<Application>\configuration\units\%GTS_UNIT_DIR_NAME%
   (The variable contains the name of the last selected unit).
3. Project directory: subdirectory of *projects*
   <GTS-OperatingEnvironment>\<Application>\configuration\projects\%GTS_UNIT_DIR_NAME%
4. Users directory: subdirectory of *users*
   <GTS-OperatingEnvironment>\<Application>\configuration\users\%USERNAME%

Please note: In order to work with data for other CAD systems in the future, the entire directory structure has been changed in version 9.0.0 of GENIUS TOOLS Starter. Consult the comparison of the old and new directory structure. The adjustment of the paths is done automatically during an update.

© 2025 INNEO Solutions GmbH

1. Standard directory
Configuration options in the directory *standard* always apply as long as they are not overwritten by specifications in subordinate folders.

2. Unit directory / directories
The directory *units* contains the individual unit directories, e. g. *<GTS_ROOT_DIR>\parametric\configuration\units\manufacturing*.

All unit directories are located on the same level, including those of subordinate units (subunits). Subunits are created by the arrangement in the organization tree.

3. Project directory
The directory *projects* contains the individual project directories, i. e. subdirectories with project-specific information, e. g. *<GTS-OperatingEnvironment>\parametric\configuration\projects\project_creo8p_de*.

You can select a project-specific directory in the settings for a project. Without this specification, the directory will be inherited from the standard or unit settings.

Please note: Unit and project directories are not generated by creating a unit or project in GENIUS TOOLS Project Configurator, but must be created manually.

4. Users directory
The directory *users* contains subdirectories for all users, e.g. *<GTS_ROOT_DIR>\parametric\configuration\users\cfoster*.

When synchronizing from Caddepot to Cadpool only the directory for the specific user is copied from the Users directory.

3.6.2 Call sequence for files

Configuration blocks (config files) and batch files can be located in these configuration directories: standard directory for global system settings, unit directories, project directories and user directories for user-defined settings. The files are processed in the following sequence by GENIUS TOOLS Starter. A configuration block will only be read if it falls into the selection made by the user for a unit and/or a project.

1. standard (global directory)
    1.1. standard > PDM, if a PDM system (e. g. Windchill) is activated
2. units (individual subdirectories)
    2.1. units > PDM, if a PDM system is activated
3. projects (individual subdirectories)
    3.1. projects > PDM, if a PDM system is activated

© 2025 INNEO Solutions GmbH

4. users (individual subdirectories, named by Windows / Windchill user name)
    4.1. users > PDM, if a PDM system is activated
5. userdata (configurable)

Please note: The directories *units* and *users* can only be used with a subscription license.

The directory *PDM* was named *SEARCHMODE* until version 9.0.1.0.

The following applies to all files:

– A file is only read if it is in the selection made by the user for a unit and project.

The following applies to Batch files, IPJ files and Creo UI files:

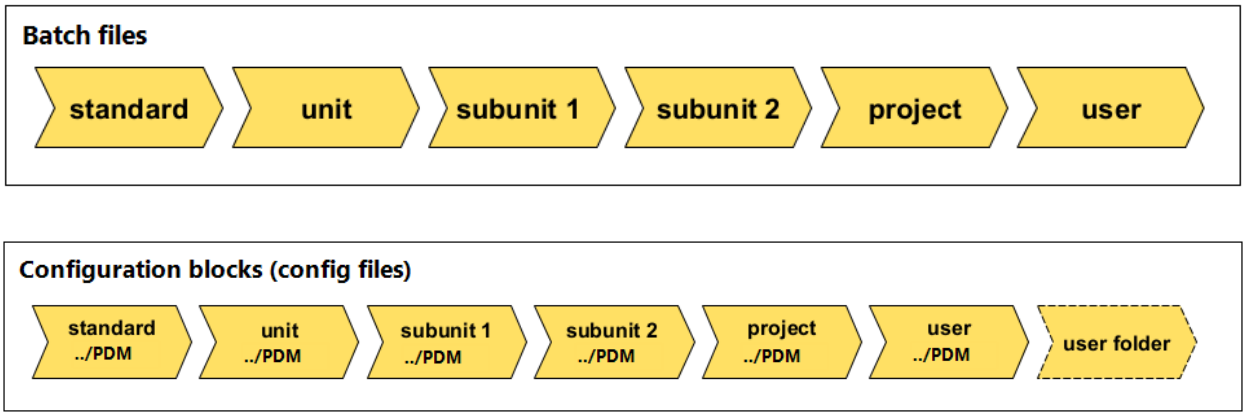
– The first file found is read.

The following applies to configuration blocks (Config_*.pro files):

– All files are read. The last entry of a configuration option is the valid value.

– If you work with subordinate units (subunits), the configuration blocks of a unit can be overwritten by another unit. The sequence depends on the organization tree, see Mapping an organization.

– The *PDM* directory must be activated extra, see PDM directories.



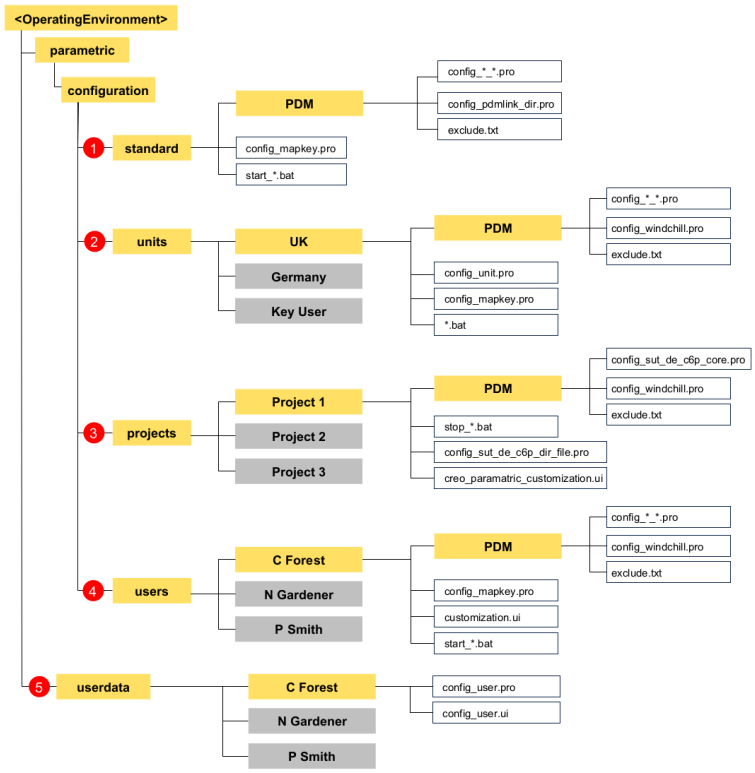
Call sequence of configuration blocks and batch files for a Starter project

The processing order of the files significantly influences the configuration result for a starter project. In addition, the settings in GENIUS TOOLS Project Configurator determine the configuration of the project, see next chapter.

Example of a project configuration: Creo Parametric

The following graphic illustrates the call hierarchy for configuration blocks and batch files, if user C.Forest chooses the unit UK and starts Project 1. The value of the last configuration block is the valid value.

© 2025 INNEO Solutions GmbH



The following configuration blocks are used if Windchill is not used. If values are listed multiple times in several blocks, the value in the last-mentioned file is taken over, in the example from the file *<GTS-OperatingEnvironment>\configuration\users\CForest\config_mapkey.pro*.

<GTS-OperatingEnvironment>\configuration\standard\config_mapkey.pro
<GTS-OperatingEnvironment>\configuration\standard\start_.bat
<GTS-OperatingEnvironment>\configuration\units\UK\config_unit.pro
<GTS-OperatingEnvironment>\configuration\units\UK\config_mapkey.pro
<GTS-OperatingEnvironment>\configuration\units\UK*.bat
<GTS-OperatingEnvironment>\configuration\projects\Project1\stop_.bat
<GTS-OperatingEnvironment>\configuration\projects\Project1\config_sut_de_c6p_dir.pro
<GTS-OperatingEnvironment>\configuration\projects\Project1\creo_paramatric_customization.ui
<GTS-OperatingEnvironment>\configuration\users\CForest\config_mapkey.pro
<GTS-OperatingEnvironment>\configuration\users\CForest\config_customization.ui
<GTS-OperatingEnvironment>\configuration\users\CForest\start_*.bat
<GTS-OperatingEnvironment>\userdata\CMeier\config_user.pro
<GTS-OperatingEnvironment>\userdata\CMeier\config_user.ui

For the selected project 1, the project settings made in GENIUS TOOLS Project Configurator also apply, e. g. to the license servers, startkeys or environment variables.

© 2025 INNEO Solutions GmbH

3.6.3 Call sequence for settings

Settings in GENIUS TOOLS Project Configurator – e. g. for license servers, synchronization behavior or additional environment variables – are made for the configuration layers standard, units and projects.

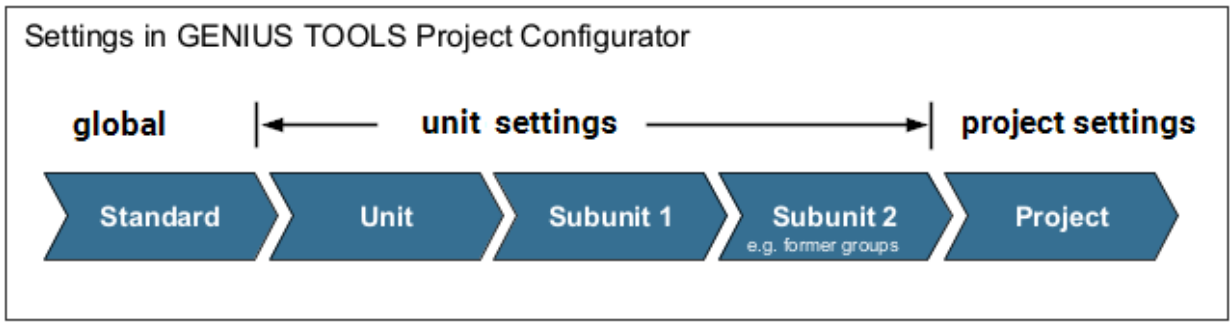
As always, the last setting overwrites the settings defined in the above configuration layers.

The following sequence for settings in GENIUS TOOLS Project Configurator applies:

1. Global settings: *Standard*
2. Unit
3. Subunit(s): If you work with subunits, their hierarchy depends on the organizational structure, see Call hierarchy for subunits.

   ↳ The settings for units and subunits are made in the menu page *Configuration*.
4. Project

   ↳ The settings for projects are made in the menu page *Projects*.



Call sequence for the settings made in GENIUS TOOLS Project Configurator

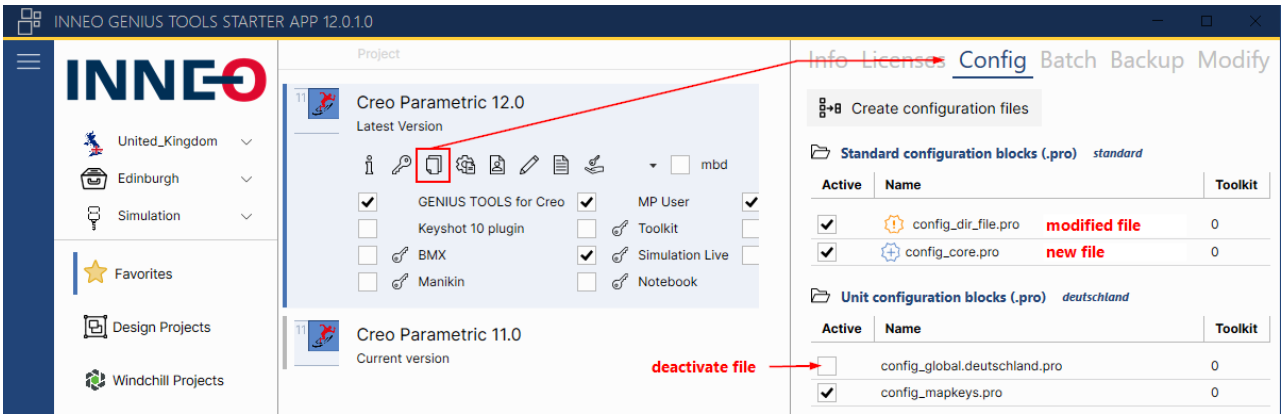
Please note: The configuration logic has been changed with the introduction of Units as of version 6.0.1.
User and computer groups have been abolished in version 11.0.0.0 and are now available as units.

3.7 Testing project configuration locally

All files that configure a Starter project can be tested locally before being synchronized to the user computers. Do not forget to pause synchronization while testing, see chapter Workflow and synchronization.

© 2025 INNEO Solutions GmbH

You can test configuration blocks and batch files by activating or deactivating them in the Config and Batch tabs. Double-clicking on the file name opens the file in GENIUS TOOLS Config Editor.



If you change files or create new files, the changes are marked directly with icons. It is not necessary to reload projects.

	New file	File has been added.
	Modified file	File has been edited. Note: The icon opens configuration blocks for Creo Parametric projects directly on the comparison page of GENIUS TOOLS Config Editor.
⚠	Incorrect batch file	GTS variables are overwritten in the batch file. In the case of start batch files, this may cause problems when starting projects.
⚠	Incorrect configuration block	There are invalid characters (non-visible control characters) in the file. GENIUS TOOLS Starter removes these characters when creating the configuration files. The project can be started.

The following function access rights are required by users to deactivate and change files:

Function in GENIUS TOOLS Starter App	Assign access rights in GENIUS TOOLS Project Configurator
For the Config tab	
Display configuration modules	Can see configuration blocks
Deactivate configuration modules and view info symbols	Can disable configuration blocks
Open and edit configuration modules	Can open configuration blocks

© 2025 INNEO Solutions GmbH

Function in GENIUS TOOLS Starter App	Assign access rights in GENIUS TOOLS Project Configurator
For the Batch tab	
Display batch files	Can see batch files
Deactivate batch files and view info symbols	Can disable batch files

3.8 Conditional configuration blocks and batch files

Conditional configuration blocks and batch files contain conditions that control their reading. They are used to define the validity of a file for units and for combined project options. Unlike basic configuration blocks and batch files, conditional configuration blocks have a tag ID.

A tag ID is a textual identifier in a filename that is recognized by GENIUS TOOLS Starter. By adding a tag ID to a configuration block, its validity can be linked to conditions. GENIUS TOOLS Starter distinguishes between unit tag IDs and free tag IDs.

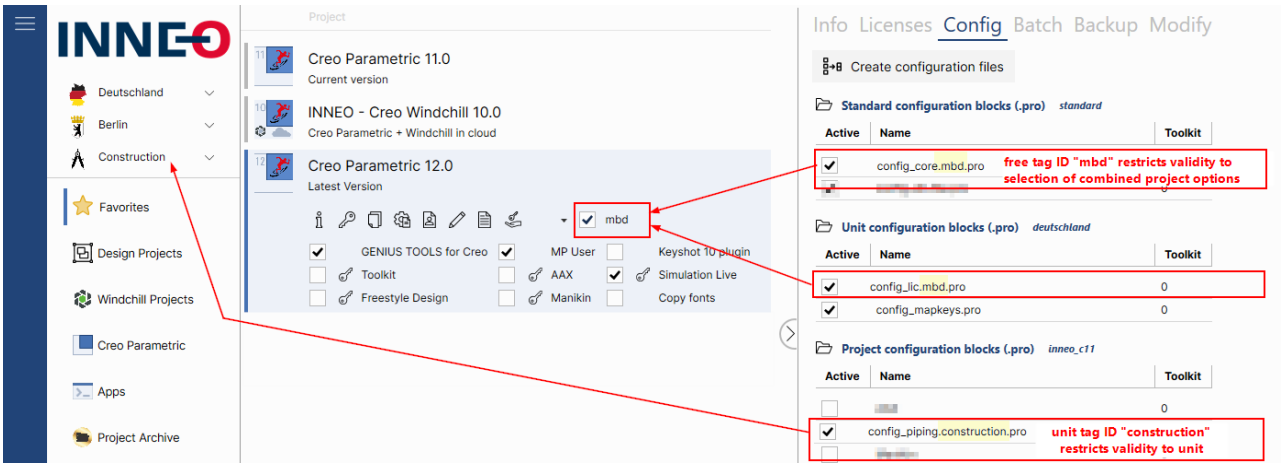
Unit tag ID
A unit tag ID is an additional textual marking in a configuration block that defines a unit and limits the validity of the block to it. A unit tag ID is used when working without unit directories, see chapter Using unit tag IDs.

Example: The configuration block *config_piping.construction.pro* contains the unit tag ID "construction". This activates the configuration settings contained in the file when the unit Construction is selected in GENIUS TOOLS Start App.

Example for multiple unit tag IDs: The configuration block *config_piping.berlin.construction.pro* is activated when the units Berlin and Construction are selected.

Free tag ID
A free tag ID is an additional textual marking in a configuration block that defines a combined project option and limits the validity of the block to it, e. g. *config_lic.mbd.pro*. That means users have to activate the project option – here: mbd – in GENIUS TOOLS Starter App in order for the configuration block and batch files to be read at project start. The first configuration block with the free tag ID creates a checkbox, see chapter combined project options.

© 2025 INNEO Solutions GmbH



Free tag IDs can be choosen freely, but cannot have the name of a unit.

© 2025 INNEO Solutions GmbH

4 GENIUS TOOLS Environment Administrator

GENIUS TOOLS Environment Administrator is an administrative tool for managing operating environments. Use GENIUS TOOLS Environment Administrator to handle the following tasks.

1. Create operating environments
2. Add components to an existing operating environment
   – project directories (directories with *config.pro* and other project-specific files)
   – data directories
   – additional applications
3. Update operating environments (Software update for GENIUS TOOLS Starter App and GENIUS TOOLS for Creo)
4. Modify settings for an operating environment for
   – license servers
   – synchronization servers (Caddepot, Cadpool)

The next chapters describe each function in detail.

Warning: The following applies to git-versioned operating environments: All changes made on the user computer that have not been commited into Git are discarded when executing a function in GENIUS TOOLS Environment Administrator.

4.1 User interface

GENIUS TOOLS Environment Administrator must be started with write access to the caddepot directory.

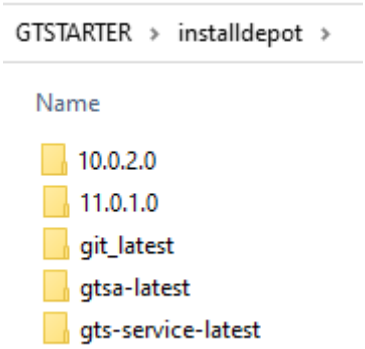
If you open the software from an administration computer which does not have an AppData directory, you must start GENIUS TOOLS Environment Administrator with the command *-gts:appdata=%TEMP%*.

Warning: GENIUS TOOLS Environment Administrator can only be used with operating environments and Startup TOOLS software that have the same or older versions.

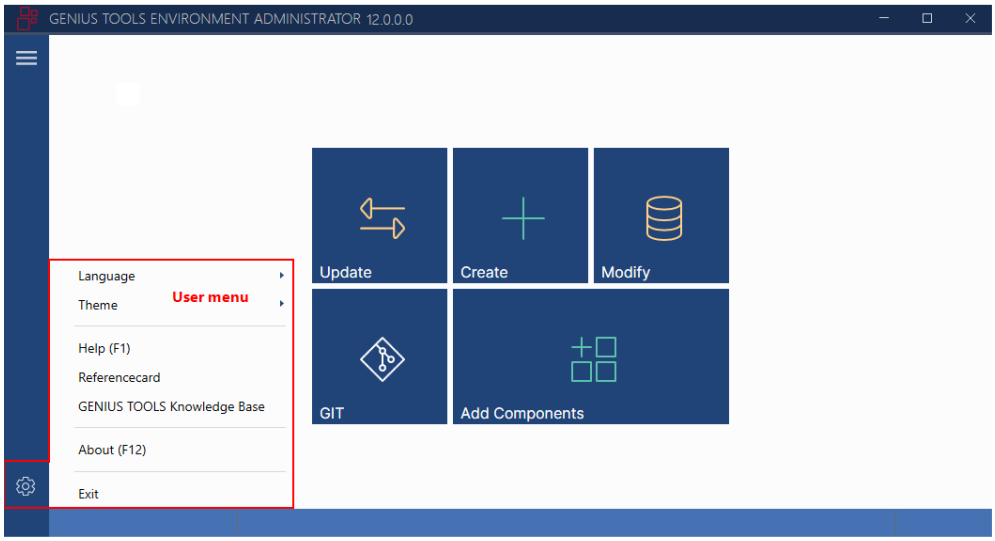
You need administrator rights on your computer for all functions that are used after creating an operating environment. GENIUS TOOLS Environment Administrator is restarted after a warning.

© 2025 INNEO Solutions GmbH

After installing the software for Startup TOOLS or GENIUS TOOLS Starter, the GTSA.exe file is located in the install depot in the gtsa-latest directory.

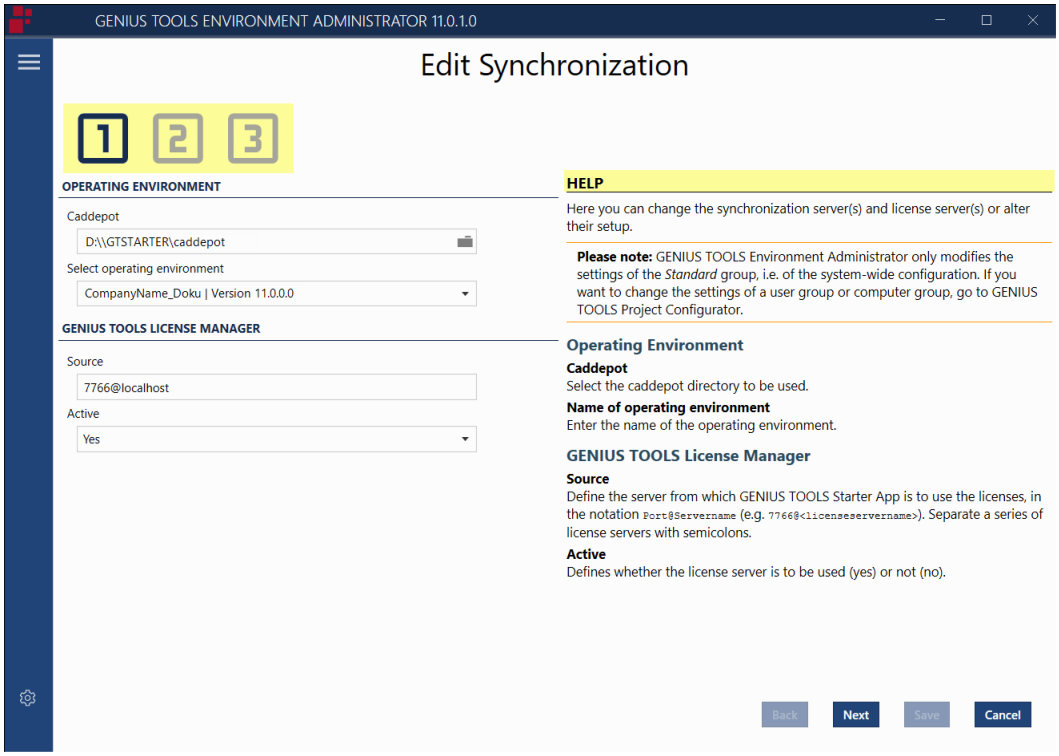


The user interface contains the user menu and the following functions.



When you select a function on the GENIUS TOOLS Environment Administrator start page, a wizard with one or more dialog pages is displayed. The inline help on the right side supports each task of the workflow.

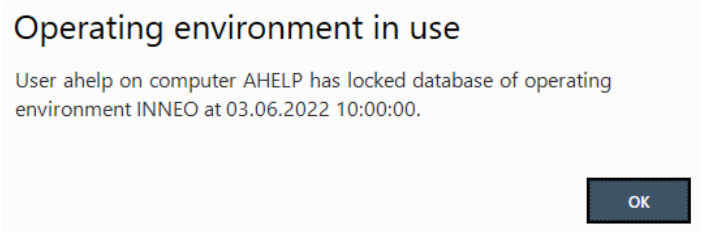
© 2025 INNEO Solutions GmbH



Dialog for completing three tasks and integrated help

First, you always need to select the Caddepot. Then, the option list shows the operating environments that are available for selection.

All changes in Caddepot are stored in a database that cannot be edited by multiple users at the same time. The following hint message means that another user is working either in GENIUS TOOLS Project Configurator or in GENIUS TOOLS Environment Administrator.



Notification that the selected operating environment is currently modified by another user

User menu

To access general settings for GENIUS TOOLS Environment Administrator, click on the gear symbol in the header.

Language: user interface language

You can switch the user interface language between English, German and French at any time. The language setting is saved and will be used the next time you start the software.

© 2025 INNEO Solutions GmbH

The software first starts with a German user interface if the operating system locale is set to German. For all other locale settings, the software first starts with an English user interface.

Theme: user interface color settings

The software comes with the color themes *Blue*, *Light* and *Dark*. You can switch themes at any time. The theme setting is saved and will be used the next time you start the software.

Help (F1)

Opens the installation manual for GENIUS TOOLS Starter. The help corresponds to the document *GENIUS TOOLS Starter Installation.pdf* in the directory *help* of an operating environment.

Reference card

Opens a reference card for a quick overview of all functions.

Info (F12)

Shows the current GENIUS TOOLS Starter version.

Exit

Closes the software. Clicking on the *Close* button (X) in the header will minimize the program window.

4.2 Creating an operating environment

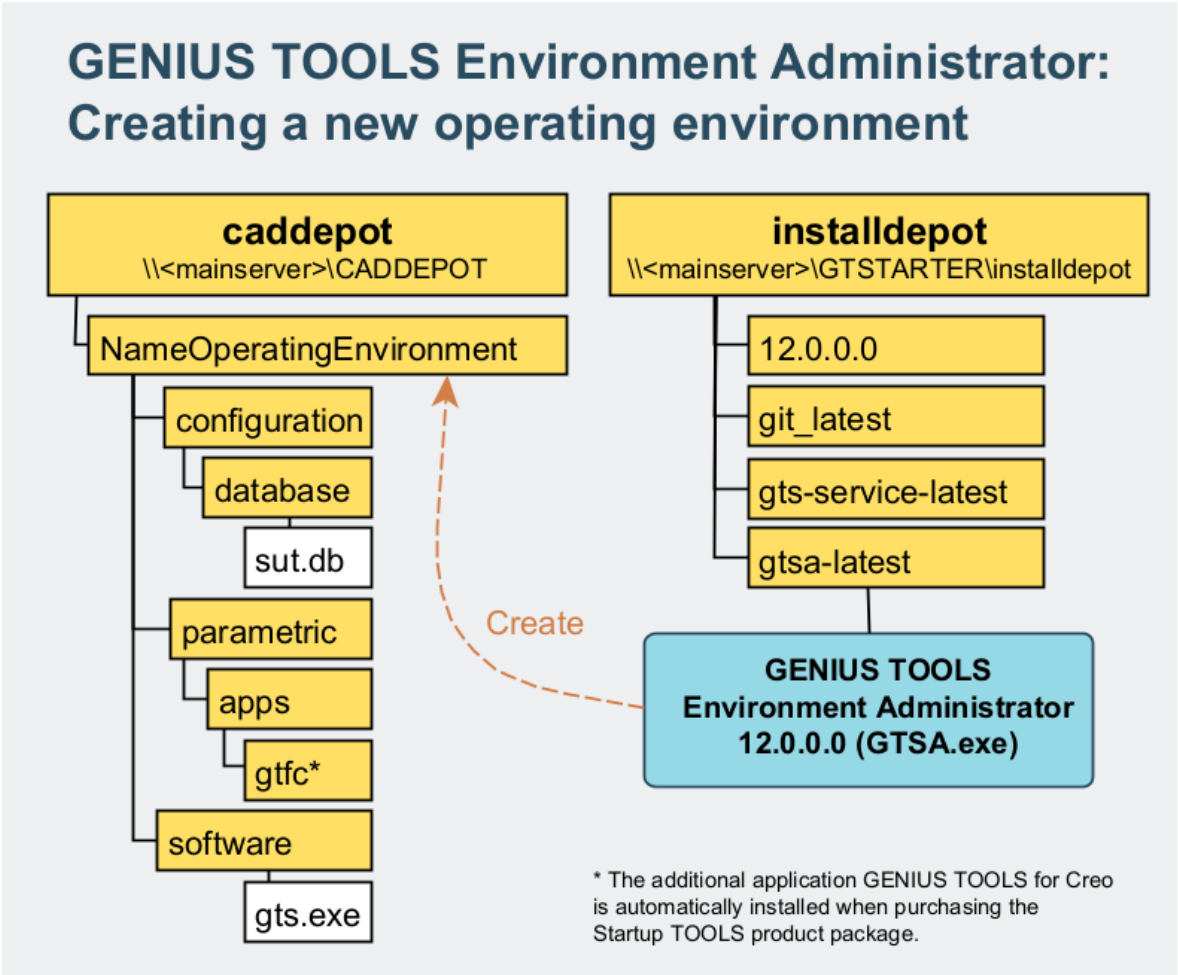
GENIUS TOOLS Environment Administrator lets you create different operating environments with just a few mouse clicks.

The function *Create* creates an empty, new operating environment. This contains the directory structure, the GENIUS TOOLS Starter software *GTS.exe* and an empty database, *sut.db*. All settings defined in GENIUS TOOLS Project Configurator are stored in this database file, which is located in the *<OperatingEnvironment>\configuration\database* directory.

If you have purchased the Startup TOOLS product package, the add-on application GENIUS TOOLS for Creo is automatically installed in the *<OperatingEnvironment>\parametric\apps* directory when you create a new operating environment. This provides you with an operating environment with standardized templates (start object templates, project-specific libraries, drawing frames, ModelCheck configurations), interface and function configurations for Creo (config.pro, config.sup config.ui) and many additional functions for Creo (toolkit applications).

© 2025 INNEO Solutions GmbH

You can add data packages and standard start projects at any time thereafter via the *Add Components* function.



Click the *Create* symbol on the start page to start create a new operating environment.

Step 1: Define operating environment

GENIUS TOOLS Environment Administrator will find the Caddepot and Installdepot directories automatically if the software is started from a default installation setup.

© 2025 INNEO Solutions GmbH

Verify the paths for the Caddepot (1) and Installdepot (3) directories.

Enter a name for the operating environment (2). The name is used to create a directory of the same name in the Caddepot and setting up the directory structure there.

Please note: You can change the name of an operating environment any time by renaming its directory.

Select a software version (4) from the Installdepot.

Please note: With GENIUS TOOLS Environment Administrator 11.0.0.0 and newer, operating environments of versions 10.0.2.0 and older cannot be created. This is due to the migration to .NET 8.

The button *Send telemetry data* (5) transmits anonymized telemetry data from GENIUS TOOLS Starter, Model Processor User and the add-on applications GENIUS TOOLS for Creo to servers of Inneo Solutions GmbH. The data is collected for the purposes of troubleshooting and optimizing performance as well as for product improvement and development (user-centered development and sustainable decision-making in the development process). See *Documentation telemetry data* in the help directory. The environment variable GT_TELEMETRY is set to 1.
Click *Next*.

Step 2: Configuring license and synchronization server

The users need to connect to GENIUS TOOLS License Manager in order to use a full version of GENIUS TOOLS Starter App.

Data synchronization allows you to keep all data up-to-date on the local application computers and give users fast access to any changes.

The synchronization process is adapted to Creo in that it will not update toolkit applications as long as Creo is running. For this, the toolkit applications, such as GENIUS TOOLS for Creo, have to be located in the *apps* directory of Creo Parametric.

Please note: If you do not configure the synchronization settings, Environment Administrator will create a local operating environment without synchronization.

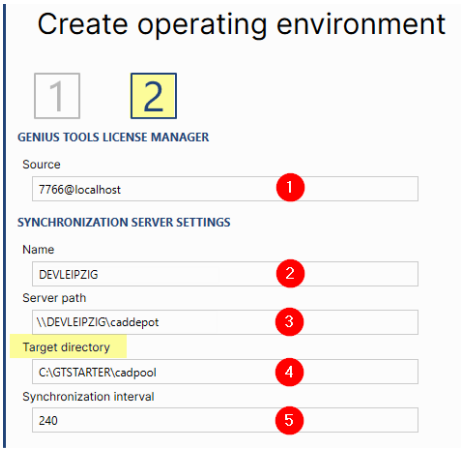
© 2025 INNEO Solutions GmbH

Under Source (1), enter the name of the server that GENIUS TOOLS Starter App should access to get licenses.

Under *Synchronization server settings*, the server name (2) that has been entered at setup is displayed.

Enter the path to the Caddepot netshare (3) of the synchronization server using UNC paths (*GTSServer**caddepot*), environment variables (*%GTS_SERVER_NAME%*) or a mixed form (*%GTS_SERVER_NAME%**caddepot*).

Under Target directory (4) enter the location where the Cadpool directory should be located on the application computers. If the Cadpool directory is not present yet, GENIUS TOOLS Starter will try to create it. It will also create a subdirectory named for the operating environment. You can use absolute paths or environment variables that are available on the application computers.



Please note: GENIUS TOOLS Starter App will add the name of the current operating environment automatically. This makes it possible to copy operating environments, for example to quickly create test environments without having to change the settings. Also, operating environments can be renamed without having to change the settings.

Enter the synchronization interval (5) in minutes. The synchronization interval defines how often GENIUS TOOLS Starter App should synchronize the data from the central Caddepot. A synchronization is also run automatically when GENIUS TOOLS Starter App is started.

The best setting for the synchronization interval depends on how often the data is changed and on how many GENIUS TOOLS Starter Apps are running at the same time. If there are many changes to the data, the interval should be shorter. If many users are accessing the Caddepot, the interval could be longer to avoid too much network load due to frequent synchronizations.

Click on *Create*.

© 2025 INNEO Solutions GmbH

4.3 Adding components to an operating environment

If you want to add components, you first have to install them into the Installdepot directory from the data setups, see Data setup. With the Add components function you can then add the following components to an existing operating environment.

For Creo Elements/Direct Modeling:

- TSPRO environment
- SOLIDPOWERPARTS

For Creo Parametric:

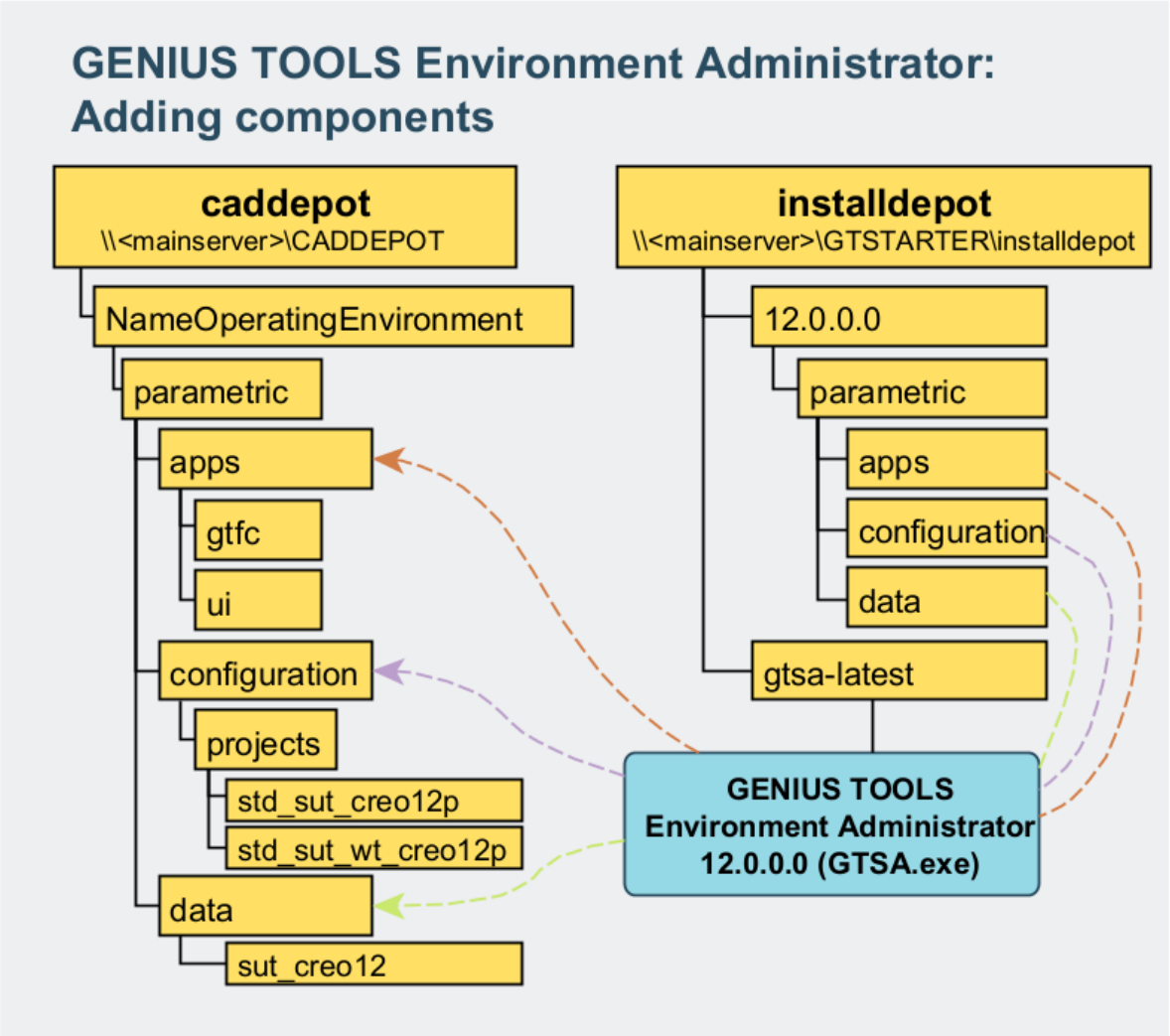
- data directories (data packages)
- project directories (directories with configuration blocks and other files)
- Toolkit applications (GENIUS TOOLS for Creo, UI)

Data packages

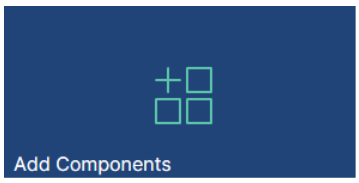
Data packages are subdirectories of the data directory, e. g. for Creo Parametric: *<mainserver>\GTSTARTER\installdepot\11.0.0.0\parametric\data\sut_creo11*.

If you add data packages to an operating environment, you will get an operating environment with standardized templates (start object templates, project-related libraries, drawing frames, ModelCheck configurations), interface and function configurations for Creo (config.pro, config.sup, config.ui) as well as many add-on functions for Creo (toolkit applications).

© 2025 INNEO Solutions GmbH



Click the *Add Components* symbol on the start page to start the installation assistant.

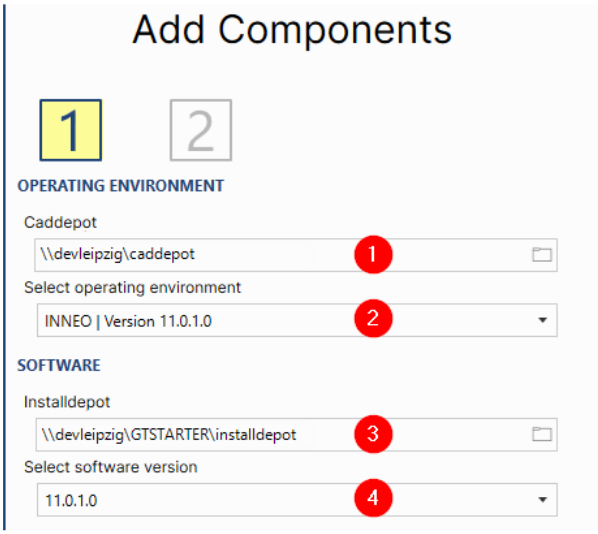


© 2025 INNEO Solutions GmbH

Step 1: Select operating environment

First select the operating environment (2) you want to configure from the Caddepot (1).

Then select the software version (4) to use from the Installdepot (3). Select a software version that has the required components installed.



Step 2: Add CAD applications

Here, project components that have been installed in the install depot are selected.

Select the CAD application to which you wish to add components.

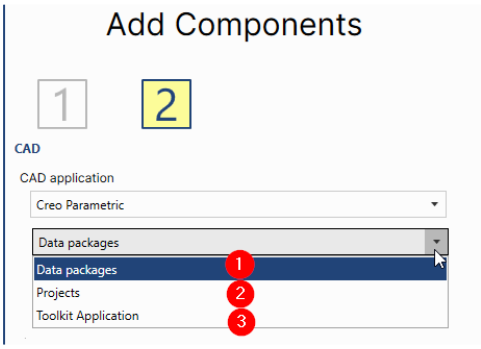
For Creo Elements/Direct:

– TSPRO-Umgebung

– SOLIDPOWERPARTS

For Creo Parametric:

1. Ddata packages
2. projects (directories for standard start projects)
3. toolkit applications (gtfc, ui)



Components for Creo Parametric

Data packages and toolkit applications are added separately.

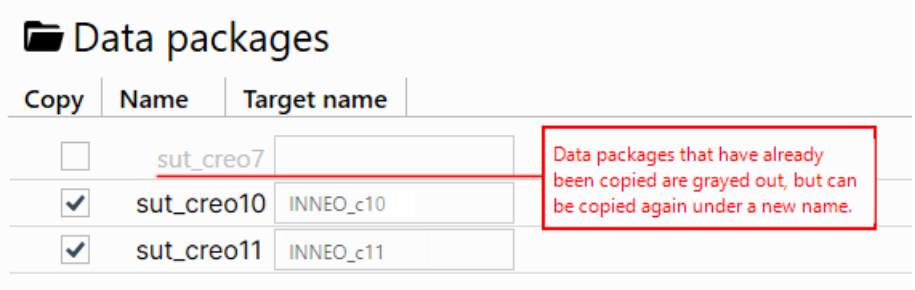
Projects can be added together with the data package subsequently as well is in their own.

1. Add data packages and create standard projects

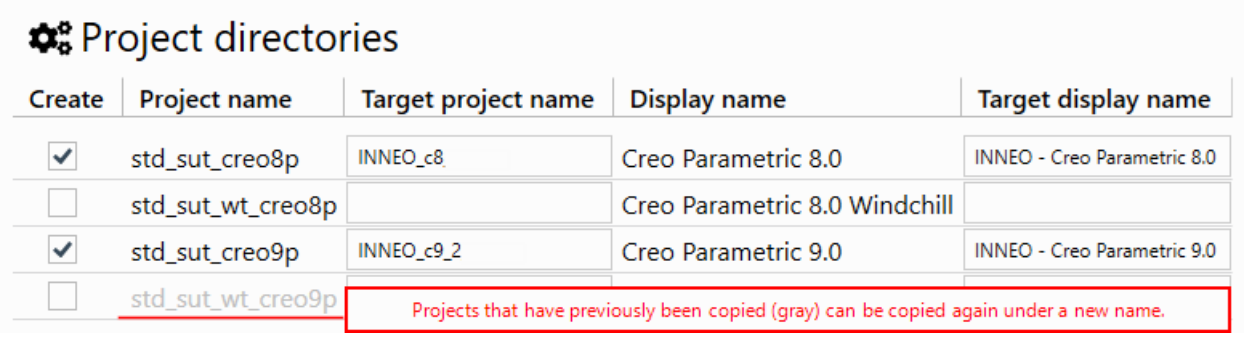
All data directories for Creo Parametric from the previously selected software version in the installdepot are displayed here, e.g. *D:\GTSTARTER\installdepot\9.0.0\parametric\data*.
Select a data package. Data packages in gray are directories that have already been

© 2025 INNEO Solutions GmbH

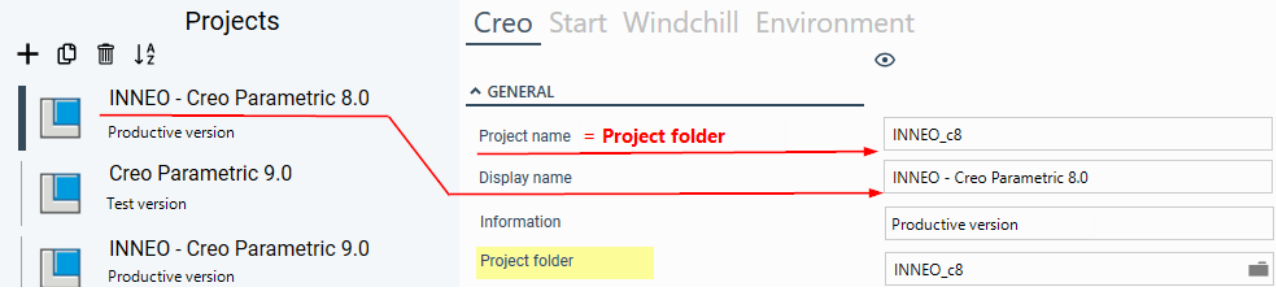
copied to the caddepot once.
Enter a target name under which it should be copied in the directory data in the caddepot. (*Caddepot\<operatingenvironment>\parametric\data*.)
The target name can be overwritten.



When selecting a data package, you can in the second step create standard projects whose settings should be adjusted afterwards in the GENIUS TOOLS Project Configurator. Here, the supplied standard projects – one standard project per Creo version with and without Windchill – are copied from the project directory *(Caddepot\<OperatingEnvironment>\parametric\configuration\projects)* under a new name (target project name).
If a project is grayed out, it means that it has already been copied once. It can be copied again under new name.

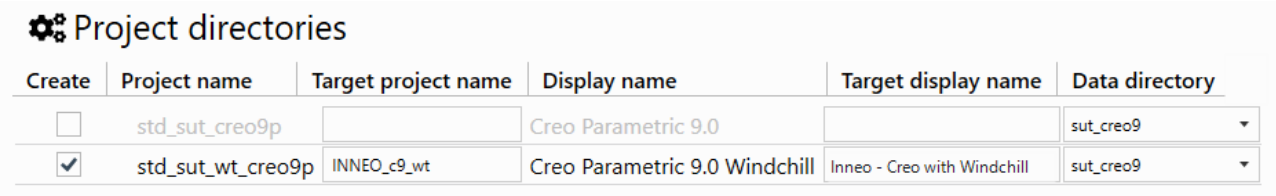


The target project name is the name of the folder in the project directory and at the same time the name of the project in GENIUS TOOLS Project Configurator. The display name is the name that appears in GENIUS TOOLS Starter App. It can be changed in GENIUS TOOLS Project Configurator.



2. Create standard start projects
If the data packages have already been installed, standard start projects can be created here as in the previous point.

© 2025 INNEO Solutions GmbH



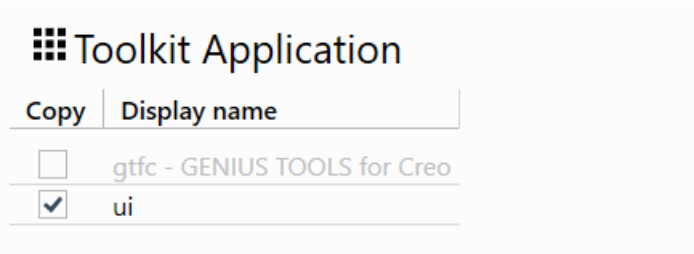
3. Toolkit applications

Select the toolkit application you wish to add.

– GENIUS TOOLS for Creo: Additional functions for Creo Parametric which are included in the products GENIUS TOOLS Library, GENIUS TOOLS Parameter and GENIUS TOOLS MBD for ISO GPS.
– ui: Application that allows reloading multiple customization.ui files.

If it is not possible to tick an application, it means that it already exists in the application-specific apps directory. The application cannot be created again.

Please note: The toolkit application GENIUS TOOLS for Creo will be automatically installed to the *parametric\apps* directory when creating a new operating environment, if you have purchased the Startup TOOLS product package.



After clicking *Add* all specified components are added to the operating environment.

4. Customize data packages

When using Startup TOOLS for the first time, we recommend adapting the supplied data directory (“data package”). All company-specific data should be adapted, such as

– Startup parts,
– material files,
– drawing frames.

Data directories should be created version-neutral.

If data files are accidentally deleted, they can be copied back from the install depot at any time, i. e. no backup copies need to be made.

Hint: If possible, always work with variables. A reference to a data directory from a configuration block is made via the variable `$GTS_DATA`.

Once a data package has been adapted to company-specific requirements, it must be manually adapted to newer software versions, see Updating Creo data packages and resource folder.

© 2025 INNEO Solutions GmbH

4.4 Updating software

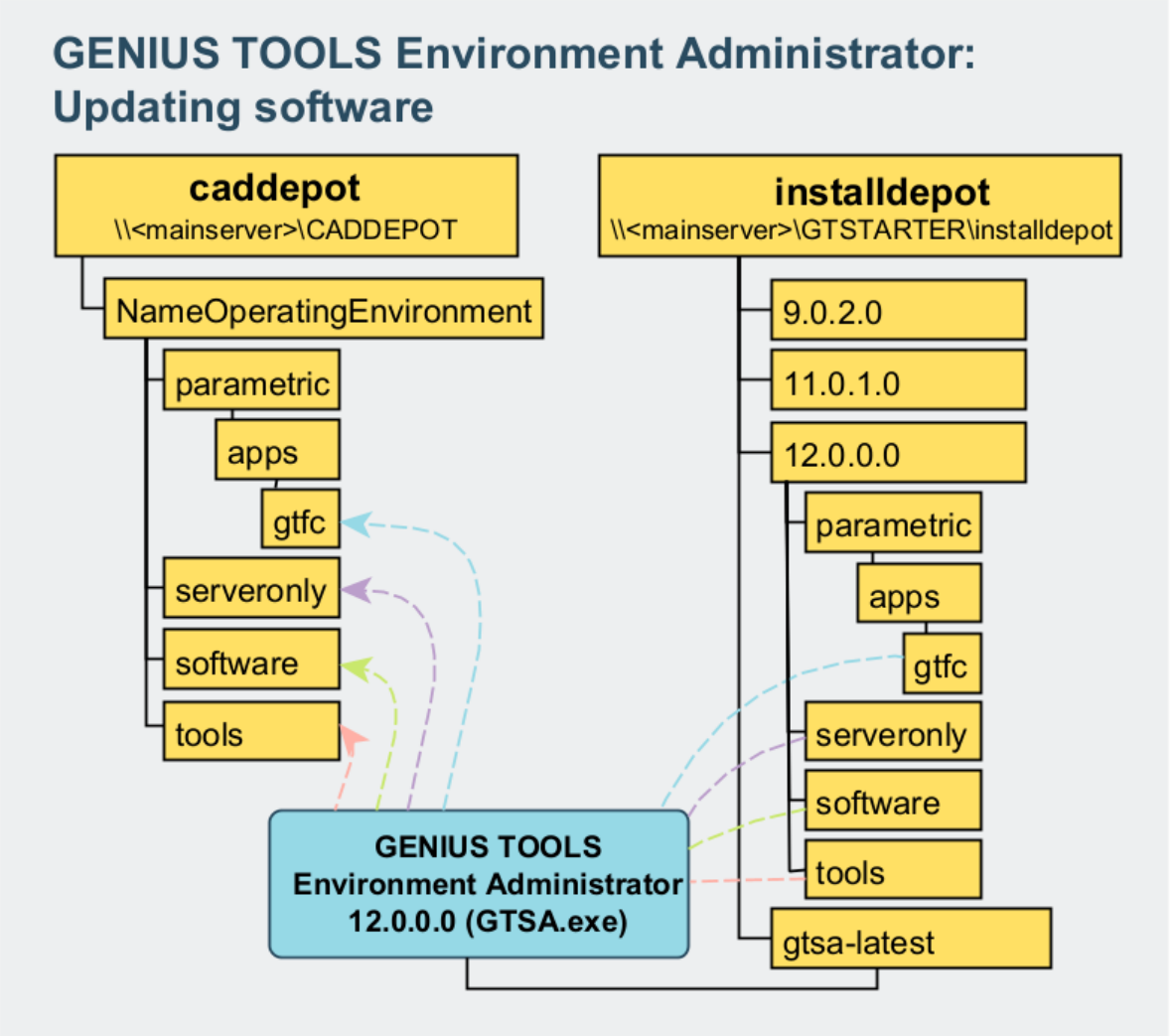
All software setups in GENIUS TOOLS Starter unpack their data to the Installdepot directory. You can use the *Update* function of GENIUS TOOLS Environment Administrator to update the software for GENIUS TOOLS for Creo and GENIUS TOOLS Starter App in the operating environments. This two-step process allows you to make targeted adjustments to individual operating environments. You can upgrade or downgrade to any version that is available in the Installdepot.

If you have configured synchronization, the configuration for the software update will be made in the background without the users having to stop Creo or GENIUS TOOLS Starter App. The new software version will then be used on the application computer after the next synchronization.

If you update GENIUS TOOLS for Creo, the synchronization on the application computers will only be run after Creo has been closed.

Warning: If you are using network mode, make sure that all users have closed GENIUS TOOLS Starter App and Creo, as the software cannot be updated otherwise.

© 2025 INNEO Solutions GmbH



In GENIUS TOOLS Environment Administrator click the *Update* button to start the installation assistant.

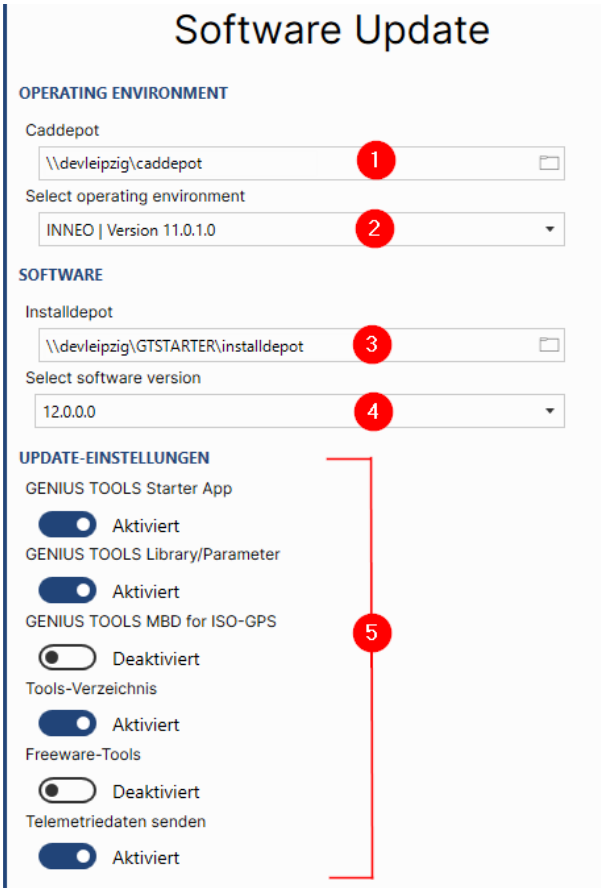
© 2025 INNEO Solutions GmbH

Software update

First, select from the Caddepot (1) the operating environment (2) you want to configure (1).

Then select from the Installdepot (3) the new software version (4) you want to install.

Under Update settings (5) you can select the components to update:



– the software GENIUS TOOLS Starter (component of the Startup TOOLS product package)

– the software GENIUS TOOLS Parameter and GENIUS TOOLS Library (add-on application GENIUS TOOLS for Creo, component of the Startup TOOLS product package)

> **Please note:** An update does not update the resource folder *(gt_resource_folder)*. This has to be updated manually, see chapter *Update process*.

– the software GENIUS TOOLS MBD for ISO GPS (add-on application GENIUS TOOLS for Creo)

– the tools directory, which contains GENIUS TOOLS Config Editor and Requirement Check, as well as

– several freeware products which are located in the Caddepot in the serveronly directory under tools. (GENIUS TOOLS Comma To Dot, GENIUS TOOLS Flexnet Watcher, GENIUS TOOLS Material Browser, GENIUS TOOLS Purge, FreeCommander, XML-Import and others).

© 2025 INNEO Solutions GmbH

The button *Send telemetry data* (5) transmits anonymized telemetry data from GENIUS TOOLS Starter, Model Processor User and the add-on applications GENIUS TOOLS for Creo to servers of Inneo Solutions GmbH. The data is collected for the purposes of troubleshooting and optimizing performance as well as for product improvement and development (user-centered development and sustainable decision-making in the development process). See *Documentation telemetry data* in the help directory. The environment variable GT_TELEMETRY is set to 1.
Under Migration settings (6), you can set whether access restrictions for projects are transferred when updating to version 11.0.0.0 and newer.

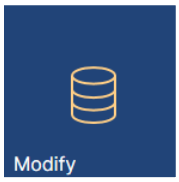
Result: The update process writes a new software directory for GENIUS TOOLS Starter and updates the database. For GENIUS TOOLS for Creo, the *gtfc* directory under *apps* is re-written. The *main.cfg* file remains untouched. The directories *tools* and *serveronly\tools* are copied from the Installdepot to the Caddepot.

4.5 Modifying settings

Some settings for operating environments can only be changed using the *Modify* wizard in GENIUS TOOLS Environment Administrator. The most important one of these setting is the Caddepot path. You can also edit synchronization and licensing settings.

Please note: GENIUS TOOLS Environment Administrator only change the standard settings, that is, the settings for the unit *Standard*. If you have made individual settings for a unit or subunit, you have to change these settings using GENIUS TOOLS Project Configurator (*Configuration* > *Select unit* > *Synchronization*)

In GENIUS TOOLS Environment Administrator click the *Modify* button to start the installation assistant.



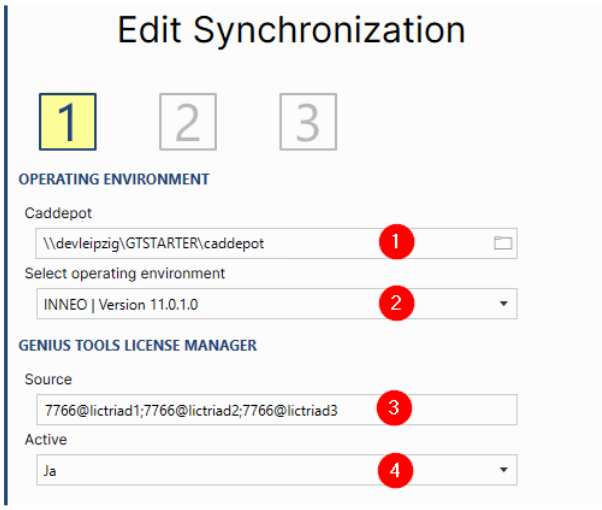
© 2025 INNEO Solutions GmbH

Step 1: Change license server settings

First, select from the Caddepot (1) the operating environment (2) you want to modify.

Then enter the license server settings (3). You can also deactivate the license server (4).

An inactive license server will not be used by GENIUS TOOLS Starter App. This means that you can only use home-use or educational Creo licenses.

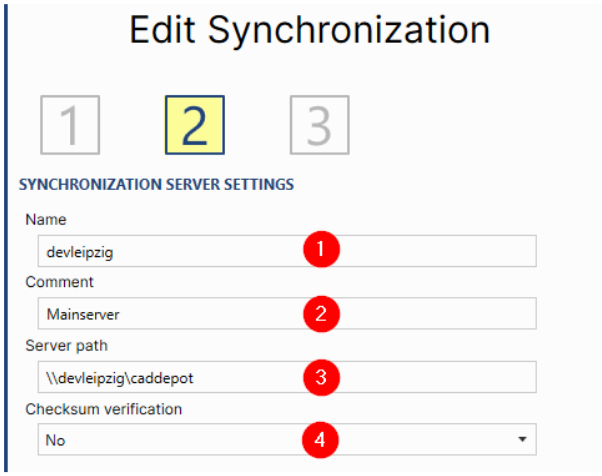


Step 2: Change synchronization settings

Specify the server path (3) so that it points to the caddepot on the synchronization server. The server name (1) is automatically taken from this information.

You can enter a description for the server (2).

When *Checksum verification* (2) is active, a checksum for each copied file is calculated and compared to the checksum of the file on the server. If the checksum differs, the server is queried for the file again. If checksum verification is not active, the files will just be copied.



Warning: Activating checksum verification often allows significantly shorter synchronization times.

If you have moved your synchronization server, proceed as follows:

1. Create a new Caddepot and adapt the synchronization server settings in the *new* operating environment there.
2. Test the new operating environment to make sure that the configuration settings are correct and the synchronization works.
3. In the *old* operating environment, switch the synchronization server to the new Caddepot

© 2025 INNEO Solutions GmbH

a. When GENIUS TOOLS Starter App is restarted, it switches to the new Caddepot and synchronizes the data from there.

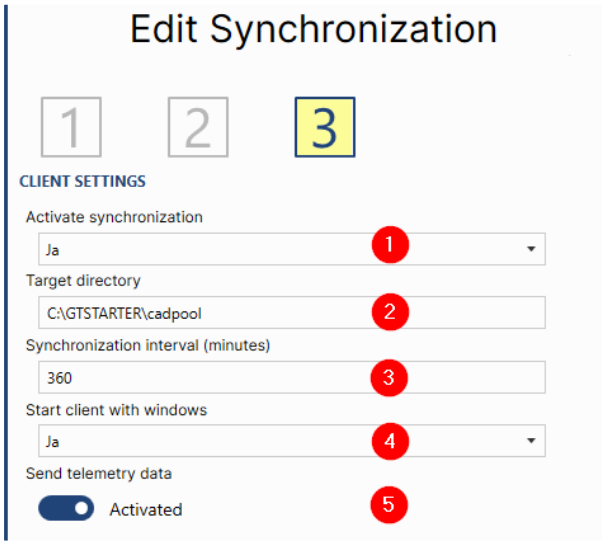
Warning: Please be extremely careful when changing the Caddepot directory in an operating environment that is already in use on multiple application computers. Wrong settings can lead to the application computers not synchronizing. However, it is still possible to change the Caddepot directory when you move a server. Create a new Caddepot, then set the synchronization path in the old operating environment to the new Caddepot. The application computers will switch over accordingly.

Step 3: Edit settings for the application computers

You can activate or deactivate synchronization between the central Caddepot and the application computer Cadpool directories (1).

Warning: If you deactivate synchronization, you permanently separate the application computers from the Caddepot. Any changes you make to the central synchronization settings or the operating environment will not be transferred to the application computers!

Under Target directory (2), specify the location of the Cadpool directories on the application computers, where the local copy of the operating environment is stored. If the Cadpool directory cannot be found, GENIUS TOOLS Starter will try to create it. A subdirectory named after the operating environment will also be created. You can use absolute paths such as *C:\GTSTARTER\Cadpool*, or environment variables that are available on the application computers, e. g. *%GTS_SYNC_DESTINATION%*.



Under Synchronization interval (3), specify an interval in minutes. The synchronization interval determines how often GENIUS TOOLS Starter App will synchronize the data. A synchronization is also run automatically when GENIUS TOOLS Starter App is started.

The best setting for the synchronization interval depends on how often the data is changed and on how many GENIUS TOOLS Starter Apps are running at the same time. If there are many changes to the data, the interval should be shorter. If many users are accessing the Caddepot, the interval could be longer to avoid too much network load due to frequent synchronizations.

© 2025 INNEO Solutions GmbH

If Start client with Windows (4) is activated, GENIUS TOOLS Starter App will be started automatically when the operating system is started on the application computers.

The button *Send telemetry data* (5) transmits anonymized telemetry data from GENIUS TOOLS Starter, Model Processor User and the add-on applications GENIUS TOOLS for Creo to servers of Inneo Solutions GmbH. The data is collected for the purposes of troubleshooting and optimizing performance as well as for product improvement and development (user-centered development and sustainable decision-making in the development process). See *Documentation telemetry data* in the help directory. The environment variable GT_TELEMETRY is set to 1.

4.6 Create Git repository

GENIUS TOOLS Environment Administrator allows you to connect an existing operating environment to the version control system Git.

The software for the Git server is supplied with GENIUS TOOLS Starter. Other Git servers are not supported.

Requirements

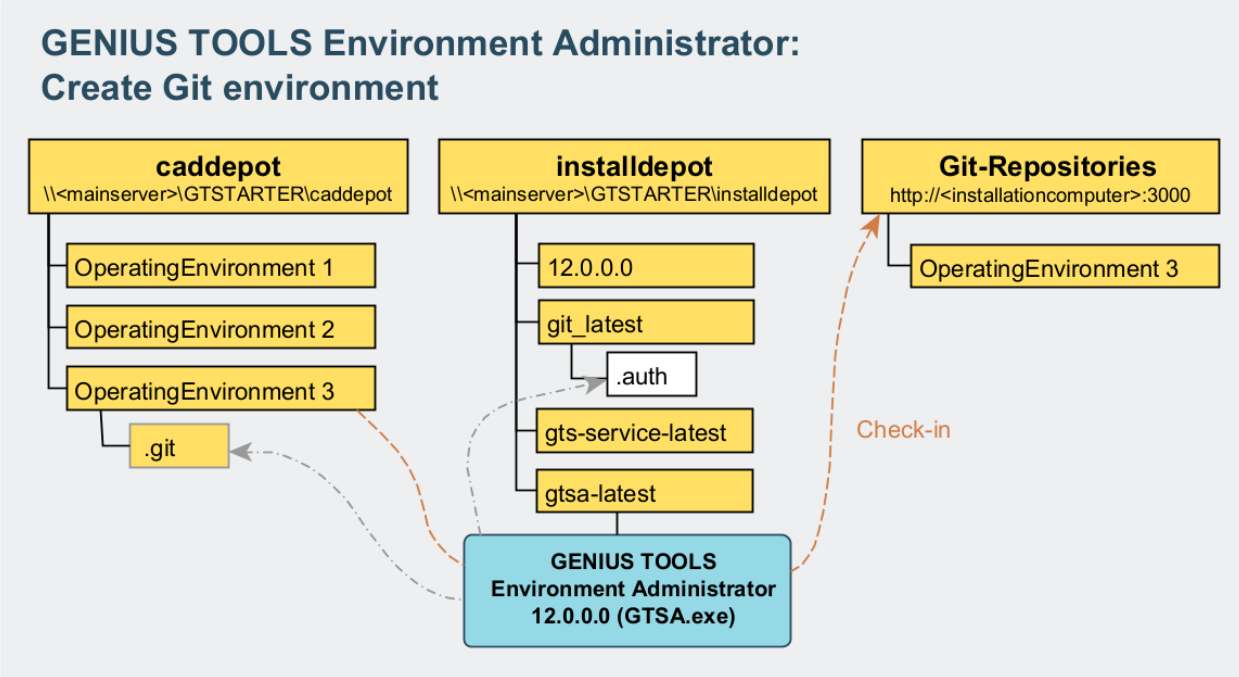
– A Git environment must be created on the installation computer, i. e. on the computer on which the caddepot is located.

– For versioning with Git the service GENIUS TOOLS Gitea must be running. This requires GENIUS TOOLS Environment Administrator to be started with administrator rights. A warning message appears if this is not the case and GENIUS TOOLS Environment Administrator restarts.

– The administrator who creates the operating environment in Git is the administrator who checks in changes to GENIUS TOOLS Project Configurator.

– The security requirements are met, see Encryption of the Auth file.

© 2025 INNEO Solutions GmbH

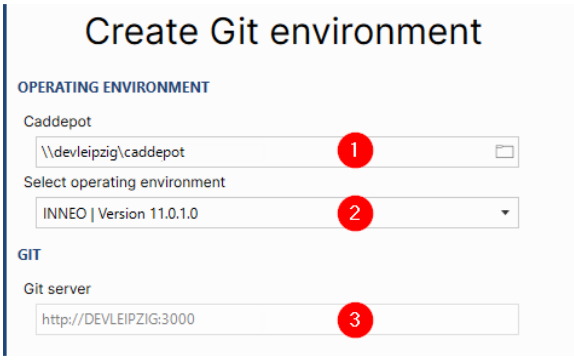


Creating Git environment

In GENIUS TOOLS Environment Administrator click the *GIT* button to start the installation assistant.

From the caddepot (1), select the operating environment (2) you want to connect to Git.

Under Git server (3), the URL address of the computer on which GENIUS TOOLS Environment Administrator is running is displayed. This must be the installation computer, see *Requirements* above.



Results

On the installation computer

1. The service GENIUS TOOLS Gitea is set up.

© 2025 INNEO Solutions GmbH

2. The Git server is automatically created with the address *http://<installationcomputer>:3000* and entered as the main server.

On the installation computer in the installdepot

3. The file *.auth* is created in the directory *git_latest*. This file should not be readable, see Auth-Datei.

On the installation computer in the caddepot

4. The hidden directory *.git* is created in the operating environment.
5. The file *GTS_Update.exe* is stored in the directory *software*.

On the Git server

6. Repositories (Git folders) are created on the Git server for each application.
7. Three users are created for Git:

– A user for GENIUS TOOLS Environment Administrator (”Owner”): Is the user from the auth file.

– A user for GENIUS TOOLS Project Configurator (”Contributor”): Has write access to all repositories.

– A user for GENIUS TOOLS Starter App (”Reader”): Has read access to all repositories.

In GENIUS TOOLS Project Configurator

8. The Git checkin button in GENIUS TOOLS Project Configurator replaces the previous Save button in the user menu. This checkin process commits all changes to the database *sut.db* and to files of the operating environment.
9. Under *Configuration* > *Settings: Synchronization* > *Section: Server*, the synchronization type is changed to Git. The synchronisation type can no longer be changed in GENIUS TOOLS Project Configurator.
10. GENIUS TOOLS Project Configurator cannot be started in network mode.

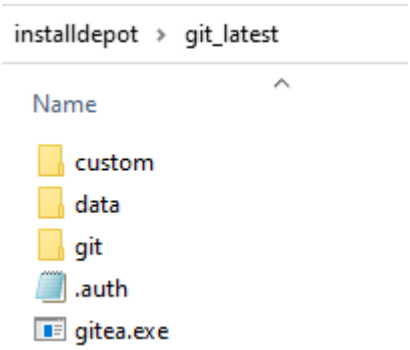
In GENIUS TOOLS Environment Administrator

11. During a software update, GENIUS TOOLS Environment Administrator recognizes whether an operating environment is git-versioned and installs the new version in the repository of the Git server.

© 2025 INNEO Solutions GmbH

Encryption of Auth file

Once the operating environment has been created in Git, the file *.auth* is created in the directory *git_latest*. This file is required to be able to check in to Git.



The Auth file contains the user name and password of the global administrator for GENIUS TOOLS Gitea service and is stored in encrypted form if all conditions are met. If errors occur during the encryption attempt, they are written into the log file *gtsa.log* in the user directory.

Warning: Save the Auth file in a safe place so that you can restore the installation environment if necessary.

Check out from Git

After migrating an operating environment to Git, GENIUS TOOLS Starter must be restarted on user computers.

For an initial installation of GENIUS TOOLS Starter, start the EXE file *GTS.exe* on the application computer.
Path: \\<*mainserver*>*gtstarter**caddepot*\<*operatingenvironment*>*software**gts.exe*

Check in to Git

With GENIUS TOOLS Environment Administrator the following changes are made on the installation computer: Adding components, Updating software and Modifying settings. These are checked in automatically.

Warning: The following applies to git-versioned operating environments: All changes made on the user computer that have not been commited into Git are discarded when executing a function in GENIUS TOOLS Environment Administrator.

On the user computer, changes are made in GENIUS TOOLS Project Configurator (database *sut.db*) and in configuration and batch files, which must be checked in with GENIUS TOOLS Git Utility.

All information on check in can be found in the chapter Connecting operating environments to Git.

© 2025 INNEO Solutions GmbH

5 GENIUS TOOLS Project Configurator

GENIUS TOOLS Project Configurator is the central application for configuring operating environments. Use GENIUS TOOLS Project Configurator for managing all project and operating environment settings.

A **Starter project** combines specifications that are made in GENIUS TOOLS Project Configurator, namely

– the program to be started,

– the required licenses,

– the project directory and

– the associated data,

with configuration settings that can be made in the configuration levels using manually created configuration blocks.

It can be selected by users in GENIUS TOOLS Starter App and starts with locally available data and the configuration settings defined centrally by the administrator.

Project Configurator manages project information by modifying the central *sut.db* database.
..*caddepot*\<*operatingenvironment*>*configuration**database*.

The project configuration for each operating environment can be synchronized to the Creo application computers. The storage location is:
..*cadpool*\<*operatingenvironment*>*configuration**database*.

Please note: Make sure that Project Configurator has write access to the central database in the Caddepot so that it can store configuration settings.

Project Configurator is not synchronized immediately. When you make changes in Project Configurator, you have to save them to the database before they become available to GENIUS TOOLS Starter App.

5.1 Starting GENIUS TOOLS Project Configurator

GENIUS TOOLS Project Configurator can be started both from the caddepot, i. e. from the installation computer, as well as from the cadpool, i. e. from any synchronized application computer:

– Installation computer: <*caddepot*>\<*operatingenvironment*>*software**GTS.exe*

– User computer: *cadpool*>\<*operatingenvironment*>*software**GTS.exe*

© 2025 INNEO Solutions GmbH

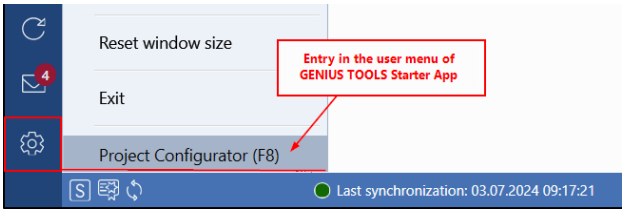
In both cases, Project Configurator accesses and edits the same central database *sut.db* in the caddepot. See also the chapter with Important terms.

There are two ways to start Project Configurator:

Starting via GENIUS TOOLS Starter App

– Open GENIUS TOOLS Starter App with the GTS.exe file.

– In the user menu, select *Project Configurator* or press *F8*.



User menu in GENIUS TOOLS Starter App

Please note: The menu item *Project Configurator* in the user menu can be hidden for users so they cannot access Project Configurator. See Assigning function access rights.

Starting with start parameter -gts:admin

– Start Project Configurator directly in the command line with

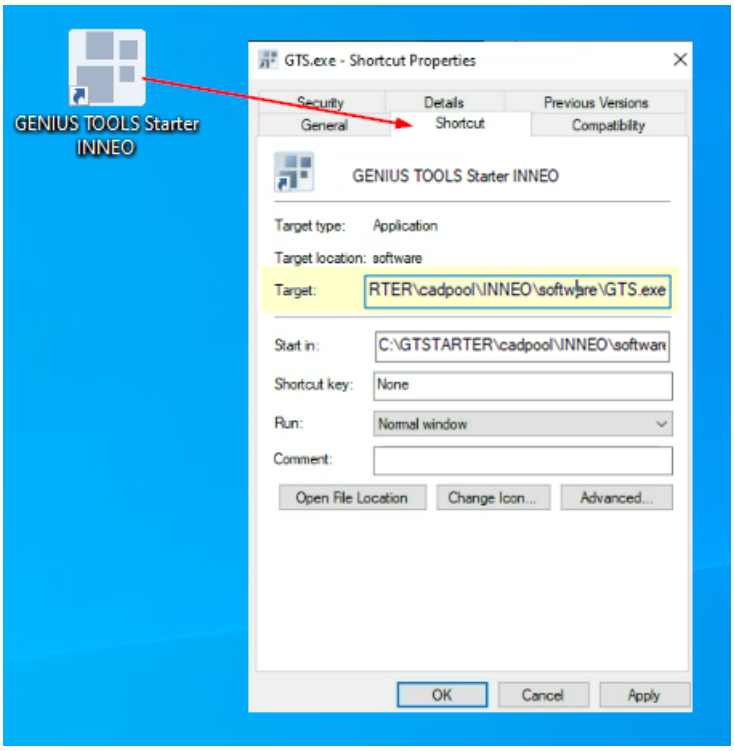
`<cadpool>\<OperatingEnvironment>\software\GTS.exe -gts:admin` or

`<caddepot>\<OperatingEnvironment>\software\GTS.exe -gts:admin`

Please note: The start parameter `-gts:admin` cannot override any access restriction for the Project Configurator.

– You can call up GENIUS TOOLS Project Configurator directly via the GENIUS TOOLS Starter desktop shortcut by specifying the start parameter *-gts:admin* under *Properties* > *Shortcut* in the target entry line.

© 2025 INNEO Solutions GmbH



Direct call up of GENIUS TOOLS Project Configurator (from cadpool)

Login

If a system other than Windows is selected for authentication, a window for entering login information appears, e. g. Windchill. See chapter Authentication.

Operating environments without version control

Lock file

When opening GENIUS TOOLS Project Configurator, a lock file is written to the database directory, which is deleted again when closing the application.
Path: *caddepot\<operatingenvironment name>\configuration\database*

> **Please note:** Make sure to close GENIUS TOOLS Project Configurator with the exit function to delete the lock file.

Read-only mode

To avoid that several users can make changes to the database of GENIUS TOOLS Project Configurator the application can only be used by one person. All other users can open the application in read-only mode and receive a note about the user who has accessed GENIUS TOOLS Project Configurator.

If you cannot open GENIUS TOOLS Project Configurator in write mode and no other user is working with it, delete the lock file.

© 2025 INNEO Solutions GmbH

Operating environments with version control system Git

Changes in the caddepot cannot be checked into Git, so GENIUS TOOLS Project Configurator cannot be opened on the installation server.

When starting GENIUS TOOLS Project Configurator from an operating environment that is versioned with Git synchronization is automatically paused.

There is no read-only mode. GENIUS TOOLS Project Configurator does not write a lock file.

Warning: All users who are allowed to start GENIUS TOOLS Project Configurator are contributors and can check in changes to Git. Therefore, make sure that changes to the operating environment are not made by several users simultaneously. This can lead to merge conflicts during check-in.

Detailed information can be found in the Connecting operating environments to Git chapter.

5.2 User interface and navigation

GENIUS TOOLS Project Configurator opens on the *Configuration* page of the main menu. Here, you can manage global settings or settings specific to units.

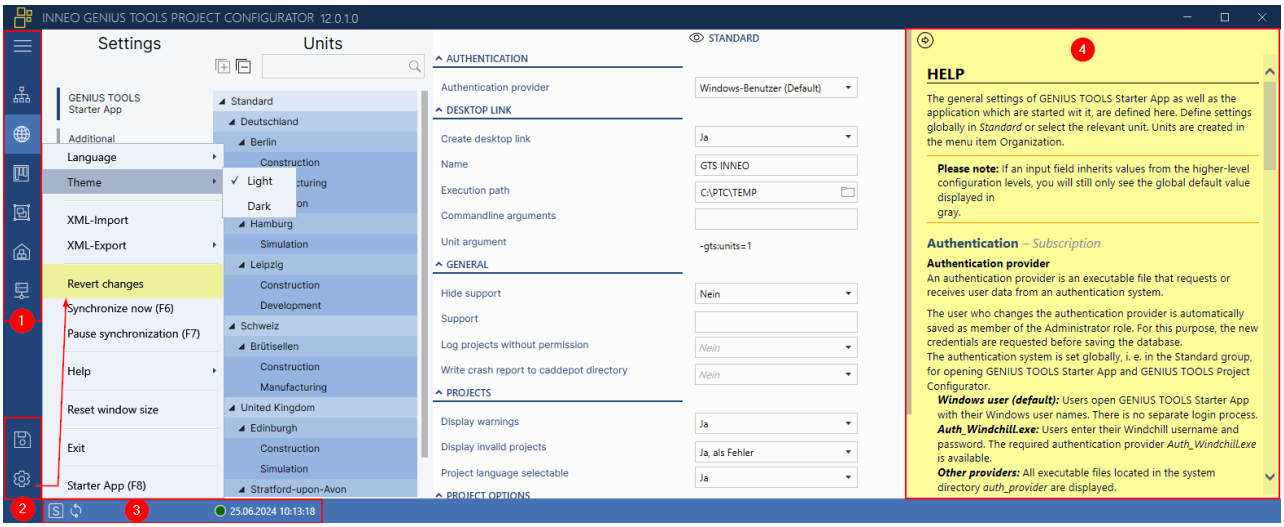
The main menu (1) is located on the left side of the Project Configurator window and can be extended to show descriptions by clicking the menu symbol ☰. It gives access to the pages:

- Organizations
- Configuration
- Projects
- Project collections
- Resources
- Satellites

When entering the settings, you will find a help section (4) on the right side of the window, which guides you through the individual input steps. This can be opened and collapsed with the arrow symbol.

The user interface can be displayed in a light and a dark color variant.

© 2025 INNEO Solutions GmbH



User interface of GENIUS TOOLS Project Configurator in light color theme

Please note: Note that GENIUS TOOLS Project Configurator – in contrast to previous Startup TOOLS versions – does not save changes immediately. All modified settings only become active after clicking Save. Before saving, changes can be undone by selecting *Revert changes* in the user menu.

At the bottom left of the sidebar (2) is the function *Save database* – or for git-versioned operating environments the function *Git checkin* – as well as the user menu. The footer (3) contains information on database and synchronization modes. The various menus are explained in the following chapters.

5.2.1 Main menu

5.2.1.1 Organization

The menu item *Organization* is used to manage roles and their access rights to projects, functions, and units.

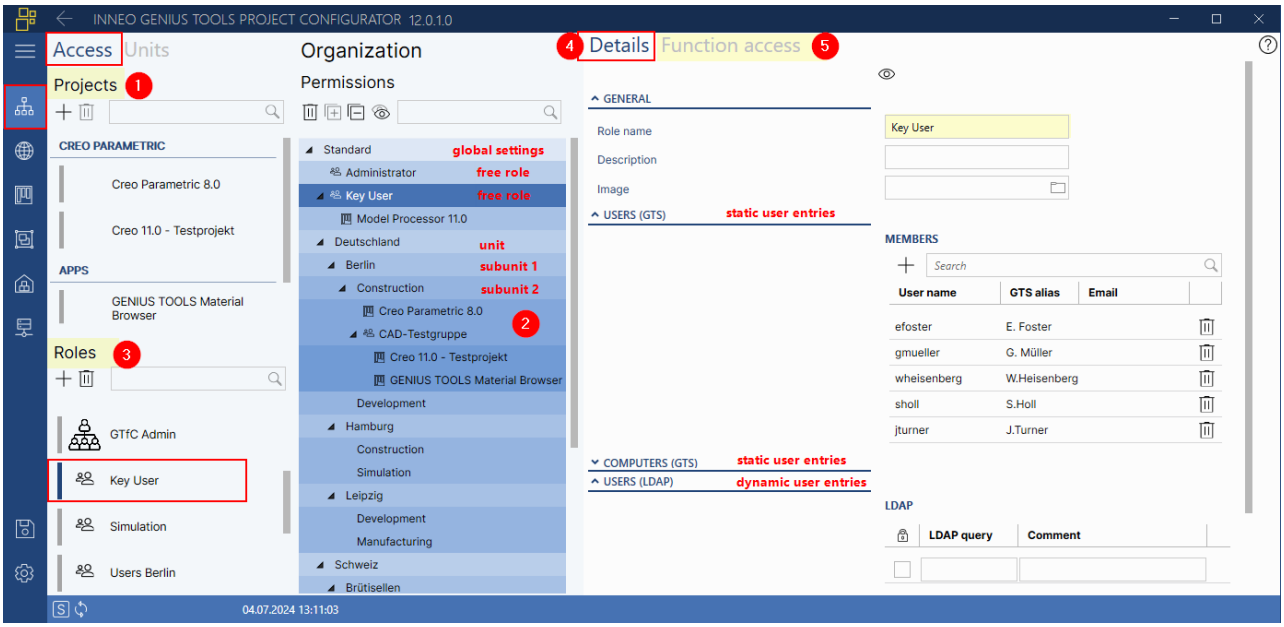
Access tab

The *Access* tab lists restricted projects (1), which determine project access based on their position in the project permission tree (2), see chapter Restricting project access.

Project access is determined via roles (3). Members are assigned to a role in the Details tab (4), either as static (GTS) or dynamic (LDAP) entries.

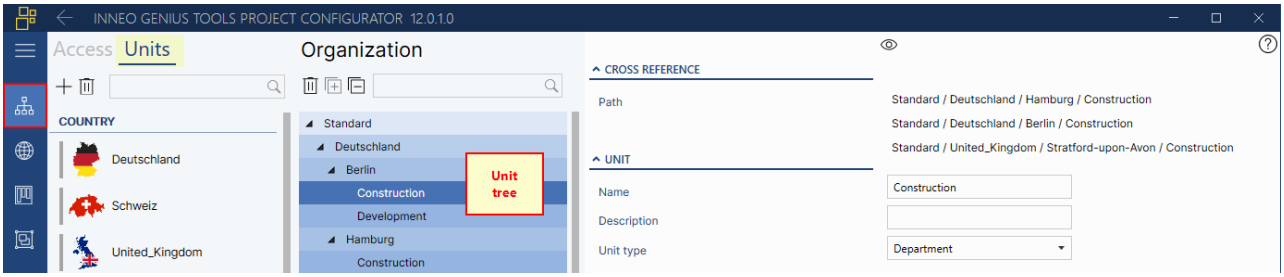
Access rights for GENIUS TOOLS for Creo and GENIUS TOOLS Starter App functions are defined in the Function access tab (5) based on the role to which they belong.

© 2025 INNEO Solutions GmbH



Units tab

Units are created and managed in the Units tab, which you can use to map your organization in different levels and sub-levels. Read chapter Mapping an organization for detailed information on working with units.

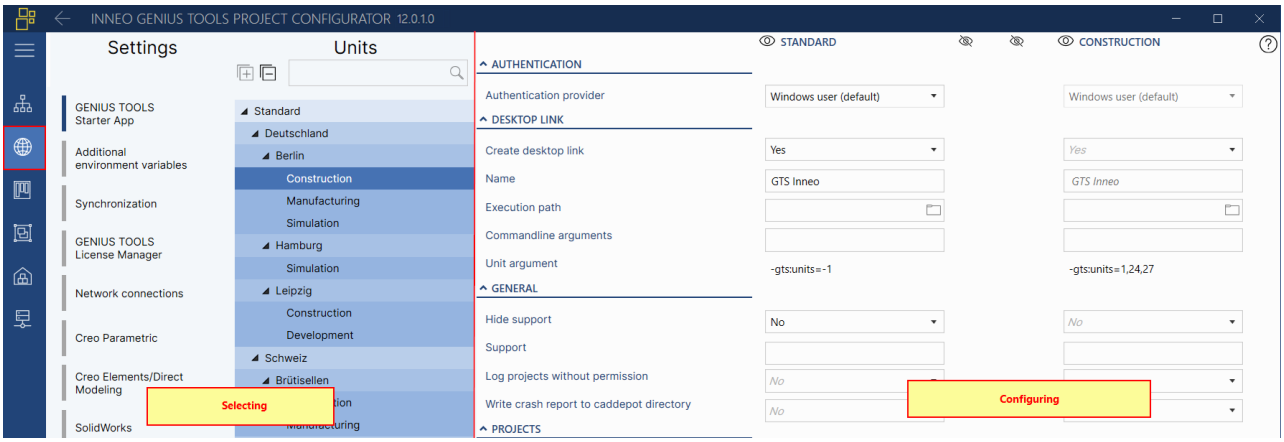


Please note: Users with permanent licenses can create unlimited number of units, but are limited to two layers. If you want to work with more layers, you need a subscription license.subscription license. There will be a warning when creating a unit for the first time after a license upgrade.

5.2.1.2 Configuration

Use the *Configuration* page to manage global settings as well as settings specific to units and subunits. The *Settings* list contains several buttons which open the settings pane and the corresponding help page.

© 2025 INNEO Solutions GmbH



Dialog window Configuration

Select a unit to show the settings applicable to this type of group. The *Standard* unit is used for managing global settings and cannot be deleted. In a newly created database, only this unit will be available.

Units are manged in the Organization page in the Units tab.

For more information on the individual settings, please refer to Configuring global environments and Configuring heterogeneous environments.

5.2.1.3 Projects

In the Projects page you can create and configure projects for the supported CAD-applications as well as projects of other applications (“Apps projects”).

Projects can either be made accessible to all users or to a defined group of users, see Restrict project access.

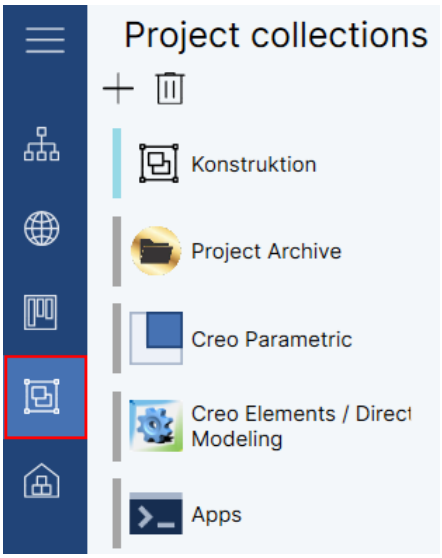
Projects page for Creo Parametric

For a selected project, the corresponding tabs are displayed for inputting settings, e. g. for Creo Parametric the tabs *Creo, Start, Windchill* and *Environment*. For information on how to create projects and define their settings, please refer to Creating projects.

Projects without an available license can either be hidden from the user's view in GENIUS TOOLS Starter App or can be marked with a warning color, see chapter GENIUS TOOLS Starter App.

© 2025 INNEO Solutions GmbH

5.2.1.4 Project collections



In the main menu item *Project Collections* you can organize individual projects into project collections, which are displayed to users in GENIUS TOOLS Starter App.

There are company-specific project collections, which can contain any projects, as well as application-specific project collections, which contain all projects of an application. Consult the chapter Project collections.

In addition, the display of auto projects can be modified here.

Auto projects are Starter projects of an application for which only one project can be created. This project will be automatically created by GENIUS TOOLS Starter App with the latest available software version on the user computer and will be displayed with an icon of the application.

Auto projects are generated from the following applications: Creo Elements/Direct Drafting, Creo Illustrate, Creo Schematics, Creo View, GeomagicDesignX, Keyshot and MathCad.

Please note: Auto projects are only available with a subscription license.

5.2.1.5 Resources

In the *Resources* page different types of resource are created in order to work efficiently with GENIUS TOOLS Project Configurator. Resources are entries for users and computers, as well as startkeys and license servers for Creo applications. Please read the chapter Resources.

5.2.1.6 Satellites

In the *Satellites* page you can set up and monitor additional synchronization servers.

A **satellite** (also: synchronization or mirror server) is a computer or a sector of a computer onto which the state of one or more operating environments of a central main server is mirrored by data synchronization.

Please read the chapter Working with satellites.

5.2.2 User menu

To access the user menu, click on the gear symbol in the side bar.

© 2025 INNEO Solutions GmbH

Language: user interface language

You can switch the user interface language between English, German and French at any time. The language setting is saved and will be used the next time you start the software.

The software first starts with a German user interface if the operating system locale is set to German. For all other locale settings, the software first starts with an English user interface.

Theme: user interface color settings

The software comes with the color themes *Blue*, *Light* and *Dark*. You can switch themes at any time. The theme setting is saved and will be used the next time you start the software.

XML Import

You can import users and computers from an XML file. If the users or computers are assigned to a role that has not yet be configured, the role will also be created during the XML import. When you click XML Import in the user menu, a dialog for selecting the XML file is displayed.

XML Export

You can export users and computers into an XML file, for example in order to make batch changes quickly, then re-import the file.

Revert changes

Project Configurator does not save changes immediately, so you can revert any unsaved changes. If you do so, Project Configurator reloads the database and re-initializes all input fields.

To revert changes, select *Revert changes*. A warning dialog is displayed. Confirm the warning (*Reload database. Changes will be deleted.*) with *Yes*.

To save changes, click *Save* in the sidebar.

Synchronize now (F8)

GENIUS TOOLS Starter immediately synchronizes – regardless of the specified synchronization interval – and loads any updated files to user computer (Cadpool).

Pause synchronization (F7)

GENIUS TOOLS Starter stops synchronization – depending on the setting for 1 hour, 9 hours or permanently. Pause synchronization if you want to prevent local changes from being overwritten. The setting *Pause synchronization* is saved for the next start and marked by a yellow bar below the header. When the user resumes synchronization, they

© 2025 INNEO Solutions GmbH

are asked whether they want to resume and overwrite local changes.

Please note: Your administrator defines whether you can pause the synchronization. If user have not been granted to appropriate access right, the item *Pause synchronization* is not displayed in the menu.

Help

– Help (F1): Software manual for GENIUS TOOLS Starter, which corresponds to this document.

– Support: Contact details for the technical support of INNEO or a company-specific link which can be set up in GENIUS TOOLS Project Configurator. Inneo's support can be reached by email, telephone and with Teamviewer.

– Info (F12): Current GENIUS TOOLS Starter version.

– Reference card: Quick overview of the functions in GENIUS TOOLS Project Configurator.

– Parameter variable: List of start parameters and environment variables.

Reset window size

Restores the default size of the dialog window of GENIUS TOOLS Starter. The window can be adjusted to all sizes.

Switch user *– only visible with an alternative authentication system*

Switches to another user of the applied authentication system, e. g. Windchill.

Exit

Closes the software. Clicking on the *Close* button (X) in the header will minimize the program window.

Starter App

Switch to the GENIUS TOOLS Starter App.

5.2.3 Saving changes

Operating environments without version control

Save changes made in the GENIUS TOOLS Project Configurator using the function *Save Database* in the sidebar. The changes are saved in the database *sut.db* on the installation computer. Path name:
\caddepot\<OperatingEnvironment>\configuration\database

© 2025 INNEO Solutions GmbH

Before saving to the database, changes can be discarded in the user menu via *Reverse changes*.

Changes to files of an operating environment, e. g. configuration blocks and batch files, must be made in the caddepot (installation computer). If you want to edit files locally in the cadpool and copy them manually to the caddepot, do not forget to pause the synchronization in the user menu of GENIUS TOOLS Starter App.

Git-versioned operating environments

Clicking on the *Git checkin* button in GENIUS TOOLS Project Configurator

– saves changes in GENIUS TOOLS Project Configurator to the database *sut.db* and

– opens GENIUS TOOLS Git Utility, which is used for committing all changes to Git, see chapter GENIUS TOOLS Git Utility.

In a git-versioned operating environment, all changes – e. g. to the database *sut.db* and to files – are made on the user computer, i. e. the computer on which the cadpool is located. These changes are checked into Git using GENIUS TOOLS Git Utility.

Data synchronization is automatically paused when opening GENIUS TOOLS Project Configurator. Pausing the synchronization must be ended in the GENIUS TOOLS Starter App user menu.

If you edit configuration blocks or batch files, do not forget to pause synchronization by opening GENIUS TOOLS Project Configurator or by using this function in the user menu of GENIUS TOOLS Starter App.

If GENIUS TOOLS Git Utility is opened, you cannot edit settings in GENIUS TOOLS Project Configurator, however, GENIUS TOOLS Project Configurator can by opened by multiple users, as no lock file is written.

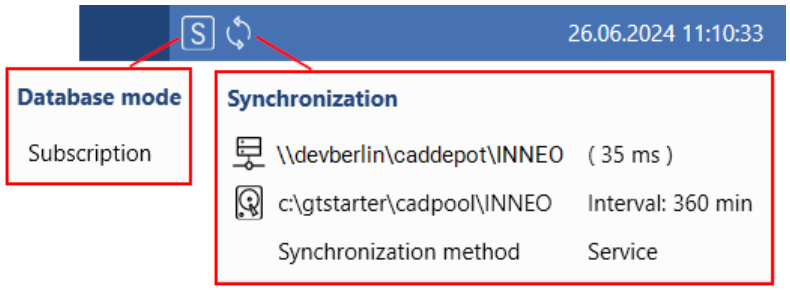
Warning: All users who are allowed to start GENIUS TOOLS Project Configurator are contributors and can check in changes to Git. Therefore, make sure that changes to the operating environment are not made by several users simultaneously. This can lead to merge conflicts during check-in.

More information on versioning with Git can be found in chapter Connecting operating environments to Git.

5.2.4 Footer

The footer in Project Configurator contains the following information.

© 2025 INNEO Solutions GmbH



Data base mode

The state of the database is displayed in the footer:

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.

Synchronization mode and synchronization status

To the right of the icon for the license mode, information on the synchronization mode is displayed. For more information, please refer to Procedures and synchronization.

Synchronization is active
Hover the mouse on the synchronization symbol to see the paths to the Caddepot and to the local operating environment as a tooltip.

Synchronization inactive
The synchronization of toolkit applications is paused as long as Creo is running

Local operating environment
There is no synchronization; you work on a local directory

Network mode
There is no synchronization; you are working directly on a network directory.

Network not connected
The network directory cannot be accessed.

Running applications

If a supported desktop application is running, the application icon will be displayed in the footer, e. g.

Creo Parametric

Creo Elements/Direct Modeling

Messages

– Red = Error message. Please troubleshoot.

© 2025 INNEO Solutions GmbH

– Yellow = Warning message. Please decide whether you want to keep on working regardless.
– Green = Last synchronization run was completed without errors.
– Green / Creating shortcuts: This message shows that the desktop link for GENIUS TOOLS Starter App has been updated.

5.3 Organizational structure

In the Units tab of the menu item *Organization* , you can create units and build an organization tree that maps your organization in various units and sub-units.

Settings for the units created here are made in the menu item *Configuration*, see Unit settings.

5.3.1 Working with units

The purpose of a unit is to group users into one configuration layer and apply unit-specific settings. Units are typically used to reflect an organization's structure such as company departments or sites.

A unit is part of the role-based authorization system, i. e. users are first assigned to a role and the role is assigned to one or more units. Thus, a user can belong to more than one unit. In this case, display and settings of projects depend on the unit selection, see next chapter Displaying units in GENIUS TOOLS Starter App.

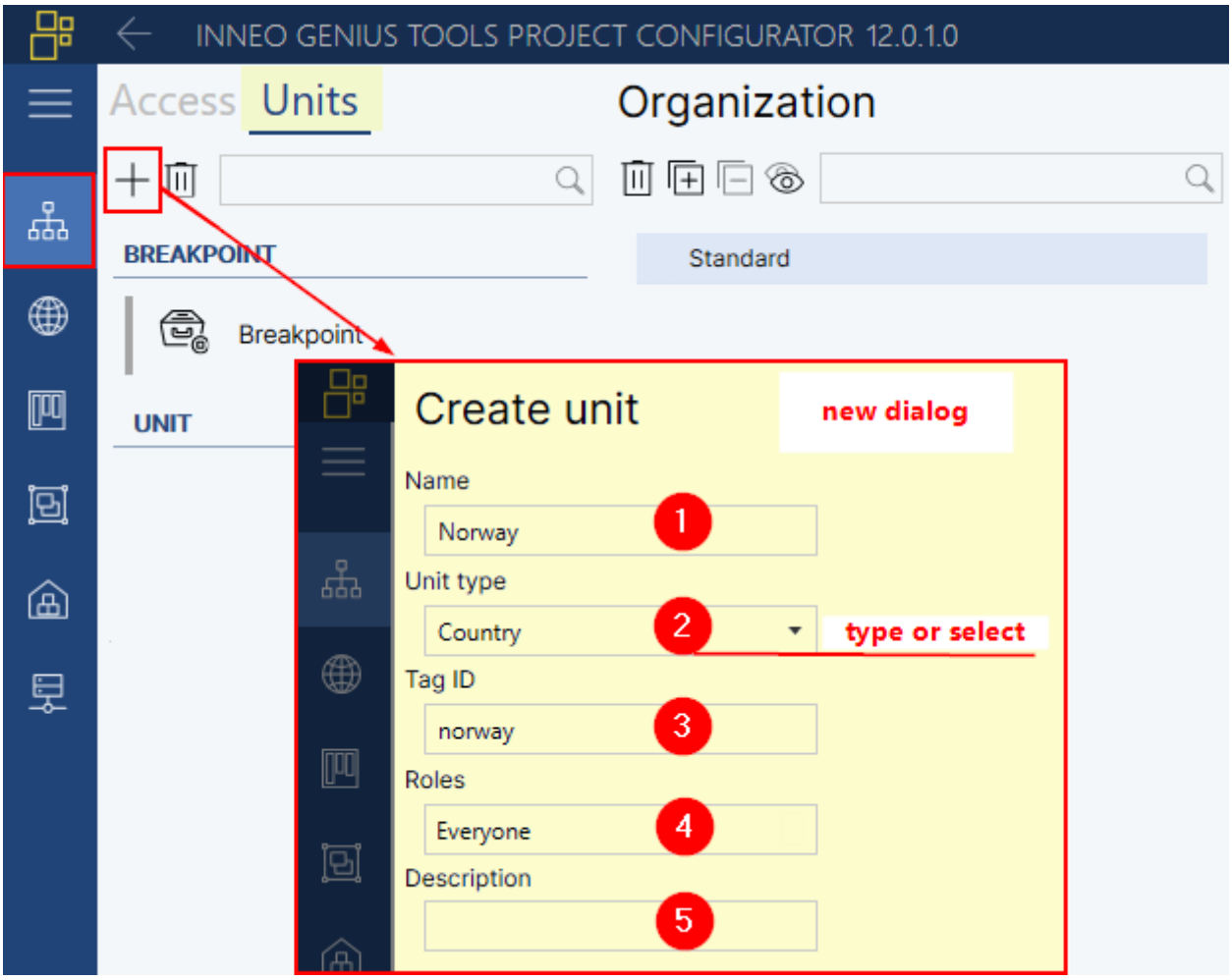
The affiliation of users to a unit can be dynamical. In this way, units always reflect the current staff list and company organizational structure as configured for Windows user management. If a user quits a company department, their Windows user account is configured accordingly, and the user is automatically removed from the corresponding unit. User assignment does not have to be updated manually. See chapter Accessing Windows user management.

Please note: To allow a transition phase between managing users and computers individually and managing them via LDAP queries, users and computers can still be manually assigned to a unit. However, this is not the recommended procedure for using units.

5.3.2 Creating units

Units are created in the *Organization* page in the Units tab. Click the Plus button to define a new unit.

© 2025 INNEO Solutions GmbH



In the following dialog fill in the input fields. Except for the name of the unit, you can enter all settings later when selecting the unit.

Name (1)
Enter a name for the unit. This is the name displayed to users in GENIUS TOOLS Starter App.

Unit type (2)
Unit types are free generic terms used for clarity in a complex organizational structure in GENIUS TOOLS Project Configurator. Type in the field to create a new type or select an existing unit type. Entering a type is optional.

Last: Places a unit as last subunit in each path, see chapter Mapping an organization.

Tag ID (3)
Define the tag ID for the unit. This is optional, see chapterUsing unit tag IDs.

Role (4)
A unit always has to have a role assigned. A unit is part of the role-based system of granting access rights. This means that firstly a role has to be defined with a group of users. (Menu item *Organisation* > *Access tab* > *Roles*.) A role is then assigned to a unit.

You can edit the role for a unit at a later point in time in the *Definition* section.

© 2025 INNEO Solutions GmbH

Description (5)
Entering a description is optional. It is displayed in the tooltip of a unit.

Result:
The newly created unit appears as a new item in the Selection column with the default unit icon . You can replace this icon with your own images, such as flags, see Displaying units in GENIUS TOOLS Starter App..

You can now use the unit to map your organization.

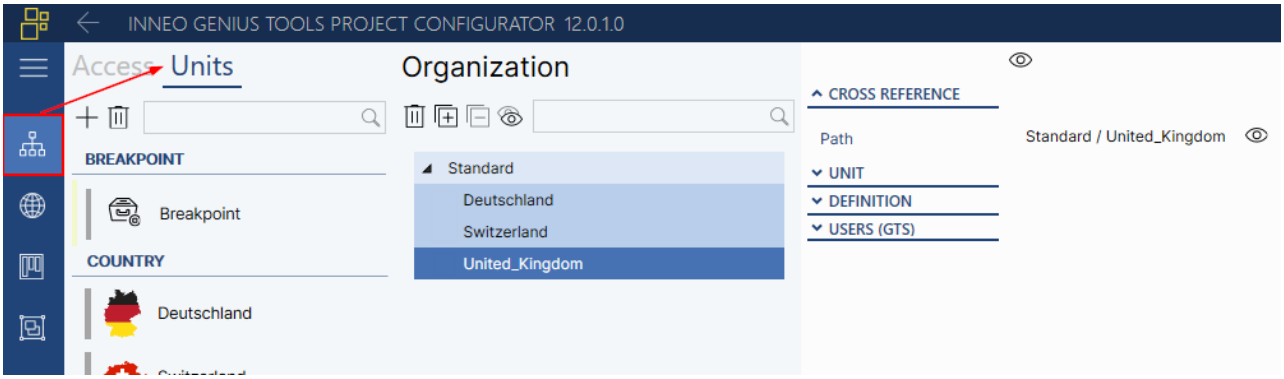
Please note: Creating a unit GENIUS TOOLS Project Configurator does not create a unit directory.

5.3.3 Mapping an organization

Units offer a wide range of options for mapping the structure of a company, since the settings for a unit can be made at several configuration levels.

Basic structure

If all units are organized in one level, no adjustments are needed in the organization tree.



Units tab in menu Organization with three units

Sorting units
Units are ordered alphabetically. Within a configuration level, you can place a unit in the first position by inserting a space at the beginning of the unit name, e. g. " Switzerland". This will also be applied to the display in the GENIUS TOOLS Starter App selection field.

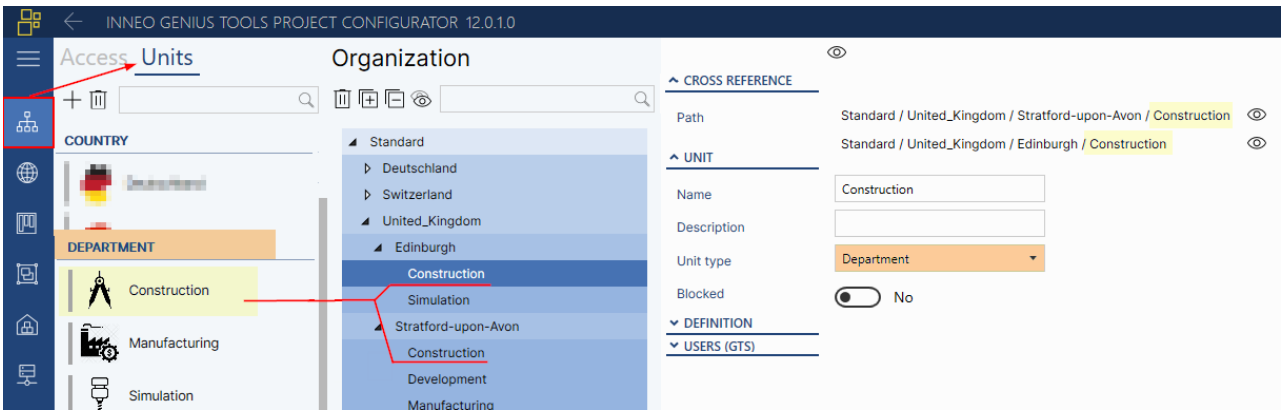
© 2025 INNEO Solutions GmbH

Subunits for complex organization structures

A subordinated unit is called subunit. Units can represent multiple configuration levels, e. g. they can be arranged by region, country, location, city etc.

Please note: Users with subscription licenses can create infinite layers for units. Users with permanent licenses are limited to three layers.

Example: You want to define settings for the Construction team, which is located in two locations. The organizational structure could look like this. The unit *Construction* was created with the unit type *Department*.



Unit tree with subunits

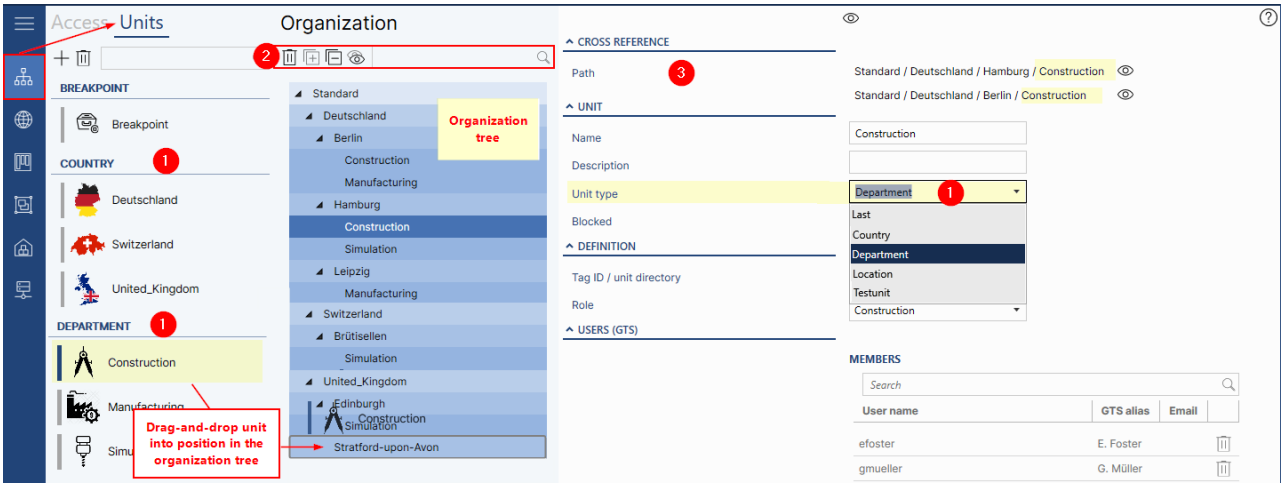
Designing the organization tree

All units are displayed on the right of the dialog *Organization*. You can select a unit there and drag it to the desired position in the organization tree. The following applies:

– Dropping a unit under a unit automatically creates a subunit.

– A unit can be used several times in different levels.

– A unit cannot be subordinate to itself.



Positioning unit "Construction" under unit "Stratford-upon-Avon"

© 2025 INNEO Solutions GmbH

Unit type (1)
For having a better overview of all units in the left Selection column it is useful to subdived them into types. In this example: Country, Department and Location. See next chapter Unit types > Grouping units.

Control icons (2)

Waste bin
Removes the selected unit from the organization tree. The unit is not deleted.

Plus symbol
Expands the organization tree showing all subunits.

Minus symbol
Collapses the unit tree to the first layer.

Eye symbol
Hides units of the type *Last* in the unit tree.

Search
The unit tree opens up to the layer of the unit you are looking for. Enter at least three letters.

Cross Reference (3)
All parent folders containing the selected unit are listed here.
A unit can be hidden from display in GENIUS TOOLS Starter App by deactivating the eye symbol, see Invisible units.

5.3.4 Unit types

By default a new unit is created on the left-hand side of the Unit tab under the term *Unit*. You can, however, create your own unit types to improve clarity.

The predefined unit type Last is available for selection to create a unit as the last subunit in the unit tree.

The special unit Breakpoint can be used for test purposes.

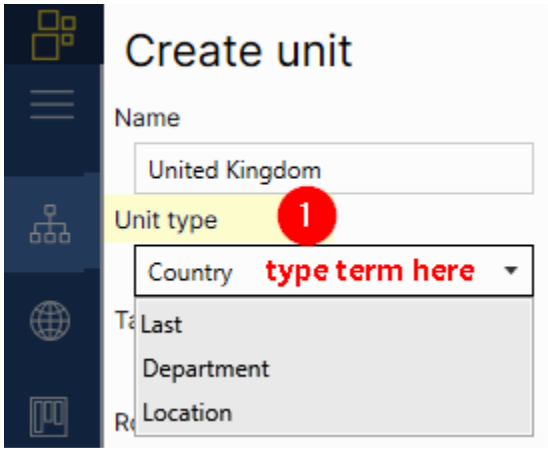
Please note: The conversion of a unit to *Last* does impact the organizational structure. Sorting units into self-created generic terms has no influence on the organizational structure.

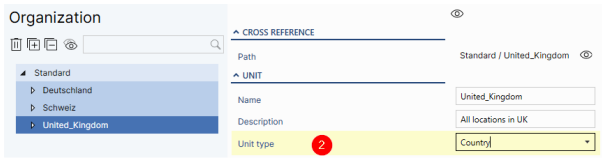
Grouping units with self-defined terms

For better clarity in a complex organizational structure, you can generate generic terms under which units are to be grouped, e. g. Country or Location.

Create a new generic term by typing into the Unit type field when creating a unit (1) or when selecting an existing unit (2).

© 2025 INNEO Solutions GmbH





The new term appears in the left-hand column of the unit tab and joins the existing terms alphabetically.

Pre-defined type "Last"

Settings made in the last unit therefore always apply to the role members of this unit regardless of which path a user selects in GENIUS TOOLS Starter App.

If you select the predefined unit type *Last*, the unit is automatically placed at the end of each path, i. e. it cannot be dragged and dropped into the organization tree. Last unit are by default set to be invisible to users in GENIUS TOOLS Starter App. Invisible Last units correspond to the functionality of the user and computer groups which were removed in version 11.

The following applies to last units:

– Existing units can be changed to last units if they do not contain any subunits or if they contain last units only.

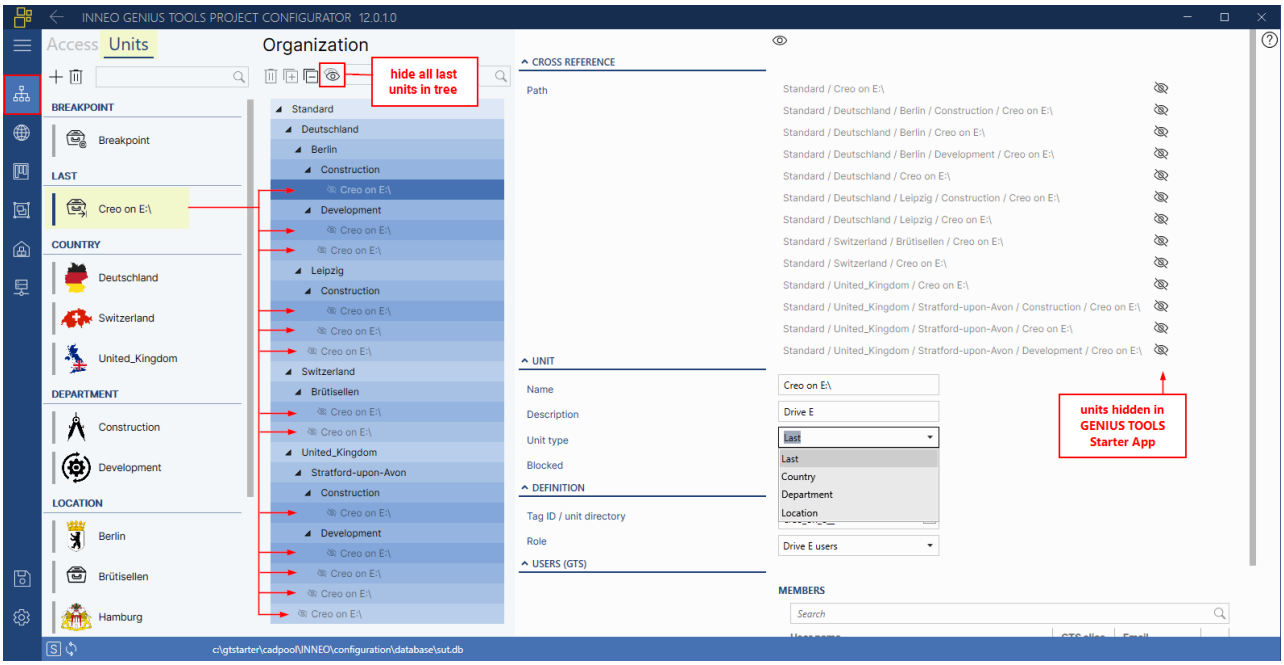
– If several last units are created, all last units to which a user is assigned to are available for selection in the GENIUS TOOLS Starter App.

– If a user has access to several invisible last units, GENIUS TOOLS Starter App selects the first last unit in the unit tree.

– If several last units are created, all Last units to which a user is assigned are available for selection in GENIUS TOOLS Starter App.

– To increase clarity in the organization tree, last units can be hidden with the eye symbol .

© 2025 INNEO Solutions GmbH



Creating unit "Creo on E:\" as last unit

Example: Last unit for users with different path settings

Create a unit for users for whom the Cadpool is to be set up on drive E of their computers.

1. Create a role with static user entries in the Organisation > Access tab menu item, e. g. with the name *Drive E users*.
2. Create a unit in the Unit tab, e. g. with the name *Creo on E:*.
3. Select the unit type Last, either in the Create dialogue or afterwards in the Unit section.

Result: The unit *Creo on E:*.

- is created as a unit of type Last in the Unit column on the left,
- is added as last unit of every path in the organization tree and
- is hidden in GENIUS TOOLS Starter App, see eye symbol in the Cross reference section.

4. In the Configuration menu item, go to the settings for Synchronization.
5. In the unit tree select the unit *Creo on E:* of an arbitrary path.
6. Enter the following in the General area under Target directory: e:\gtstarter\cadpool

Result: The path with drive E applies to all members of the role *Drive E users*, regardless of which unit they select in GENIUS TOOLS Starter App.

7. Optional: For better clarity in the organization tree, hide all last units with the eye symbol.
8. Save changes.

© 2025 INNEO Solutions GmbH

Special unit: Breakpoint

Administrators can use the breakpoint unit to test settings from GENIUS TOOLS Project Configurator and from configuration blocks for a specific path. The breakpoint unit does not have any settings, so when this unit is added to the unit tree, the settings up to the unit above the breakpoint apply.

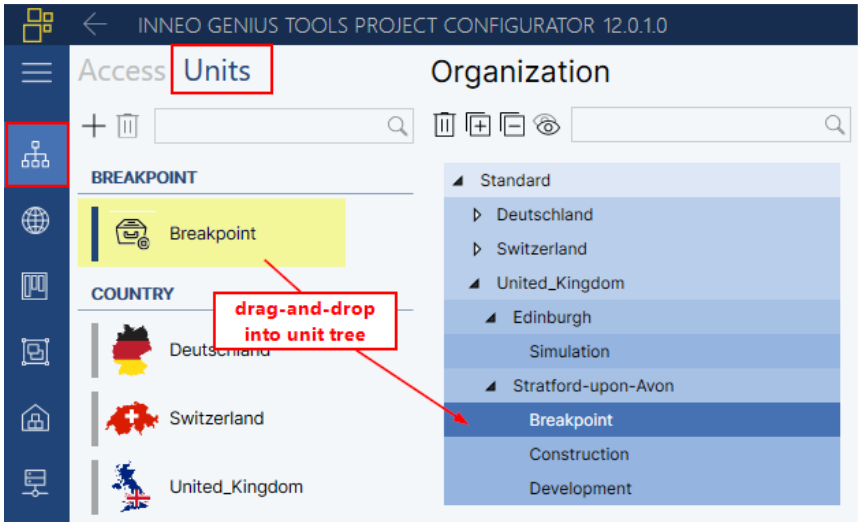
The breakpoint unit cannot be renamed or deleted and it is not displayed for the configuration settings in the Configuration page.

Usage:

– Administrators can create the Config.pro file that is valid for the selected project at the breakpoint with the button *Create config.pro* in the Config tab of GENIUS TOOLS Starter App.

– Administrators who are members of a Last unit can use it to test settings that do not apply to the Last Unit.

Hint: We recommend creating a separate role for the breakpoint unit or using the administrator role.



Breakpoint under unit "Stratford-upon-Avon" and selection in GENIUS TOOLS Starter App

Warning: When selecting Breakpoint, Starter projects may not work correctly because necessary settings are missing, e. g. the variable GTS_UNIT_NAME.

5.3.5 Assigning unit directories

A unit can be used with or without a unit directory.

Working with unit directories offers extensive possibilities for configuration, as a unit directory can contain the following files:

© 2025 INNEO Solutions GmbH

– configuration blocks

– PSF files (Creo startkeys)

– batch files

Creating a unit directory

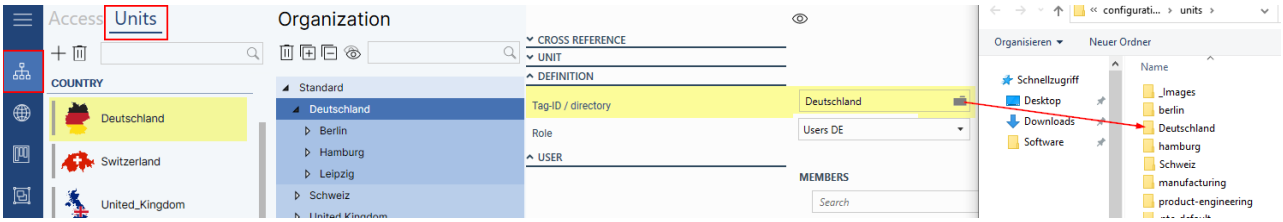
A unit directory is created manually as a subdirectory in the system directory *units* of an application.

Caddepot\<operatingenvironment>\<application>\configuration\units\<unitdirectoryname>

The name of the unit directory does not have to correspond with the name of the unit that is created in GENIUS TOOLS Project Configurator. Different names for a unit and a unit directory can be advantageous when working with subunits, i. e. for a better overview of the call hierarchy of settings.

Selecting a unit directory

You can enter the name of the required unit directory in the Create Unit dialog or select it in the field *Tag ID / unit directory* in the Defintion segment in the Organization menu item.



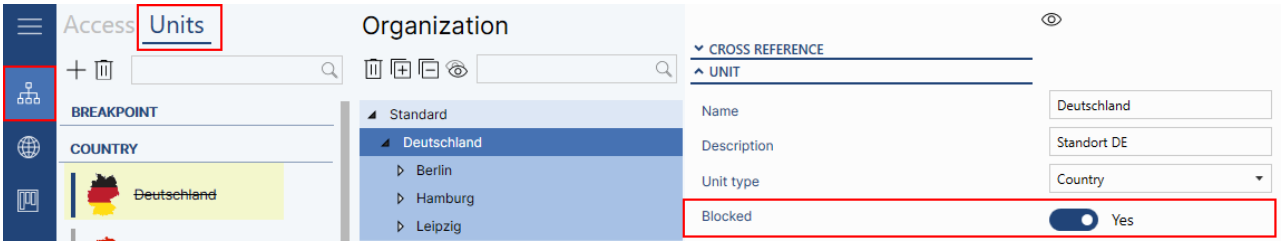
Selecting a unit directory in the Organisation menu item

When a directory is selected, its name becomes the unit tag ID.

5.3.6 Deactivating units

Blocking a unit in the Project Configurator is useful if you wish to disregard the configuration for this unit without deleting the unit, e. g. during tests.

To do this, go to the Name/Members area and activate the radio button Blocked. The name of the unit will be crossed through.



© 2025 INNEO Solutions GmbH

You can also block individual users or computers without locking the entire unit, see the section Blocking individual users or computers.

5.3.7 Using unit tag IDs

A unit tag ID is an additional textual marking in a configuration block or batch file that defines a unit and limits the validity of the configuration block to it. For example, the file *config_lic.development* could contain all licenses that are only to be used by the unit *Development*.

Unlike configuration blocks that are located in a specific Unit folder, configuration blocks with a unit tag ID can be stored in all folders. They are activated by the selection of the unit in GENIUS TOOLS Starter App. This allows settings to be made for a unit even without assigning a unit folder to the unit.

Unit tag IDs can further be used as name of the unit folder and in the name of an image file to assigning images to a unit.

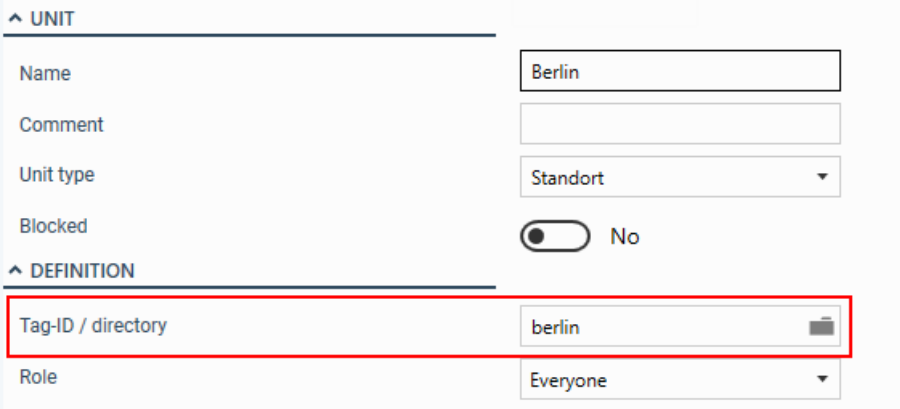
Creating units without a unit folder

After creating a unit in the Create dialog, a unit has a unit tag ID that can be used even without assigning a unit folder.

– When creating a unit in GENIUS TOOLS Project Configurator, a unit tag ID is suggested.

– You can change the name of the unit tag ID thereafter in the *Definition* area.

– Do not select a unit folder.



Unit tag ID / folder name
Defines the tag ID for the unit. If you select a unit folder, its name will also be the name of the unit tag ID. Unit folders are created manually in *configuration\units*.
The tag ID preset in the input field can be:
Retained/ overwritten: Defines the unit tag ID. Tag IDs must not contain characters that are invalid for file names, such as ~ " # % & * : < > ? / \ { | }. German umlauts and the letter ß are not accepted.
The unit directory preset in the input field can be:

© 2025 INNEO Solutions GmbH

Retained / replaced: Assigns an existing unit folder to the unit; the name of the folder becomes the unit tag ID (case-insensitive).

The name of the unit which users can choose in GENIUS TOOLS Starter App can be freely set by the administrator and does not necessarily have to correspond to the name of the unit folder. Naming a unit folder differently from a unit can be useful for a better folder structure of files.

Use case

In a company two sub-departments (Amsterdam, Berlin) of the Europe division are to work together on five projects. In two projects (C, D) of the five different license extensions should be used: Amsterdam should work with AAX, Berlin with BMX.

Initial situation: A unit folder with the name *Europe* is located in the *units* system folder and contains the Creo configuration options (configuration blocks) for the unit Europe.

Procedure:
In GENIUS TOOLS Project Configurator

1. In the main page *Organization* main page go to the *Select* section and click the Plus button, see Creating units.
2. Create a unit with the name “Amsterdam” and the tag ID "amsterdam".
3. Create a unit with the name “Berlin” and the tag ID "berlin".
4. Do not assign any unit folders to these units.
5. Add the two units in the organization tree under the unit Europe.

At file level

6. Create a configuration block named *config_aax.amsterdam.pro*.
7. Enter the license extensions for AAX.
8. Create a configuration block named *config_bmx.berlin.pro*.
9. Enter the license extensions for BMX.
10. Place the two files in the project folder for project C.
11. Place the two files in the project folder for project D.

Result: The license extensions AAX and BMX can be restricted to units for projects C and D without having to create new projects.

Advantage: Without tag ID four projects would be necessary: Project C with AAX/ with BMX and Project D with AAX / with BMX.

© 2025 INNEO Solutions GmbH

5.3.7.1 Project options with several unit tag IDs

A configuration block with a unit tag ID can be used as a project option in one or more projects. A project option can be limited to one unit by adding a single unit tag ID, but it can also contain multiple tag IDs.

Validity

When using multiple unit tag IDs, all conditions set by the tag IDs must be met.

Example: Validity of a configuration block

A company has the units Construction and Manchester, but no unit MBD. This means the configuration block *config_lic.manchester.construction.mbd.pro* is valid if the unit Construction *and* the unit Manchester *and* the combined project option MBD is selected.

Usage

Using multiple unit tag IDs is useful when you have subunits in different configuration levels.

Example: Configuration block in multiple levels.

For project A, the team Construction on the site Edinburgh, but not in Hamburg, is to be given NC as an option on the project.

Solution: 1. The units Edinburgh and Construction are created in GENIUS TOOLS Project Configurator.

2. A configuration block with the name *config_lic_nc.edinburgh.construction.nc.pro* is created in the project folder of project A.

3. The project option NC is defined according to requirements (e. g. license extensions), see Single project options.

Result: The construction team in Edinburgh can activate the project option NC on project A.

Advantage: The project option NC is not available to all members of the unit Construction, as would be the case if the configuration block were located in the Construction unit directory.

© 2025 INNEO Solutions GmbH

5.3.8 Call hierarchy for subunits

The call sequence of subunits corresponds to the arrangement in the organization tree, in this example: Standard - United Kingdom - Stratford-upon-Avon - Development (1).

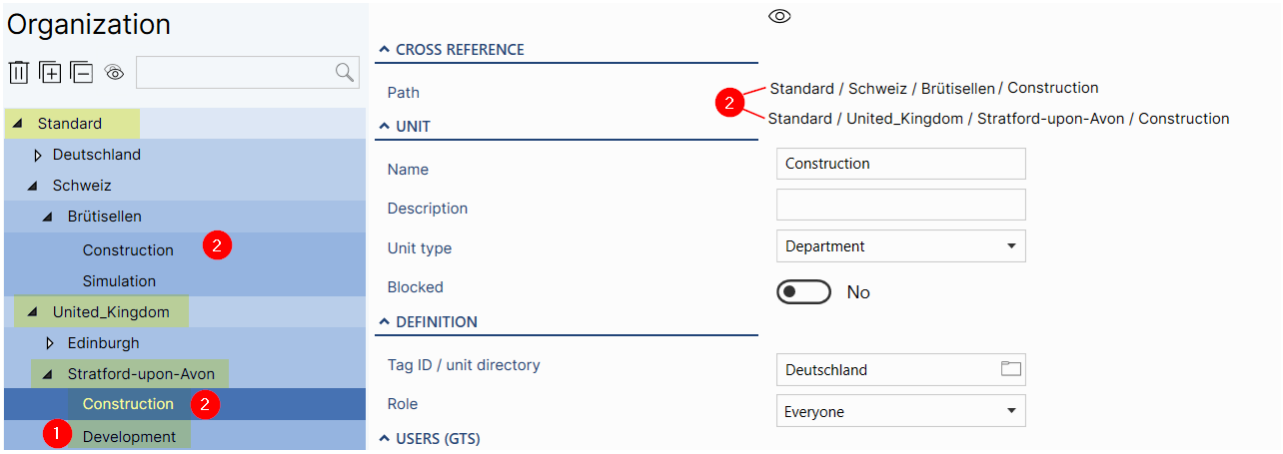
In this example, the following settings define a Starter project

– the settings for the Development unit,

– the inherited settings from Standard, United Kingdom and Stratford-Upon-Avon as well as

– settings of the project, see Call sequence for settings.

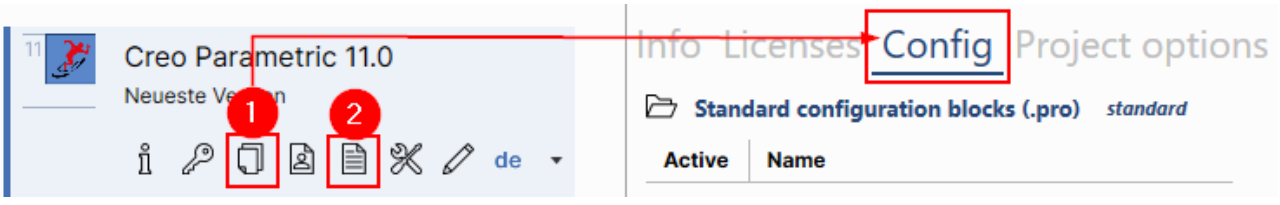
If a subunit exists more than once, e. g. Construction (2), inherited settings from the parent units Switzerland / Brüttisellen *or* United Kingdom / Stratford-upon-Avon may apply, depending on the selection by the user.



View call sequence

The more subunits you have, the more difficult it becomes to track at which configuration levels settings are made and possibly overwritten. You can see this in two locations:

1. In the Config tab of GENIUS TOOLS Starter App: The configuration blocks are listed by directory.



2. For Creo Parametric projects in the project report under the heading "config.pro": The config.pro blocks are listed with path information.

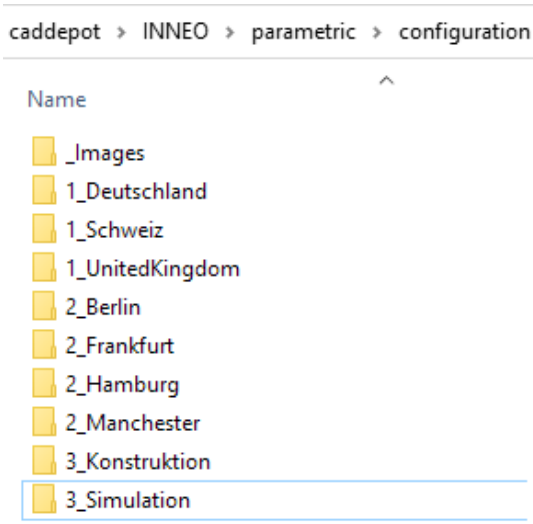
© 2025 INNEO Solutions GmbH

Directory structure for files

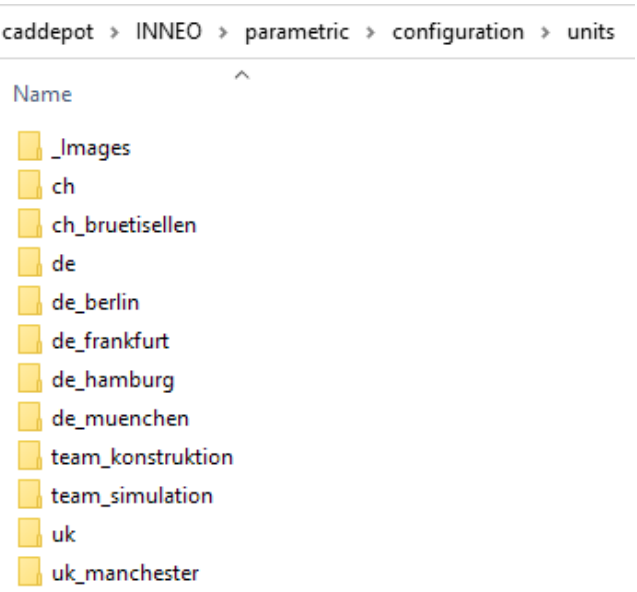
In the units system directory all directories are located on one level, i. e. it is not visible whether a directory contains settings for a unit or a subunit. For an easier overview at file level, it may therefore be useful to adjust the unit directory names to reflect the call hierarchy. You can do this by giving the unit directory a different name to the unit you create in GENIUS TOOLS Project Configurator.

Please note: The name of the unit directory becomes the unit tag ID when assigning the directory to a unit.

Examples for an easy overview of call hierarchy:



Unit directories by country and city



Unit directories by country

5.3.9 Displaying units in GENIUS TOOLS Starter App

Once users belongs to multiple units, they have to select a unit in the user interface of GENIUS TOOLS Starter App.

Standard selection

If there are only units in one organization level, the selection field lists all units available to the user in alphabetical order.

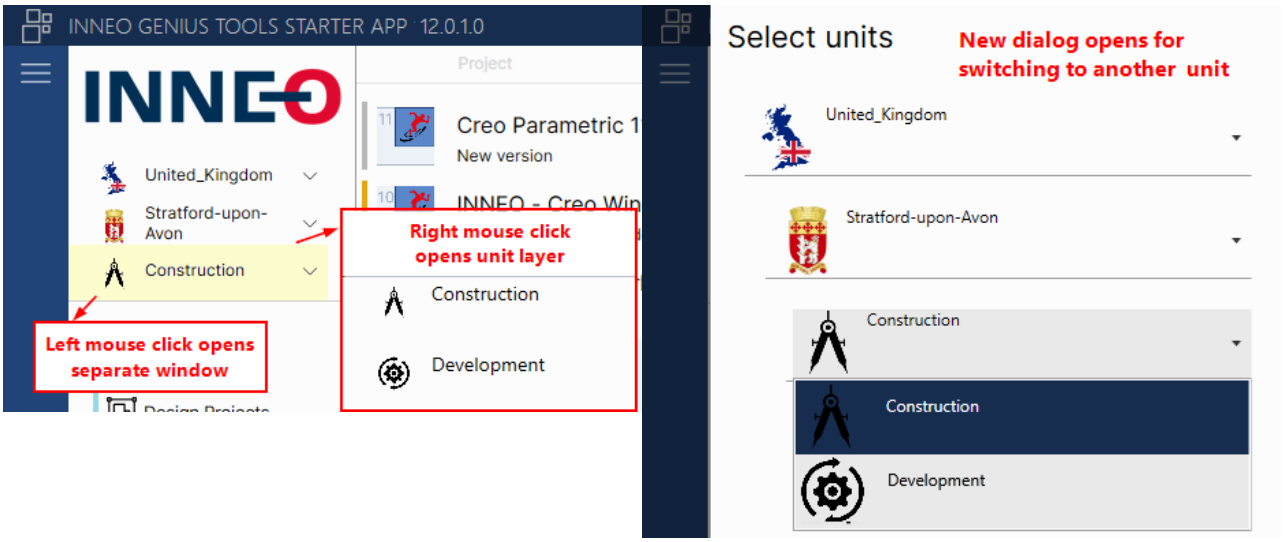
© 2025 INNEO Solutions GmbH

Hint: If you wish to place a unit at the top of the list, put a space character in front of the unit name, e. g. " United Kingdom".

Changes to unit names are adapted after restarting GENIUS TOOLS Starter App.

Selection of subunits

If there are subordinated units (subunits) to choose from, a separate dialog box opens.

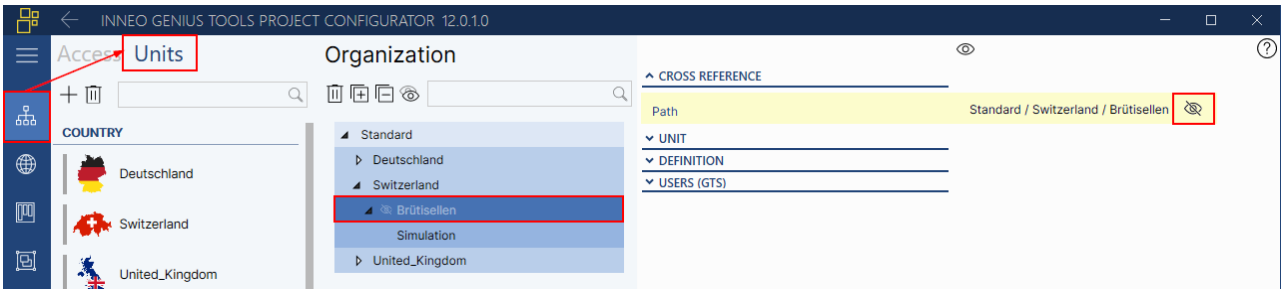


Invisible units

The display of a unit can be hidden in the GENIUS TOOLS Starter App. This supports the clarity of the selection and can save users from having to click on subunits.

Change the visibility of a unit in GENIUS TOOLS Project Configurator under *Organization* > *Units* > *Cross reference* by deactivating the eye symbol on the selected unit path. The settings for invisible unit are retained.

© 2025 INNEO Solutions GmbH



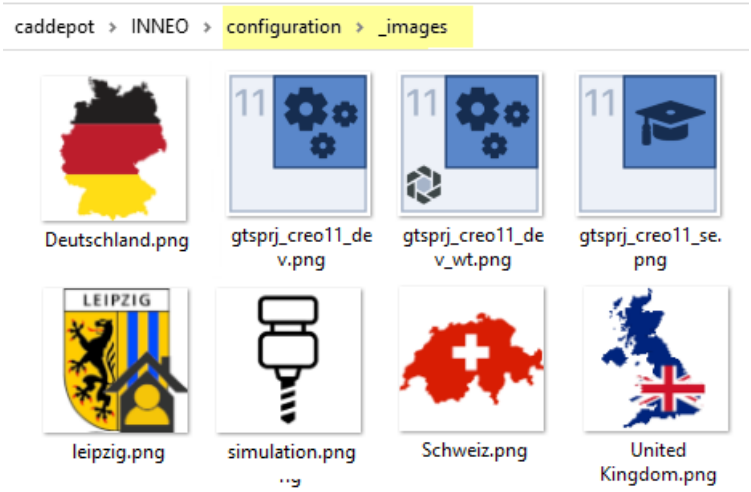
Setting unit Brütisellen to "invisible" in GENIUS TOOLS Project Configurator

Result in GENIUS TOOLS Starter App:

Please note: If a unit has several subunits that are all set to invisible, GENIUS TOOLS Starter App automatically selects the first subunit to which the user has access. If a different subunit is to be selected, use the start parameter -gts:units.

Displaying units with icons

You can add a picture to the display of a unit by storing a JPEG, PNG or SVG file in the _Images subdirectory of the configuration directory in the Caddepot. The name of the file has to be identical to that of the unit directory, e. g. *United Kingdom.png*, or – if you are working without a unit folder – to that of the unit tag ID.



Images directory under configuration

© 2025 INNEO Solutions GmbH

5.3.10 User and computer groups

User and computer groups have been abolished in version 11.0.0.0, because the assignment of access rights is defined via roles and roles can be linked to units only, not to groups. If you want to simulate the way groups have worked, you can create a unit of the type *Last* and leave its visibility in GENIUS TOOLS STARTER switched off, see Unit types > Last.

Existing groups are automatically converted into units when updating to version 11.0.0.0 and newer:

– Configuration blocks that were created for user or computer groups (*UG_<nameofusergroup>_config.pro* or *CG_<nameofcomputergroup>_config.pro*), will be migrated into a new unit directory of the same name.

– After the update, the former groups appear as the last subunit in the organization tree, i. e. they are inserted under each last unit. This corresponds to the call sequence for settings.

– Group settings (Menu item *Configuration*) will be transferred to the new unit(s).

Warning: If the environment variables GTS_USER_GROUP or GTS_COMPUTER_GROUP were used in a configuration block, these variables must be renamed to GTS_UNIT_DIR when updating to version 11.0.0.0 and later.

Please note: After the update, users with permanent licenses can work with units and subunits of a further level. A subscription license is required for unrestricted working with units.

The advantages of units over computer and user groups are:

1. Units can contain sub-units and therefore better reflect the organizational structure of a company.
2. A user can be assigned to several units.
3. The affiliation to a unit does not have to be maintained manually.

For more information on migrating groups, see *GENIUS TOOLS Environment Administrator > Update*.

© 2025 INNEO Solutions GmbH

5.4 Roles

GENIUS TOOLS Starter is based on a **role-based authorization concept**. This allows you to grant different access rights to projects and functions to defined user groups.

Roles are managed in the main menu item *Organization* in the *Access* tab (1) under *Roles* (2).

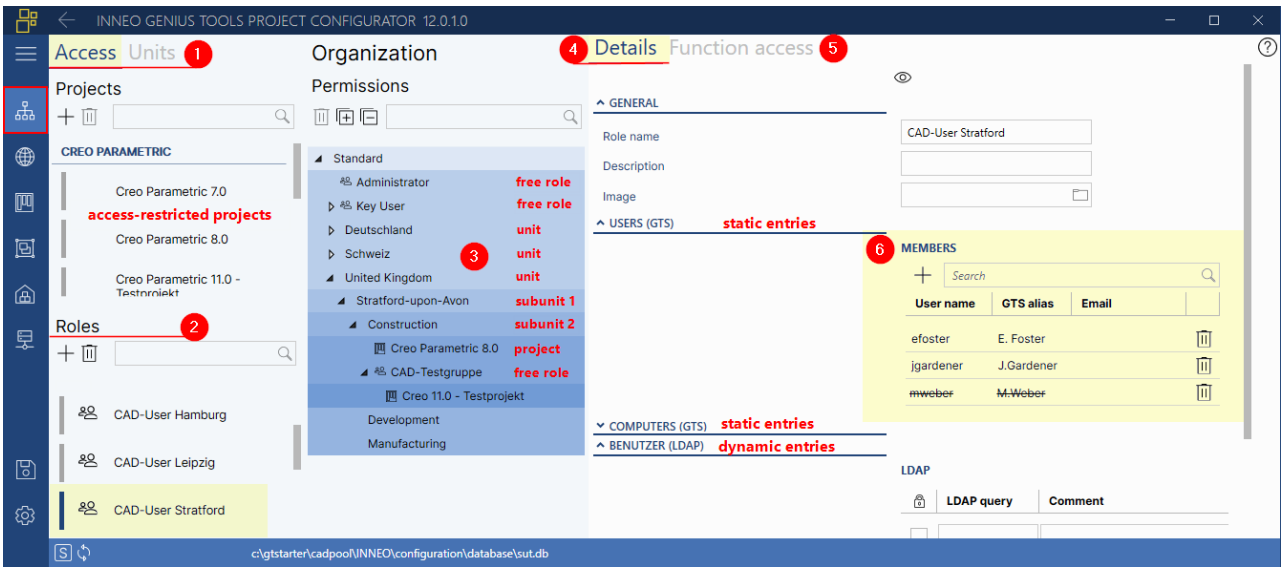
Firstly, users are assigned to a role in the Details tab (3). These entries can be static or dynamic (5). Dynamic user entries change automatically in GENIUS TOOLS Starter when the entries are changing in the source, e. g. Windows Active Directory. Computer entries are always static entries.

Secondly, access rights are defined for this role. These rights include access to projects (6) as well as to functions in GENIUS TOOLS Starter App (4), see chapter Access rights.

If a role configured in this way is assigned to a unit, it becomes a **assigned role**. For a unit, you can apply specific settings for the various CAD applications.

A role can also be used in the permissions tree as a **free role**. A free role is not assigned to a unit but still restricts the access of a project to the members of this role.

The tree for permissions shows – like the tree for units – all units and subunits. These can restrict the access of a project. In addition, you can also use free roles for defining project access in the permissions tree.



Details tab of the role "CAD user Stratford-upon-Avon"

The members list (4) shows all users (or computers) assigned to the selected role. You can **search for users** and **delete user** with the recycle bin icon to the right of the user name.

A crossed name means that a **user is blocked**, i. e. for this user neither any role nor any unit configuration is applied. To change the blocked status, go to *Resources* > *Users* > *Edit / create user*.

© 2025 INNEO Solutions GmbH

5.4.1 Usage of roles

Roles are used for grouping users and for assigning rights.

Grouping of users

If the members of a role work with a special configuration setting, a role must be assigned to a unit, under *Organization* > *Unit tab*.

Assignment of function rights

A role must be created if the members of the role require special functions in GENIUS TOOLS Starter App and GENIUS TOOLS for Creo, see *Organization* > *Access tab* > *Roles* > *Tab: Function access*.

If a role is neither added to the project tree nor assigned to a unit, the role does not define any project restrictions, but still determines the access rights for the members of the role.

Example: A company assigns access to the Editors of GENIUS TOOLS for Creo to administrators without creating an extra unit for this user group. The procedure for this example is described in Chapter Free roles for function access.

Please note: Function access rights are always cross-unit: If a user has different rights in different roles, the granted access applies regardless of which unit is selected in GENIUS TOOLS Starter App. See chapter Granting function access rights.

A description of all access rights for GENIUS TOOLS Starter App and GENIUS TOOLS for Creo can be found in chapter Granting function access rights.

Assignment of project rights

It is possible to restrict access to a project to certain users. To do this, the users must first be grouped into a role. The second step is to add the project to the permission tree. If users are assigned to several roles, the visibility of the allowed projects in GENIUS TOOLS Starter App can be restricted:

- regardless of the selected unit: cross-unit project access
- depending on the selected unit: unit-specific project access

Please note: Project access rights are always defined for the members of a role. The role can be assigned to a unit or be used as a free role in the permissions tree.

© 2025 INNEO Solutions GmbH

5.4.1.1 Use case: Usage of roles

The company ABC wants to assign certain functions and projects to the following user groups and specify configuration settings. Click a role to go to the chapter that describes how to create that role.

Name of the role	Users	Function access	Project access	Configuration options
Default roles				
Administrator	Main administrator	– Can enter GENIUS TOOLS Project Configurator	Operating environment for testing, e. g. for customizing object data	– own network drive connection
Everyone	All persons for whom a user entry was created in GENIUS TOOLS Project Configurator	– Can see project info – Analyze / borrow licenses – etc.		
Free roles				
CAD test group	User who test projects with the newest Creo version	like *Everyone* plus – Can pause synchronization – Can deactivate configuration blocks	Test project for new Creo version	
KeyUser	Users trained for Model Processor	like CAD test group	Model Processor project	
GTfC Admin	Site administrators	like CAD test group plus – Is GTfC-Admin – Can use network mode		

© 2025 INNEO Solutions GmbH

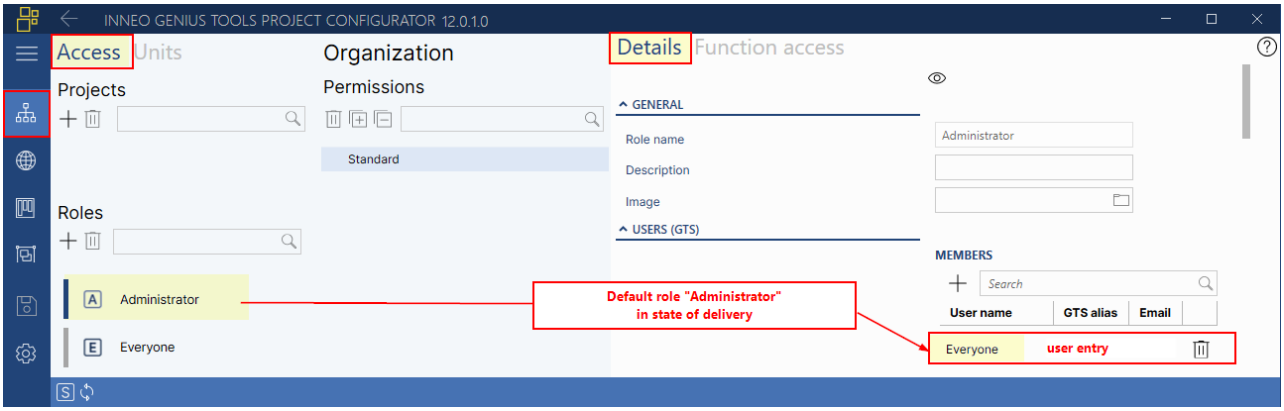
Name of the role	Users	Function access	Project access	Configuration options
Assigned roles				
Users DE	All users in DE		Can see projects in DE	– license server in Germany
Users UK	All users in UK		Can see projects in UK	– license server in UK
Construction	All designers in CH, DE, UK	like *Everyone* plus – Can deactivate configuration blocks	Can see projects with older Creo versions	– configuration blocks for Creo settings

5.4.2 Adjusting default roles

There are two pre-configured roles *Everyone* and *Administrator*. Both contain in the default settings all Windows user names known to the system.

Hence, every user is a member of the role *Administrator*. When you first use GENIUS TOOLS Project Configurator, you should adjust the role by removing the user entry *Everyone* and by assigning some individual users to it.

The default roles cannot be deleted. The roles *Everyone* and *Administrator* cannot be renamed.



Standard role "Administrator" with user entry "Everyone"

Hint: The user entry *Everyone* in the Members is accessible to all roles and can be used if you do not want to manage each user manually.

If you delete the user entry *Everyone* from the Administrator role, it will still be available for selection in the Members area (Plus symbol).

© 2025 INNEO Solutions GmbH

5.4.3 Creating roles

To create a new role, click on the plus button (1) in the Roles area of the Access tab. Enter the name of the role and an optional comment in the Details tab under General (2). You can add an image.

The following elements can then be assigned to a role:

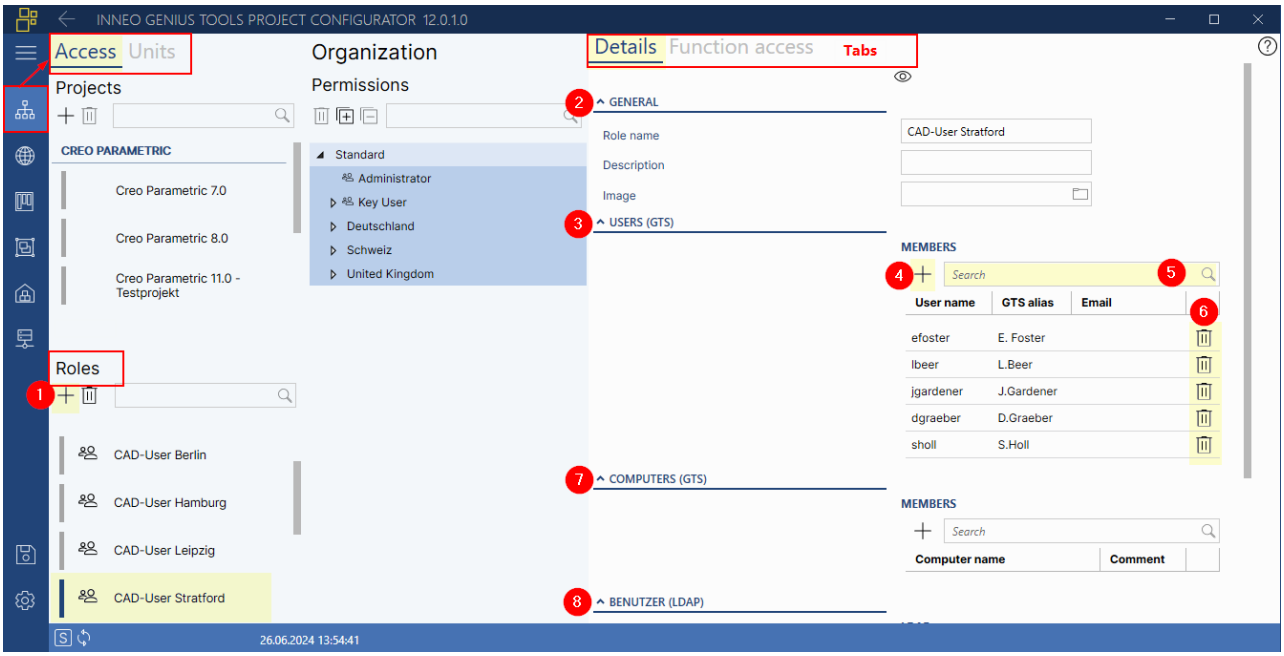
- static entries (GTS) of Windows users (3) and/or computers (7),
- dynamic (changeable), e. g. from the Windows user administration (8, LDAP) or an alternative authentication system.

Dynamic entries are created directly in the role. For static entries, user or computer entries must be created under Resources.

Individual users can be added (4), searched for (5) and deleted (6) in the member list.

If you have changed the authentication to a system other than Windows (e. g. Windchill), the area *User groups (authentication provider)* appears instead of the LDAP area, in which the assignment of user groups to a role is possible. The update function to the right of the add symbol updates these user groups.

To assign access rights, fill in the *Function access* tab, see chapter View users rights.



Creating a new role

5.4.3.1 Adding static entries to a role

You can assign users and computers to a role statically.

Static entries do not change automatically as dynamic user entries do. Changes to static

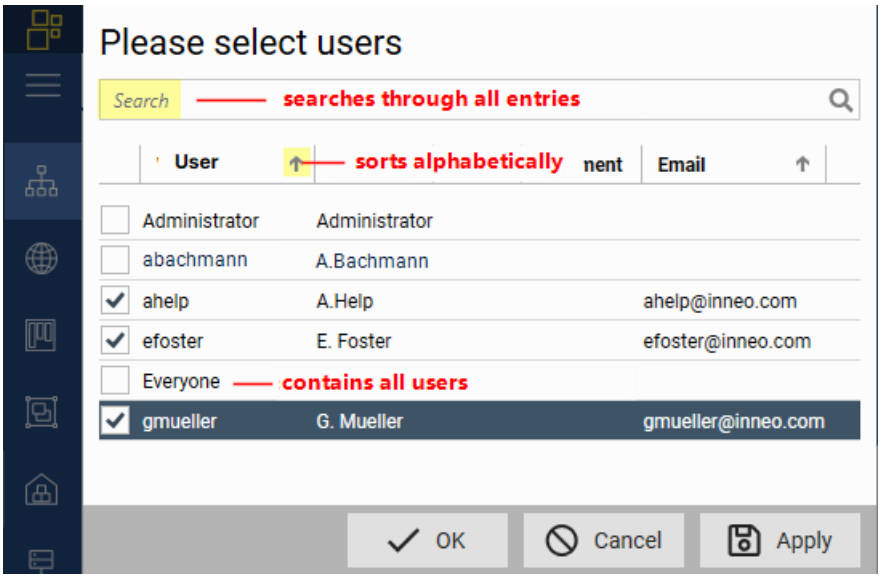
© 2025 INNEO Solutions GmbH

entries must be made manually for each entry in GENIUS TOOLS Project Configurator.

To assign a user or computer to a role, you have to first create an entry as a *Resource* under *users / computer*. A user or computer can be assigned to several roles.

Procedure: Add users to a role

1. Under the main menu item *Organization*, select the role to which you want to add one or more users.
2. In the Users section (3), click on the plus button (4).
3. In the new dialog box that opens, select the users you wish to add to the role.
   You can search entries and sort them alphabetically.
   Hint: The default entry *Everyone* contains all users.



4. Finish the dialog box by clicking on either:
   – *Ok*: Add selected users and close dialog box,
   – *Cancel*: Close dialog box without adding selected users,
   – *Apply:* Add selected users without closing dialog box.

5.4.3.2 Adding dynamic entries to a role

Dynamic user entries adopt changes from the system in which they have been created.

If GENIUS TOOLS Starter is used by Windows users, this is done automatically for dynamic entries by means of an LDAP request. If users are to authenticate with a different authentication system, the entries of this system must be regularly updated manually in GENIUS TOOLS Project Configurator using the Update function.

© 2025 INNEO Solutions GmbH

Accessing Windows user management

If you are using a subscription license, you can access the Windows user management. This means that you can assign permissions to users and user groups that have been defined by your company's central IT management. GENIUS TOOLS Starter App uses live queries to make sure that user assignment is up-to-date. Thus, you do not have to create users locally.

Windows user management is accessed using LDAP queries. LDAP (lightweight directory access protocol) is a standard network protocol for accessing a distributed directory service.

> **Please note:** An LDAP query is only available with a subscriptions license. When using a permanent license, the *LDAP* tab is not visible.

Defining an LDAP query

To define an LDAP query, go to the *Resources* page, select the role that you want to assign a query to, and go to the *LDAP* tab.

In GENIUS TOOLS Starter App live queries to Active Directory are executed at the start of project validation. The LDAP groups are cached for fallback functionality.

The LDAP fields *Description, DisplayName, Initials* and *Enabled* are queried and the entries are transferred to the following fields. The administrator can overwrite the content of a field, but not the mapping.

Defining an LDAP query

▶ Users (LDAP) – *Subscription*

In the LDAP section, you can assign users from an LDAP query to a role dynamically. (LDAP: Lightweight Directory Access Protocol)

Blocked (1)
Use this to block the LDAP query.

© 2025 INNEO Solutions GmbH

LDAP query (2)
Enter the name of the LDAP group you want to use.

Comment (3)
Enter an optional comment for the LDAP query.

Delete (recycle bin icon,4)
Removes the LDAP query from the role.

▶ Modify users

In the section *Modify Users* you can edit details from LDAP queries or alternative authentication systems. Specifications for static user and computer entries are edited under Resources.
Any changes only apply to GENIUS TOOLS Starter.

Please note: Information from dynamic user entries is not written to GTS variables.

Search (5)

Camera column (6)
Double-click the upload icon in the camera column to add a user image.

User name (7)
Displays the user name (Windows / alternative authentication systems).

GTS Alias (8)
Alias name of the user. An LDAP query transfers entries from the field *DisplayName*.

GTS Alias Long (9)
Long user alias. An LDAP query transfers entries from the field *DisplayName*.

GTS Alias Short (10)
Short user alias. An LDAP query transfers entries from the field *Initials*.

LDAP query (11)
Displays the LDAP group or the user group of the alternative authentication.

Comment (12)
Displays the staff position. An LDAP query transfers entries from the field *Description*.

Email (13)
Displays the email address.

Accessing alternative authentication systems

If you have selected an alternative authentication method in the global settings, you can assign user entries that come from this system to a role. Details of users and their affiliations to user groups are updated with the update function which appears to the right of the Add icon. These entries are therefore dynamic, i. e. changes made in the

© 2025 INNEO Solutions GmbH

authentication system are adopted by GENIUS TOOLS Starter and do not have to be entered manually per entry.

Please note: Integrating an alternative authentication system with GENIUS TOOLS Starter requires a subscription license.

For Windchill, all user groups and their assigned users are automatically imported from the specified Windchill server. The following information is adopted:

User group information
"Name" > Group name
"Description" > Description of group

User information
"Name" > User name
"FullName" > GTS Alias Long
"AlternateUserName1" > GTS Alias Short
"Email" > Email

If you would like to use other authentication systems, you must create an authentication provider by yourself, see chapter Creating your own authentication provider.

In the section *Users (Authentication Provider)*, the following details can be specified and modified.

▶ Users (Authentication provider) – *Subscription*

In the section *User groups (authentication provider)* you can dynamically assign these groups to a role.

Blocked (1)
Blocks the user group.

User group (2)
Enter the user group you want to assign to the role.

Comment (3)
Enter an optional comment or accept the existing one.

Delete (recycle bin icon,4)
Deletes the user group from the role.

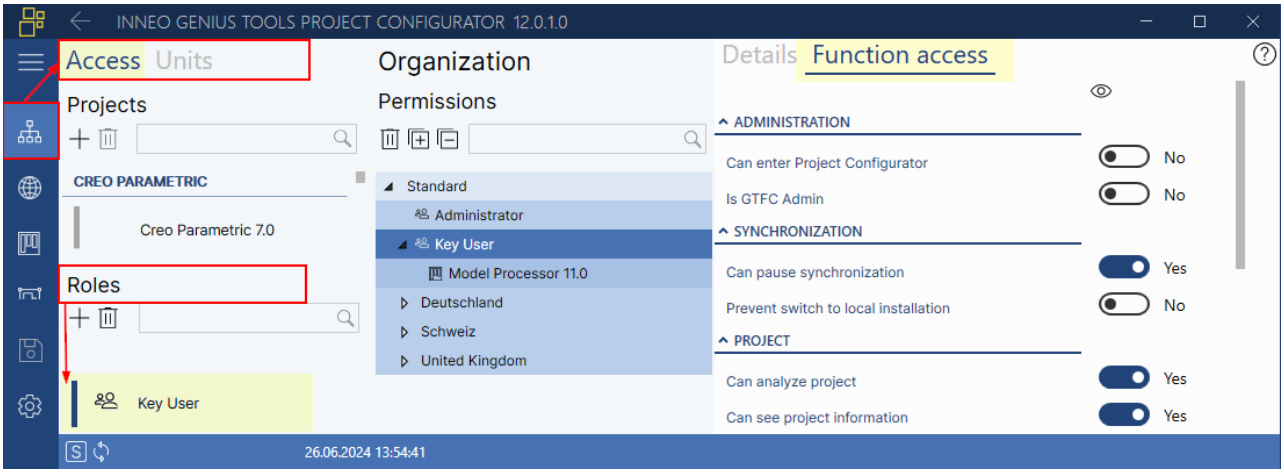
▶ Modify users

Details about individual users can be edited like entries from LDAP queries.

© 2025 INNEO Solutions GmbH

5.5 Granting function access rights

Function access rights are always defined for the members of a role. In the *Function Access* tab, select the rights you wish to grant to the members of a role for using functions in GENIUS TOOLS Starter App and GENIUS TOOLS for Creo.



Granting function access to the role "Key User"

Use case: Function access when a user is a member of several roles

The table shows the function access authorizations for user Anna Help, who is a member of the roles GTFC Admin, Construction and Everyone.

Example for user A. Help	**Function access: cross-unit**		
	„Can enter GTPC“	„Can use network mode“	„Can deactivate configuration blocks“
Membership in:			
Role GTFC-Admin	–	X	X
Role Construction	–	–	X
Role Everyone Überblick	–	–	–
Authorizations for GENIUS TOOLS Starter:			

© 2025 INNEO Solutions GmbH

Regardless of the selected unit	–	X	X

Granting access rights – GENIUS TOOLS for Creo

These two functions concern the work with GENIUS TOOLS for CREO (GTfC):

Is GTFC admin

The variable *%GTFC_ADMIN%* is set to 1, i. e. users have access to all Editors of GENIUS TOOLS for Creo (GTFC) whose start switches have this variable. The specifications can be viewed in *gt_main.cfg* and in GENIUS TOOLS Configuration Utility.

Default for role Administrator: Yes
Default for role Everyone: No

Consult the chapter start settings of the Startup TOOLS software.

Prevent switch to local installation

By default, if the GENIUS TOOLS Starter App is started from the Caddepot directory on the server, GENIUS TOOLS Starter App will switch automatically to the Cadpool. If set to *Yes*, there is no automatic switch and the user works with the data in the Caddepot.

Default for all roles: No

Warning: If this right is granted to a user before the initial synchronization, GENIUS TOOLS Starter App will not be installed locally for this user, and the user will not be able to start locally.

Granting access rights – GENIUS TOOLS Starter App

The other access rights are assigned for GENIUS TOOLS Starter App. If an access right is not given to a user, the corresponding button or tab does not appear in GENIUS TOOLS Starter App. Also refer to the chapter GENIUS TOOLS Starter App User Interface.

Please note: Not every function in the GENIUS TOOLS Starter App can be controlled. Default functionalities cannot be influenced. Calling up GENIUS TOOLS Starter and starting a project cannot be influenced.

▶ Administration

Can enter Project Configurator

Determines whether users are allowed to open GENIUS TOOLS Project Configurator. For users who do not have this right, a message will be displayed, and the Project Configurator will be closed when the user confirms the message.

Default for role Administrator: Yes
Default for role Everyone: No

© 2025 INNEO Solutions GmbH

Hint: When GENIUS TOOLS Starter is started locally from the Caddepot directory, Project Configurator is always accessible. In this way, an administrator will always have access to the configuration.

Please note: If this right is not assigned to any user, GENIUS TOOLS Project Configurator will revert to the default setting of granting the right to all users.

▶ Synchronization

Can pause synchronization
The user may pause the automatic data synchronization. Synchronization has to be paused if you want to make changes to files in the Cadpool locally, otherwise local changes would be overwritten as soon as the synchronization runs.
Default for role Administrator: Yes
Default for role Everyone: No

Warning: GENIUS TOOLS Starter App will keep the synchronization on pause even after a restart of the software as long as the user still has this right. If this right is withdrawn while the synchronization is paused, the synchronization will run automatically when the software is restarted, which may result in data loss.

▶ Project

An overview of the following settings can be found in the chapter Customizing information panes.

Can see project information
Users can open the Info tab containing the project name, paths to the project, data and working directory as well as the selected language and the startkey. The button is displayed.
Default for role Everyone: Yes

Can create project report
The user can view all information about the project and user settings in a separate document. The button is displayed under the project name.
Default for role Everyone: No

Can see licenses
Controls the visibility of the license evaluation in GENIUS TOOLS Starter App. The Licenses tab appears, see chapter Displaying license information. To use this option, you also have to set *Show licenses* under *Configuration* > *Creo settings* > *Tab: Start* to *Yes*.
Default for role Administrator: No
Default for role Everyone: Yes

Can borrow licenses
Users can start the license borrowing process. The button is displayed under the project name, see License borrowing for Creo Parametric users.

© 2025 INNEO Solutions GmbH

Default for role Administrator: No
Default for role Everyone: Yes

Warning: To borrow the PTC licenses, the user has to complete the PTC borrowing process.

Can see configuration blocks
Users can view configuration files. The tab *Config* appears, see chapter Config tab.
Default for role Administrator: No
Default for role Everyone: Yes

Can disable configuration blocks
The user can temporarily disable configuration files for a project. Disabled files will not be used by GENIUS TOOLS Starter App when creating the configuration settings. Modified and added configuration blocks are marked with icons when working locally.
Default for role Administrator: No
Default for role Everyone: Yes

Warning: Disabled configuration files will become active again on the next project validation or synchronization.

Hint: This right makes it possible to quickly disable configuration files on individual computers without having to change company-wide configuration settings.

Can open configuration blocks
Users open and edit configuration files. See Config tab.
Default for role Everyone: No

Can save private configuration blocks
Users can edit their private Config files and write them back to the userdata directory in the Caddepot of the server. See Config tab. Set the path to the userdata directory in the configuration settings page under User settings in the *Application* tab.
Default for role Everyone: No

Can see batch files
Users can view batch files. The tab *Batch* appears, see %TARGETTITLE%> > Batch.
Default for role Administrator: No
Default for role Everyone: Yes

Can disable batch files
The user can temporarily disable batch files for a project. Disabled files will not be used by GENIUS TOOLS Starter App when creating the configuration settings. Modified and added batch files are marked with icons when working locally.
Default for role Administrator: No
Default for role Everyone: Yes

© 2025 INNEO Solutions GmbH

Sees auto projects
GENIUS TOOLS Starter will search for certain supported applications on the computer, for example Keyshot or Mathcad , see auto projects., and will display them in the last installed software version in GENIUS TOOLS Starter App.

Default for role Administrator: No

Default for role Everyone: Yes

Can save customized settings/file
Creo Parametric users can view, edit and make a backup copy of the file *creo_parametric_customization.ui*, which contains all user-specific settings for the graphical user interface of Creo.
SolidWorks users can save their user specific settings, which are stored in the registry.
. The button is displayed in GENIUS TOOLS Starter App in the Backup tab.

Default for role Everyone: No

5.5.1 Assigned roles for function access

A role that defines a unit is called an assigned role.

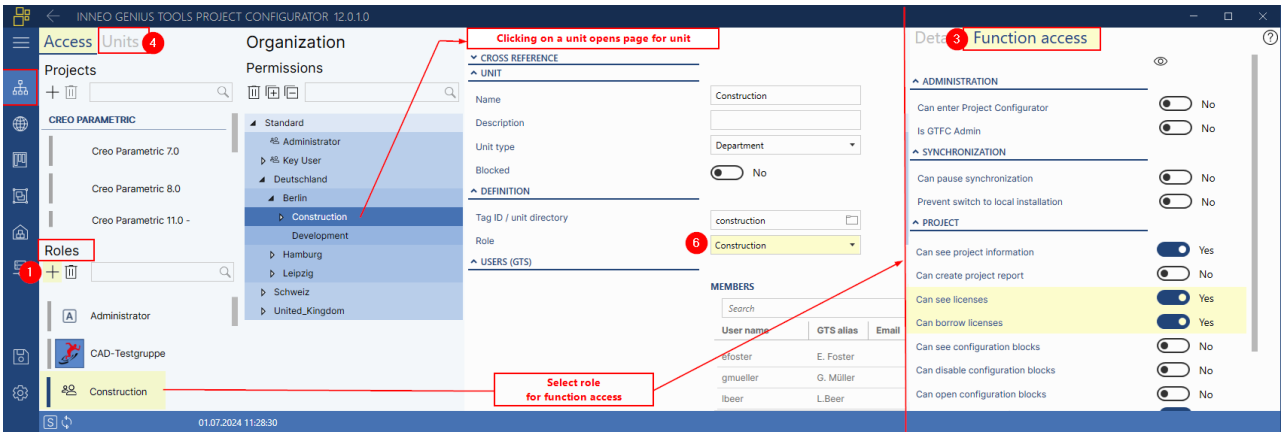
Please note: Function access rights are always cross-unit: If a user has different rights in different roles, the granted access applies regardless of which unit is selected in GENIUS TOOLS Starter App. See chapter Granting function access rights.

Use case: Granting rights to members of the Construction unit
Company ABC would like to give all designers the right to analyze and borrow licenses for Starter projects.

1. Create role: Construction
2. Assign user to role: Eric Foster, Gerd Miller etc.
3. Tab Function Access: *Can see licenses, Can borrow licenses* set to *Yes*
4. Create unit: Construction
5. Add unit to the organization tree: Drag and drop Unit *Construction* under *Berlin*
6. Assign role to unit: Assigning the role *Construction* to the unit *Construction*

The tree for permissions shows – like the tree for units – all units and subunits. These can restrict the access of a project. In addition, you can also use free roles for defining project access in the permissions tree.

© 2025 INNEO Solutions GmbH



Result:

– All designers have access to the newly set rights.

– No projects are assigned.

– If a designer is also a member of other roles, he receives all the rights of these roles.

A unit can also be used to restrict projects, see Unit-specific visibility.

5.5.2 Free roles for function access

A role that does not define a unit is called a free role.

If a role is neither attached to the project tree nor assigned to a unit, the role does not restrict any projects, but still determines the access rights for the members of the role. For example, a company can give administrators access to the editors of GENIUS TOOLS for Creo without creating an extra unit for this user group.

Example: Assigning rights for site administrators

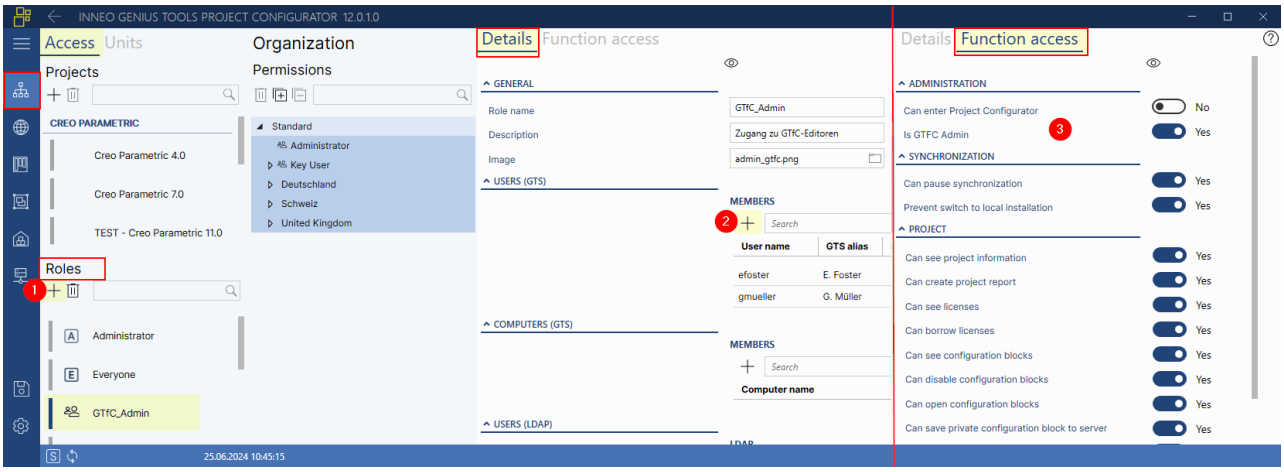
Company ABC has one site administrator in Germany and one in Great Britain. Both need the same rights to make settings in the editors for GENIUS TOOLS for Creo, but should not, like the main administrator, have the right to make settings in GENIUS TOOLS Project Configurator and use the network mode.

Use case: Assigning rights for site administrators

Company ABC has one site administrator in Germany and one in UK. Both need the same rights to make settings in the editors for GENIUS TOOLS for Creo, but should not, like the main administrator, have the right to make settings in GENIUS TOOLS Project Configurator and use the network mode.

1. Create role: GTfC_Admin
2. Assign user: Eric Foster and Gerd Müller
3. Tab Function access: Function *Is GTFC-Admin* set to *Yes*
4. Do not add the role to the authorization tree.

© 2025 INNEO Solutions GmbH



Result:

– The two site administrators have access to the GENIUS TOOLS for Creo editors.

– No projects are assigned to the site administrators.

– If a site administrator is also a member of other roles, he receives all the rights of these roles.

Please note: Function access rights are always cross-unit: If a user has different rights in different roles, the granted access applies regardless of which unit is selected in GENIUS TOOLS Starter App. See chapter Granting function access rights.

A free role can also be used to restrict projects, see Cross-unit visibility.

5.6 Creating projects

GENIUS TOOLS Starter enables users to launch any program with the user component GENIUS TOOLS Starter App.

In the main page *Projects* , projects can be created for the CAD applications *Creo Parametric, Creo Elements/Direct, SolidWorks, Inventor* and *AutoCAD*.

Projects for all other applications can be created as Apps projects with simplified setting options. Most importantly, they cannot be set up for a specific release.

GENIUS TOOLS Starter App can also generate projects from certain applications automatically, if they are installed on the user computer, e. g. KeyShot. For such Auto projects no settings can be defined.

Please note: A project created here only becomes a Starter project after having been selected in GENIUS TOOLS Starter App (by the user and his unit). That is, only the selection by users computes the different configuration levels. The corresponding configuration settings and batch files are then included to make up the project start, according to the Configuration concept.

© 2025 INNEO Solutions GmbH

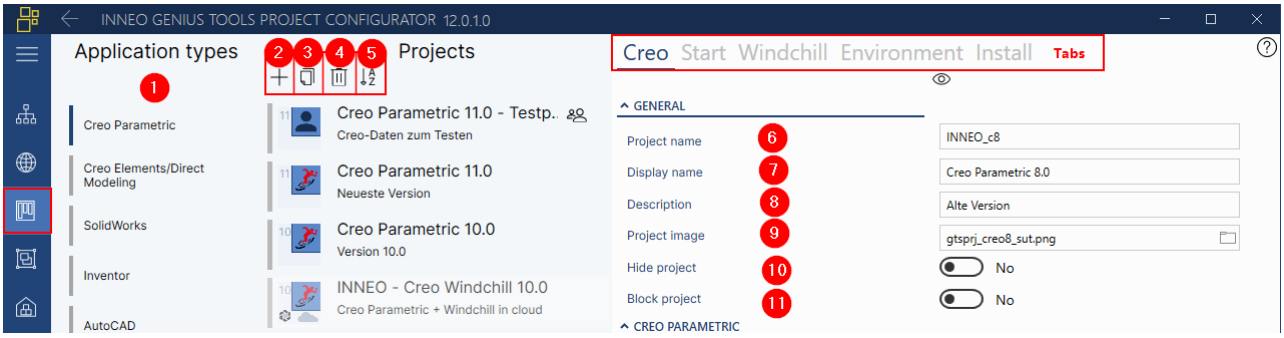
Administrators can restrict the access to a project to defined user groups (roles), see chapter Restricting project access.

5.6.1 Creating a new project

Choose the application (1) for which you want to create a new project.

The Plus symbol (2) creates a new button with the name *New Project* as well as a number if a project of the same name already exists. The new project becomes visible to the users as soon as you save your changes to the database.

Click on a project in the projects list to edit the project details in the right pane. Note that there are further tabs with project details for the CAD applications.



Details for the project "Creo Parametric 9.0"

Some input fields are pre-filled with the default settings, for others a drop-down menu opens for directory search.

There are also optional fields (indicated in brackets in the following chapters). If the optional input fields are not filled in, the system-wide settings (Standard) or the settings of the unit(s) are inherited by the project.

5.6.2 General project settings

Settings for project display (display name, project image and info text) are entered in the segment *General*.

General details

Project name (6)
A unique name without space characters that identifies a project, e.g. project_vers8_en. The default setting *New Project* can be overwritten. The project name can be changed at any time.

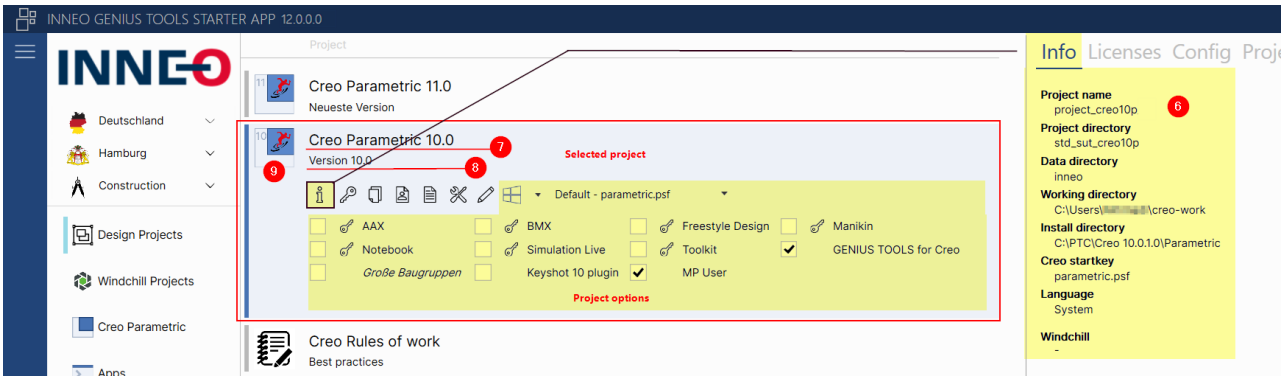
Display name (7)
A unique name that is displayed for the users in GENIUS TOOLS Starter App. In GENIUS TOOLS Starter App, the projects will be listed alphabetically according to their *display*

© 2025 INNEO Solutions GmbH

name.

Description (8, optional)
A short text describing the project can be entered which will be shown below *Display name*.

Project image (9, optional)
You can upload an image from the *_Images* directory, which is displayed next to the project in GENIUS TOOLS Starter App. Use PNG or JPEG files.
Projects are displayed to users in GENIUS TOOLS Starter App as follow.



Display of projects in GENIUS TOOLS Starter App

Administrators can restrict the access to the tabs and project details for different user groups (roles), which is explained in the chapter Presenting projects to users.

Sorting projects

In the GENIUS TOOLS Starter App, you can set the order of the projects for the users by dragging and dropping the projects. The *Change sorting* button (5) in the *Projects* column sorts the projects in the application alphabetically by display name.

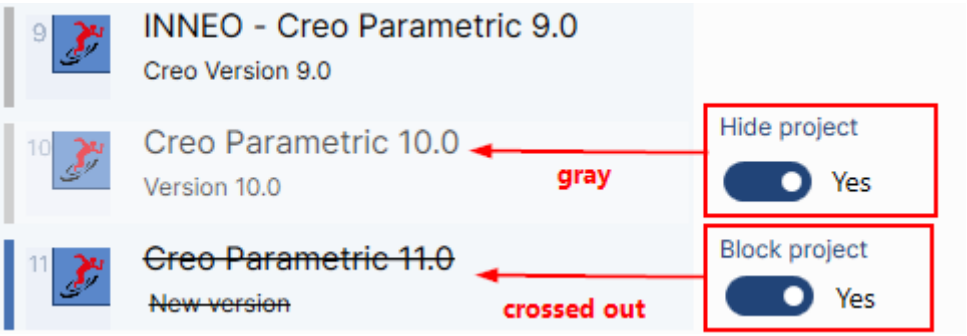
Restrict project access

Projects can be restricted to users who belong to a defined role with specific access rights. Members of this role can only view in GENIUS TOOLS Starter App the projects they have access to. See chapter Restricting project access.
All projects that a user has access to are displayed under *Resources* > *Users* > *Card view* > Project symbol (right).

5.6.3 Hiding and blocking projects

Projects that shall not be displayed to the user in GENIUS TOOLS Starter App can be hidden in *Projects* > *Application Type* > *Projects* > *First tab* > *Section: General*.

© 2025 INNEO Solutions GmbH



Blocked projects are displayed in gray in GENIUS TOOLS Project Configurator. Hidden projects are crossed out.

When you set *Hide project* to *Yes*, the project is not listed in GENIUS TOOLS Starter App, but can still be started using a start parameter. This can be a useful option for Windchill projects, for example.

Hide project

No (default): The project is listed in the user interface.

Yes: The project is not displayed on the user interface in GENIUS TOOLS Starter App, but can be selected using the `-gts:p=<project name>` start parameter.

A blocked project, by contrast, cannot be started using a start parameter.

Block project

No (default): The project can be accessed.

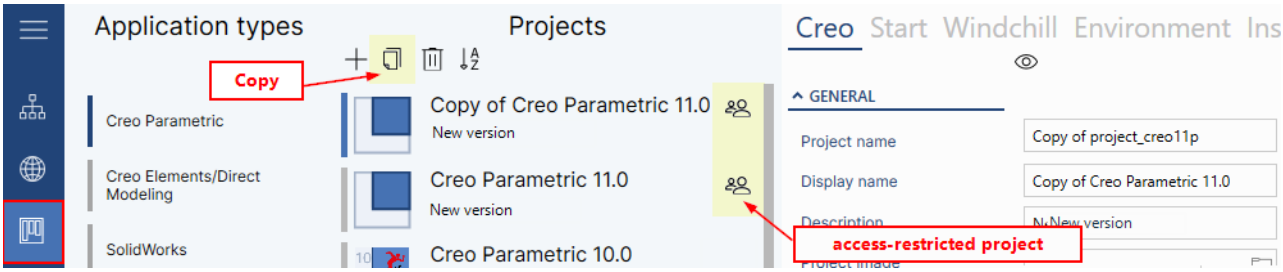
Yes: The project is not displayed and cannot be accessed on the application computer.

The other specifications differ depending on the CAD application, see CAD-specific project settings.

5.6.4 Copying a project

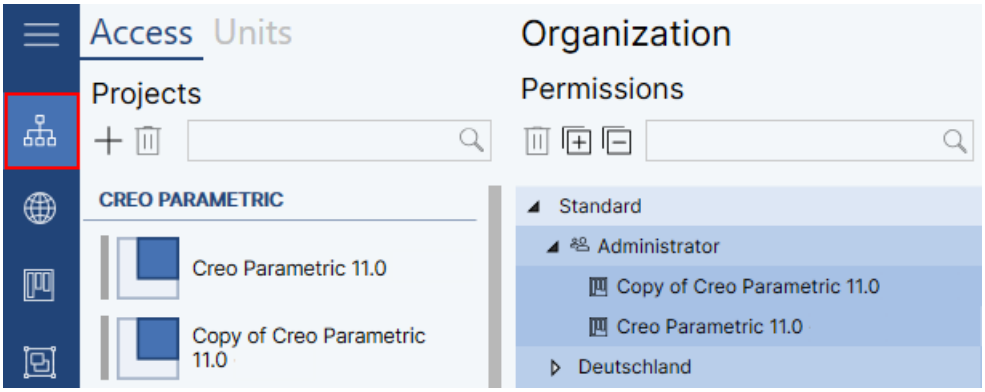
You can copy existing projects with the Copy button. Enter a new name and the remaining settings as in the previous chapter.

If you copy an access-restricted project, the access rights are transferred.



Copying project Creo Parametric 11.0

© 2025 INNEO Solutions GmbH



Creo Parametric 11.0 and copy in the permission tree

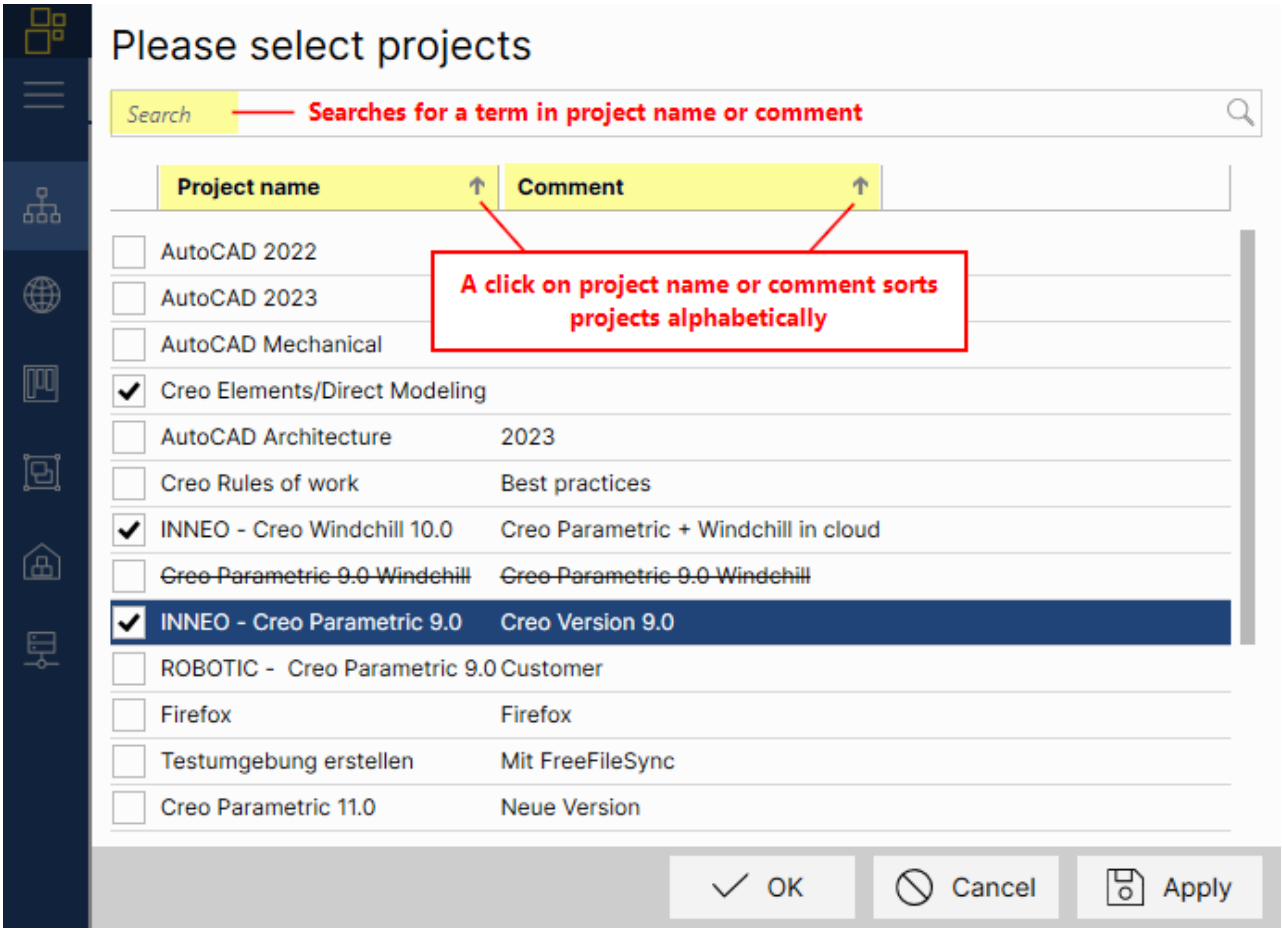
5.7 Restricting project access

Access permissions for projects are defined in the permissions tree in the menu item *Organization* in the Access tab. To do this, create a role with the desired user group.

Please note: Project access rights are always defined for members of a role. The role can be assigned to a unit or be used as a free role in the permissions tree.

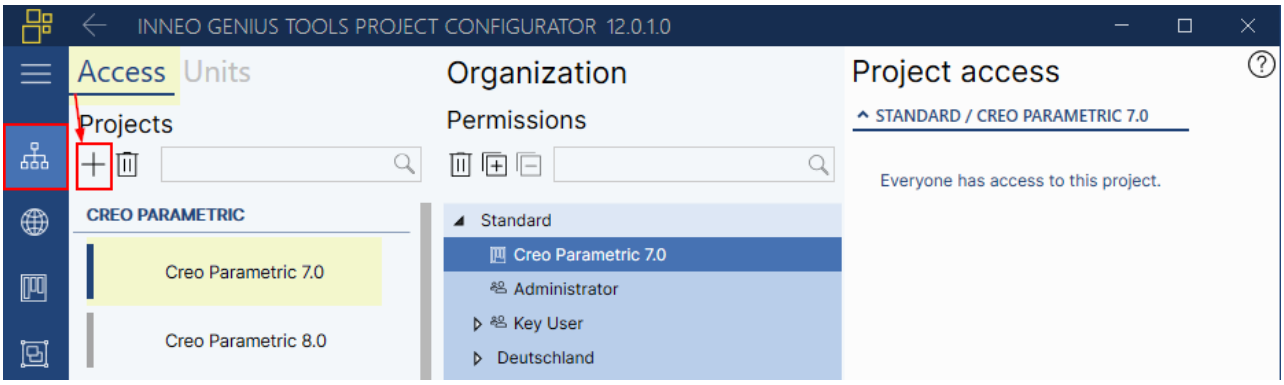
In the Access tab, select a project in the *Projects* area using the plus symbol. In a new window, you can search for the desired projects and add them by ticking them.

© 2025 INNEO Solutions GmbH



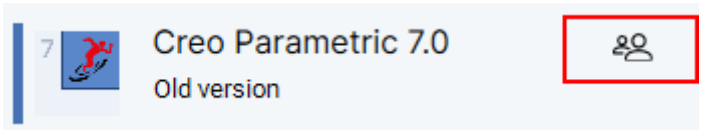
Selecting projects

After selection, the project - in the example Creo Parametric 7.0 - appears in the permissions tree under Standard.



An access-restricted project is first inserted under "Standard"

All projects selected in the Access tab are marked as access-restricted with the symbol for roles on the projects page.



Display of an access restricted project

© 2025 INNEO Solutions GmbH

Under Standard, the project is accessible to all users. In the permissions tree, access to a project can now be restricted to a unit or a free role by dragging the project to the corresponding position. The following options are available:

– Cross-unit visibility (with free roles)

– Unit-specific visibility (with assigned roles)

– Divided unit-specific visibility (with free roles)

Please note: To verify which projects are accessible for a certain user, go to the card view under *Resources* > *Users* and click on the project symbol on the user's card, see View users rights.

5.7.1 Cross-unit visibility

For cross-unit visibility of projects, free roles have to be created, i. e. roles that are not assigned to a unit. You can allow project access

(a) across all units for the members of a free role by dragging the project under *Standard* > *Free role*, or

(b) across different subunits if the project is under *Unit* > *Free role*.

(a) Cross-unit visibility for all units

If a project is created under a free role under Standard, project access is restricted to all members of the free role. Members of the free role see the project regardless of the selected unit in GENIUS TOOLS Starter App.

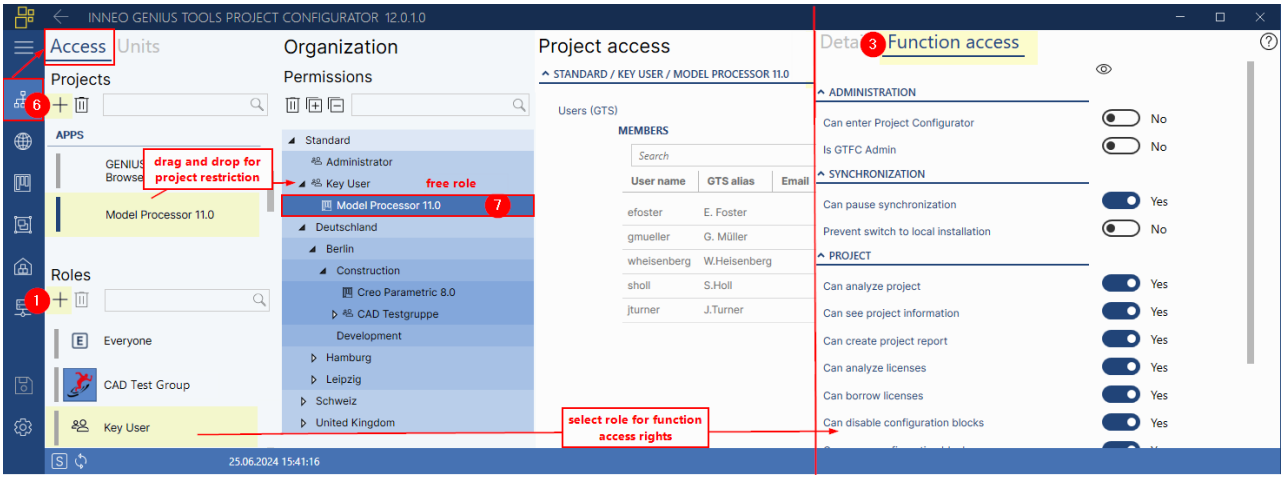
Use case: Enable all key users to access a project

The company ABC would like to limit access to the data revision program GENIUS TOOLS Model Processor to a small group of designers who have been trained to use this software. There should not be an extra unit for this group of key users. The key users, who are members of several units, should be able to open the program out of all units.

1. Create free role: Key User
2. Assign user to role: Eric Foster, Gerd Müller etc.
3. Tab Function Access: No GTPC access, no GTFC admin, no network mode, all project functions
4. No GTPC access, no GTFC admin, no network mode, all project functions
5. Add role to the permissions tree: Drag and drop *Key User* under *Standard*
6. Create project: Model Processor 11.0
7. Select project for access restriction: Model Processor 11.0

© 2025 INNEO Solutions GmbH

8. Add the project to the permissions tree: Drag *Model Processor* 11.0 under *Key User*



Result:

– Members of the Key User role have the rights listed above.

– Key users have access to the project Model Processor 11.0.

– Key users see Model Processor 11.0 project regardless of the selected unit in GENIUS TOOLS Starter App. (Cross-unit project access)

– If a key user is also a member of other roles, he receives all rights of these roles. (Cross-unit function access)

(b) Cross-unit visibility for subunits

If a project is created under a free role under a unit, e. g. Germany, project access is restricted to all members of this free role. The project is visible to these members in GENIUS TOOLS Starter App if they select the unit Germany and any of its subunits – here: Berlin, Hamburg, Leipzig.

This variant is useful if the higher-level unit contains more users than the free role, e. g. if the unit Germany contains all German-speaking users, including Swiss users. (If all users in Germany are already defined in the unit Germany , the project should be arranged directly under the Germany unit, as in the example under View users rights).

Example: Making work guidelines visible to users in Germany and Switzerland with free roles

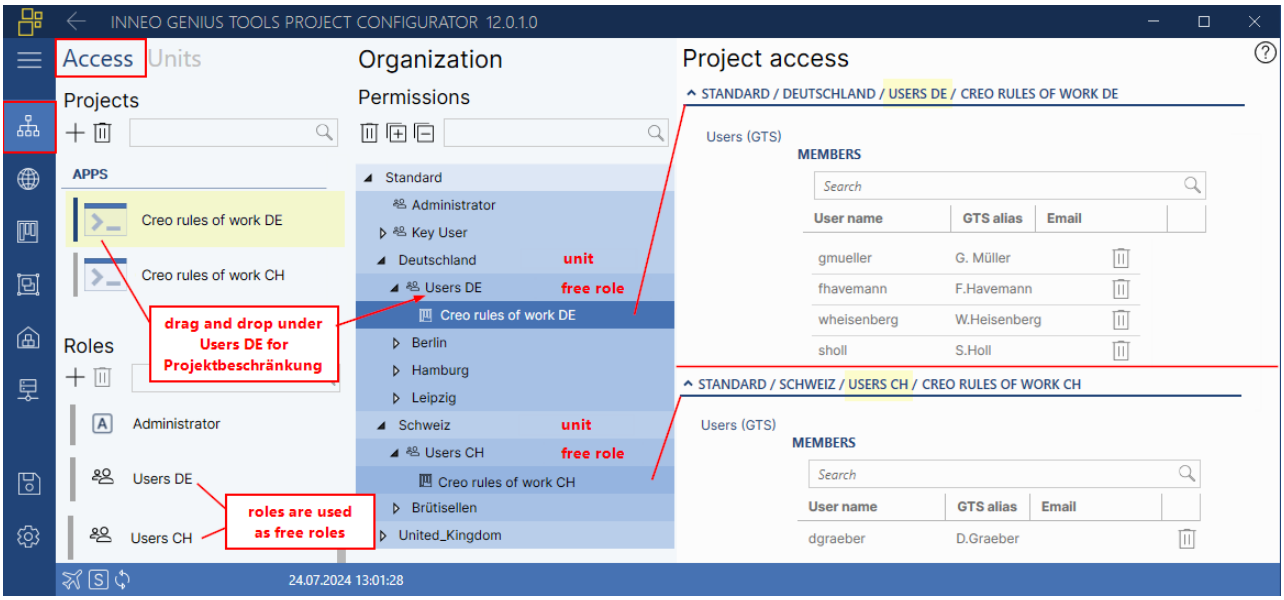
This variant is useful if the superordinate unit contains more users than the free role, e. g. if the unit Germany (Deutschland) contains all German-speaking users, including Swiss users. (If all users in Germany are already defined in the unit Germany, the project should be subordinated directly to the unit Germany, as in the example in Unit-specific visibility).

The company ABC wants to make work guidelines with German legal requirements visible to all users in Germany and work guidelines with Swiss legal requirements visible to all

© 2025 INNEO Solutions GmbH

users in Switzerland. There are no units which separately map the users in Germany and Switzerland.

1. Create free role: Users-DE
2. Assign user to the role: Gerd Müller, Fabian Havemann etc.
3. Tab Function Access: Optional
4. Add the role to the permissions tree: Drag and drop *Users-DE* under the unit Deutschland
5. Create project: Creo rules of work DE
6. Select project for access restriction: Creo rules of work DE
7. Add project to the permissions tree: Drag *Creo rules of work DE* under the free role *Users-DE*
8. Repeat steps 1-8 with the role “Users-CH” and the corresponding user entries and the project “Creo rules of work CH”.



Result:

– Members of the role *Users-DE* have access to the project *Creo roles of work DE* if they select the unit Germany and any of its subunits in GENIUS TOOLS Starter App. (Project access across subunits)

– Members of the role *Users-CH* have access to the project *Creo roles of work CH* if they select the unit Switzerland and any of its subunits in GENIUS TOOLS Starter App. (Project access across subunits)

© 2025 INNEO Solutions GmbH

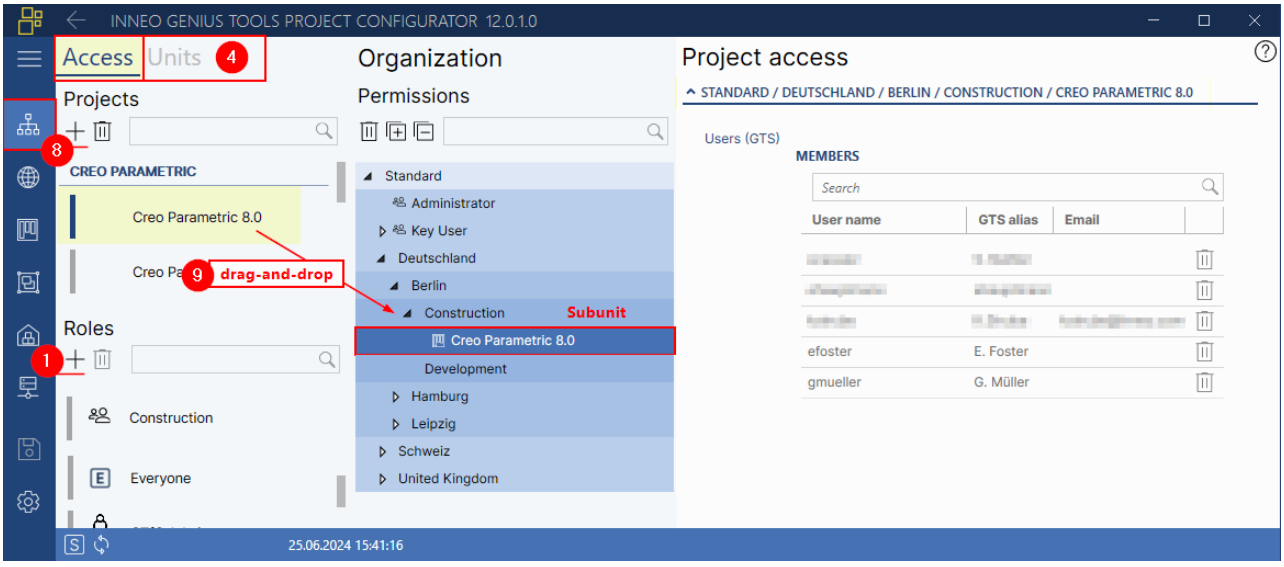
5.7.2 Unit-specific visibility

As of version 11.0.0.0, it is not only possible to restrict access to a project to certain users (roles), but also to restrict the visibility of a project to users of a certain unit. This is useful when users are assigned to multiple units.

Please note: For unit-specific visibility of a project you have to use roles that are assigned to a unit.

Use case: Enable designers in Berlin to access the project
The company ABC wants Creo Parametric version 8.0 to be used only by designers in Berlin, as this version is needed for a specific customer project. The designers in Berlin should not see the project if they select another unit in the GENIUS TOOLS Starter App that they are also a member of.

1. Create role: Construction
2. Assign user to role: Eric Foster, Gerd Müller etc.
3. Tab Function Access: Optional
4. Create unit: Construction
5. Assign role to unit: Assign the role *Construction* to the unit *Construction*
6. Add unit to the organizational tree: Drag and drop Unit *Construction* under the unit *Berlin*
7. Create project: Creo Parametric 8.0
8. Select project for access restriction: Creo Parametric 8.0
9. Add project to the permissions tree: Drag *Creo Parametric 8.0* under the *Construction* unit



© 2025 INNEO Solutions GmbH

Result:

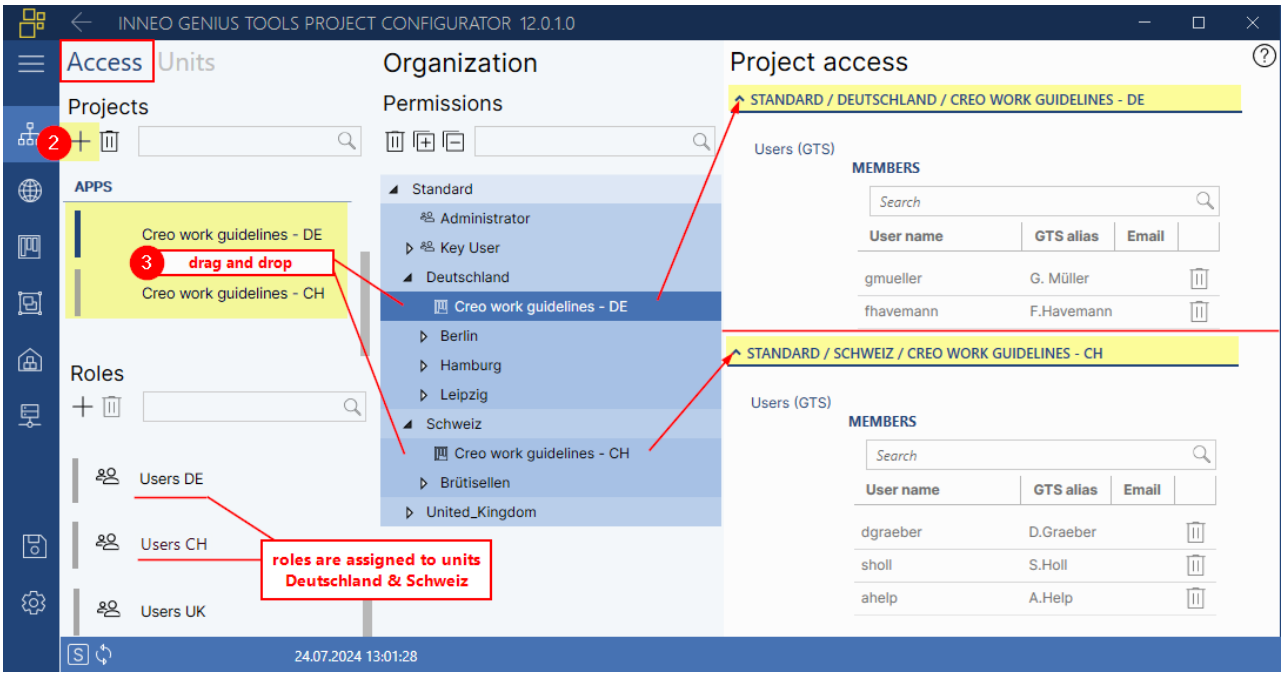
– Members of the Construction unit (role: Construction) have access to the Creo Parametric 8.0 project

– If a member of this unit is also a member of other roles,
  – he receives all rights of these roles. (cross-unit function access)
  – he can only see the Creo Parametric 8.0 project in GENIUS TOOLS Starter App if he selects the Construction subunit from the Berlin unit. (Unit-specific project access)

Use case: Making work guidelines visible in Germany and Switzerland with assigned roles

The company ABC intends to make work guidelines with German legal requirements visible to all users in Germany and work guidelines with Swiss legal requirements visible to all users in Switzerland. The Germany unit includes all users in Germany (role: Users-DE) and the Switzerland unit includes all users in Switzerland (role: Users-CH).

1. Create project: Creo work guidelines DE
2. Select project for access restriction: Creo work guidelines DE
3. Add project to the permissions tree: Drag *Creo work* guidelines *DE* under *Users* DE
4. Repeat steps 1-8 with the role "User-CH" and the corresponding user entries and the project "Creo work guidelines CH".



Result:

– Members of the unit Germany (*Users-DE* role) have access to the Creo work guidelines DE project.
  The project is visible in GENIUS TOOLS Starter App if the Germany unit and any of its subunit is selected. (Unit-specific project access)

© 2025 INNEO Solutions GmbH

– Members of the unit Switzerland (*Users-CH* role) have access to the Creo work guidelines CH project.
The project is visible in the GENIUS TOOLS Starter App if the unit Switzerland and any of its subunits is selected. (Unit-specific project access)

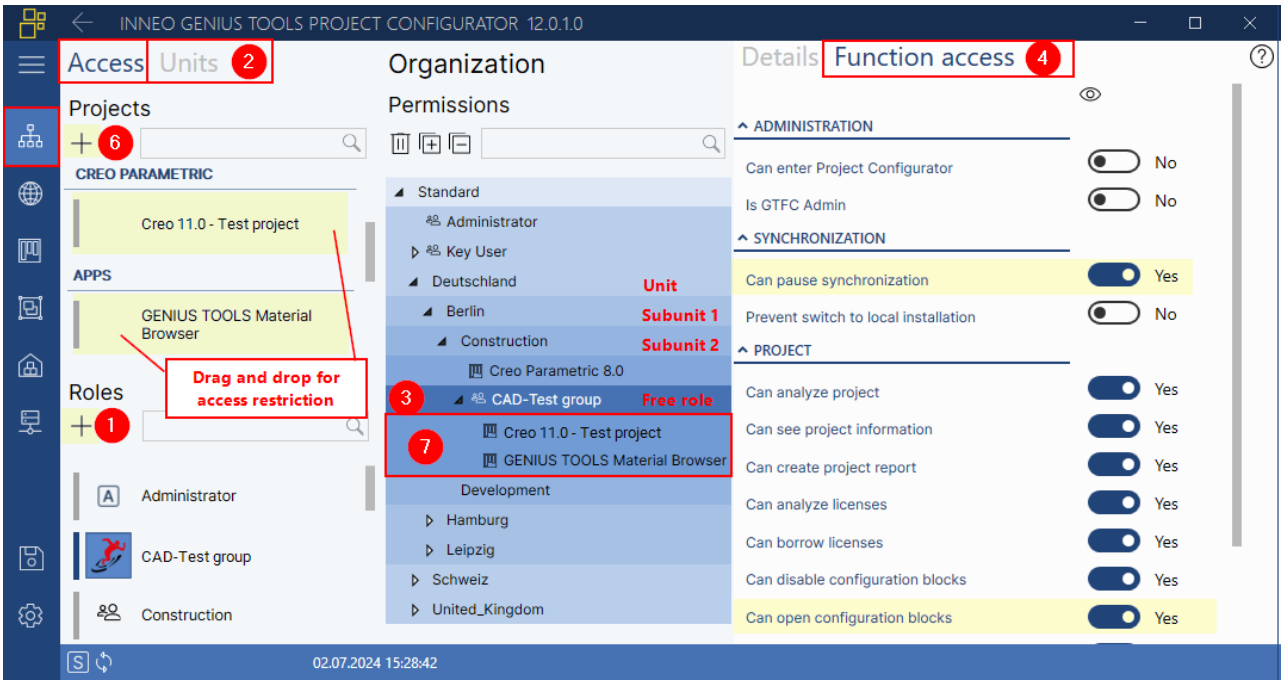
5.7.3 Divided unit-specific visibility

With the 11.0.0.0 option to restrict the visibility of a project to the users of a specific unit, a project can also be restricted to the members of a free role within a unit. For example, a specific group of people can be given access to a test project within a specific unit.

Use case: Enable project access for test group within unit designers in Berlin
The company ABC would like to set up a test group of designers to test an update of the Startup TOOLS data packages for Creo Parametric 11.0. To do this, they also need access to GENIUS TOOLS Material Browser. The testers should be able to pause the synchronization and open configuration blocks. The test project should only be available to the testers from Unit Construction in Berlin.

1. Create free role: CAD-Testgruppe
2. Assign user to role: Anna Help, David Graeber etc.
3. Add role to the permissions tree: Drag *CAD-Test group* into the *Construction* unit
4. Tab Function access: *Can pause synchronization*, *Can open configuration blocks* set to Yes
5. Create project: Creo 11.0 - Test project and GENIUS TOOLS Material Browser
6. Select project for access restriction: Creo 11.0 - Test project and GENIUS TOOLS Material Browser
7. Add project to the permissions tree: Drag *Creo 11.0 - Test project* into the *CAD-Test group* role, drag *GENIUS TOOLS Material Browser* into the *CAD-Test group* role

© 2025 INNEO Solutions GmbH



Result:

– Members of the CAD-Test group role have the rights listed above.
– Members of the CAD test group role have access to the Creo 11.0 Test project if they select the Construction subunit from the Berlin unit in the GENIUS TOOLS Starter App.
– All other members of the Construction subunit in Berlin cannot see the test project. (Divided unit-specific project access)

5.7.4 Project access - overview

This table shows the display in GENIUS TOOLS Starter App of access-restricted projects when a user is a member of several roles.

Use case: The user Anna Help is member of the free roles Key User and Test Group and member of the units (and assigned roles) Germany, Construction and Development.

The following projects are displayed after selecting:

(a) Unit Construction at the location Germany > Berlin

(b) Unit Development at the location Germany > Berlin

© 2025 INNEO Solutions GmbH

User A. Help	Project access			
	crossunit (free role)	**unitspecific (assigned roles)**		**divided, unit-specific (free role)**
	Model Processor 11.0	Creo-Work Guidelines	Creo Parametric 8.0	Creo 11.0 - Test project
Membership in:				
Role Key User[1] free role under Standard	X	–	–	–
Role Users-DE[2] assigned to unit Germany	–	X	–	–
Role Construction[3] assigned to unit Construction	–	–	X	–
Role Test Group[4] free role under unit Construction	–	–	–	X
Role Development assigned to unit Development	–	–	–	–
Selection in GENIUS TOOLS Starter::				
(a) Unit: Germany > Berlin > Construction	X	X	X	X
(b) Unit: Germany > Berlin > Development	X	X	–	–

[1] This example is described in Enable all key users to access the project.
[2] This example is described in Work guidelines DE.
[3] This example is described in Enable project access for test group within unit Designers in Berlin.

© 2025 INNEO Solutions GmbH

[4] This example is described in Enable designers in Berlin to access the project.

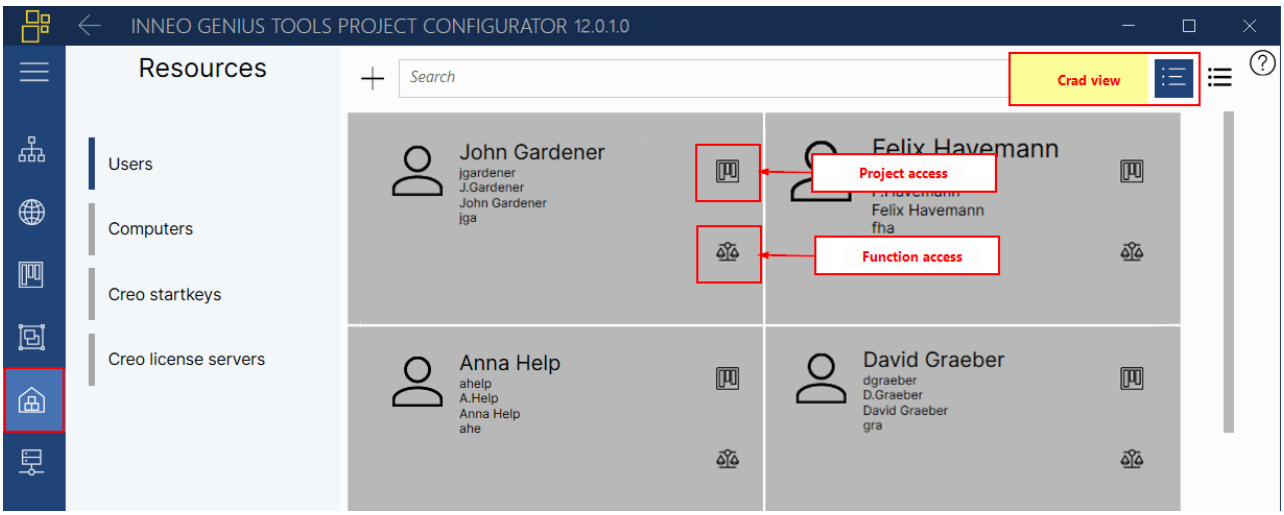
5.8 View users rights

The role-based authorization concept of GENIUS TOOLS Starter allows different user groups to be granted or denied different access rights. User groups are defined as roles.

You can assign access rights for individual projects to the members of a role and grant rights for certain functions in GENIUS TOOLS Starter App and GENIUS TOOLS for Creo – see chapters Kapitel Restricting project access *a*nd Granting function access rights.

Please note: Project access rights are always defined for the members of a role. The role can be assigned to a unit or be used as a free role in the permissions tree.

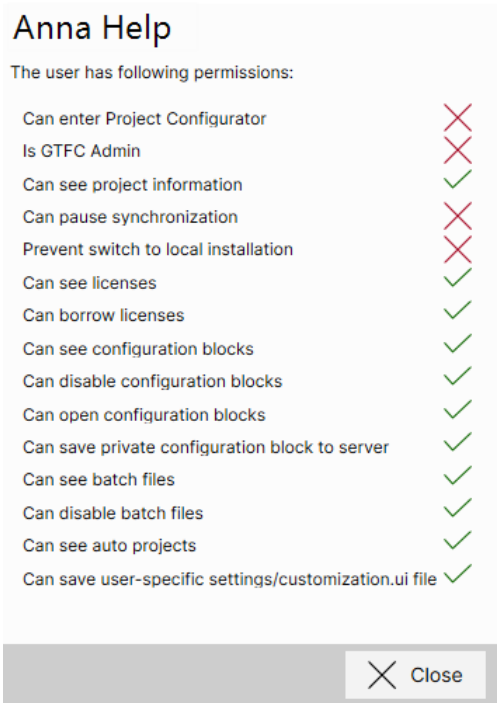
In the main menu item *Resources* , you can view the access rights for individual users in the card view.



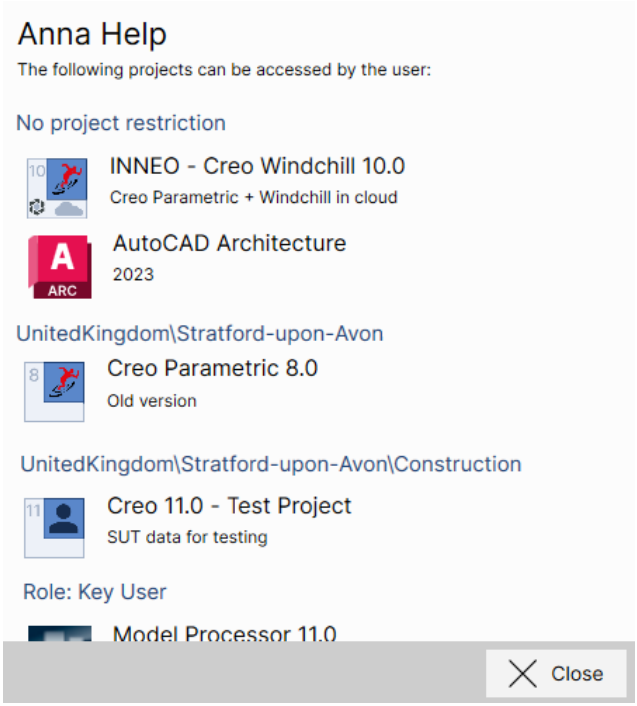
User entries in the card view

Clicking on the icons Function access and Project access opens the following windows.

© 2025 INNEO Solutions GmbH



Access rights for user Anna Help



List of projects that the user Anna Help sees.

The **Function access rights** result from all roles in which the user is a member.

Please note: Function access rights are always cross-unit: If a user has different rights in different roles, the granted access applies regardless of which unit is selected in GENIUS TOOLS Starter App. See chapter Granting function access rights.

Project access rights can be cross-unit or unit-specific, i. e. it is possible that a user does not see an access-restricted project in all units with which she logs into GENIUS TOOLS Starter App. Please refer to the tabular overview in chapter Restrict project access.

5.9 Resources

The following resources are managed in the main menu item *Resources*:

Static Entries for

1. user and
2. computers

For Creo Parametric projects,

3. Creo startkeys and
4. Creo license servers can be created.

Units and roles are not considered resources and are created in the menu item *Organization*.

© 2025 INNEO Solutions GmbH

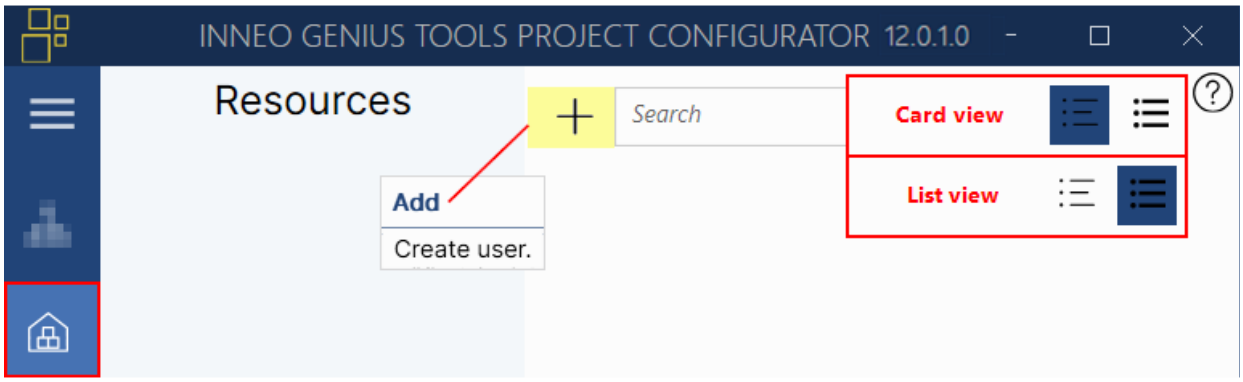
5.9.1 Creating users

In the main menu *Resources* page , static user entries are created and managed. You can enter static user entries manually or import existing entries.

Static entries do not change automatically as dynamic user entries do. Changes to static entries must be made manually for each entry in GENIUS TOOLS Project Configurator.

Hint: We recommend that you decide whether you will work with static or dynamic user entries before creating users, as mixing both types of entries greatly reduces the clarity in GENIUS TOOLS Starter.

You can switch between the card view (default) and the list view with the icons to the right of the search window.



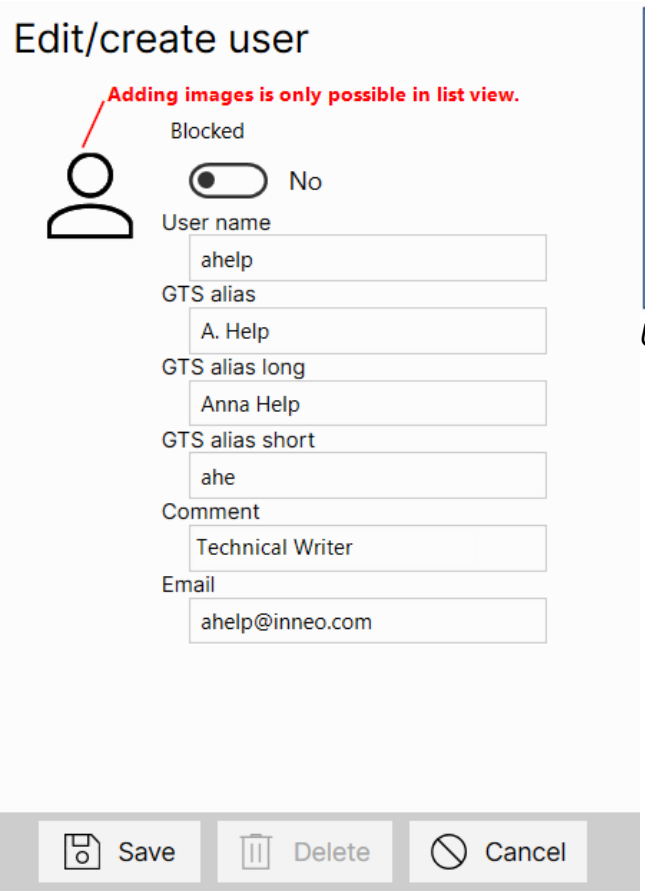
The resource "User" can be displayed in two views

GENIUS TOOLS Project Configurator saves the last used view. User photos can only be edited in the list view.

Adding static users manually

Static users are identified by their Windows user names. If you are not working with Windows users as an authentication method, work with dynamic users.
To create a static user entry, click the Add icon (+) in the upper left corner. A new window will open. Alternatively, you can write entries into a new row in the list view, see Editing users in the section below.

© 2025 INNEO Solutions GmbH



Dialog for adding users

User card in GENIUS TOOLS Starter App

Creating users with regular expressions

User as well as computer names can be specified either directly (so that only the corresponding user is legitimized) or with regular expressions (a group of users is legitimized by a definition). When using regular expressions in the fields *Windows user* and *computer name* the entries are extended by ^ and $, i. e. to ^*INPUT*$. Longer user names can thus be legitimized by shorter and partial spellings, e. g. *efoster* legitimizes both *efoster* and *ethanfoster*. Find a list of regular expressions in the appendix.

Importing existing users

You can import existing entries of Windows users with an Excel list. If you have switched authentication to a system other than Windows (e. g. Windchill), the Import function, which allows you to import users via the authentication provider, appears to the right of the Plus icon. See Importing users with authentication provider.

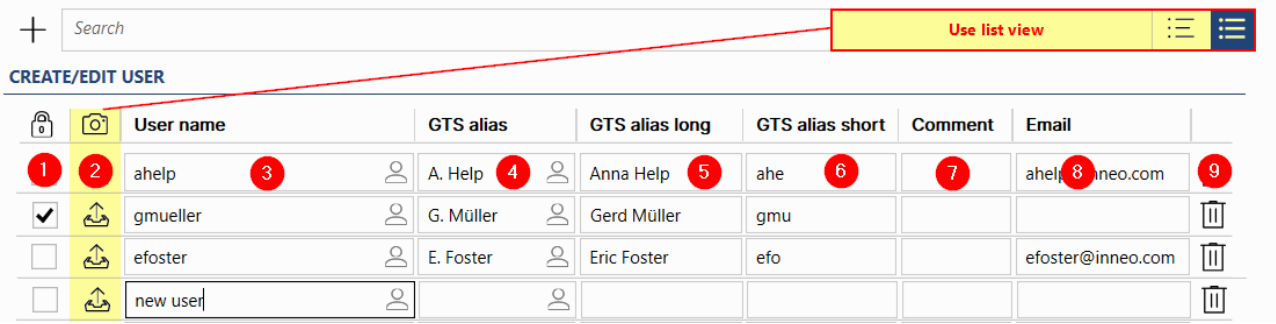
Searching for users

To find existing users, enter a search term in the search input field with at least three characters.

© 2025 INNEO Solutions GmbH

▶ Editing users

To edit a user, double-click on a visiting card or use the list view if you wish to make several changes. You need to use the list view for assigning a user image.



List view

Blocked (1)
You can block a user, which means that unit settings or role assignment will not be applied.

Yes/set: Settings or role assignment for this user will not be considered.
No/not set: Settings and role assignment will be used.

Camera (2)
List view: Double-click on the *Upload* icon to add a photo in PNG or JPEG format to the user profile.

User name (3)
Enter the user name. If you are in the list view, you can get the user name for the currently logged-in user by clicking on the person icon. Instead of entering a user name you can also use regular expressions. See Section below.

GTS alias (4)
Enter a GTS (GENIUS TOOLS Starter) alias for the user, for use in additional Creo applications. For example, the GTS alias is used in GENIUS TOOLS Parameter. If you do not specify an alias, the Windows user name will be set. If you are in the list view, you can get the Windows user name for the currently logged-in user by clicking on the person icon in the *Windows user* column. The GTS alias is available as an environment variable `%GTS_USER%` in Creo.

GTS alias long (5)
Long user alias. The long alias is available in Creo via the environment variable `%GTS_USERLONG%`.

GTS alias short (6)
Short user alias. The short alias is available in Creo via the environment variable `%GTS_USERSHORT%`.

Comment (7)
Enter an optional comment. It is available in Creo via the environment variable `%GTS_USER_COMMENT%`.

© 2025 INNEO Solutions GmbH

Email (8)
Enter the user e-mail address. It is available in Creo via the environment variable `%GTS_USER_EMAIL%`.

Delete (9)
Clicking the recycle bin icon deletes the user entry.

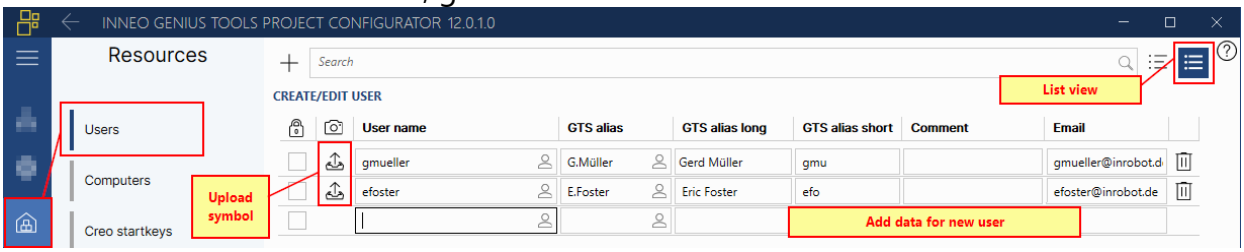
Viewing user rights

You can view the projects accessible to a user and the functions granted in GENIUS TOOLS Starter App in the map view, see chapter View users rights.

5.9.1.1 Action: Create user entry with image

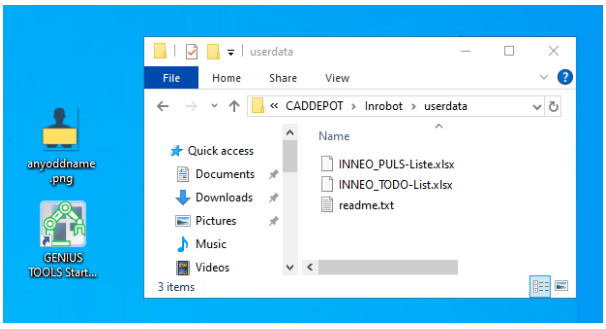
Prerequisite:
You have an image in JPEG, PNG, SVG or GIF format. The storage location can be any. The name of the image file is automatically changed to the user name when it is uploaded.
Procedure for the new user entry "Anna Help - ahelp":

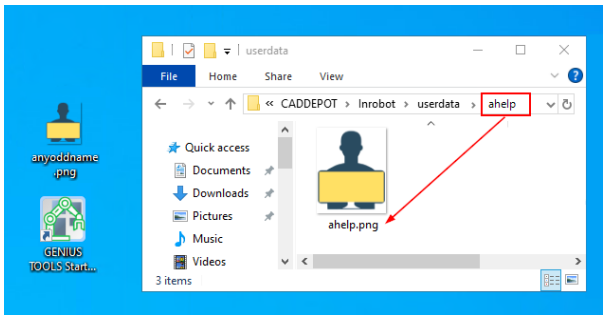
1. In the menu item *Resources*, go to the list view.



2. Enter the user name in the bottom free line. If you are not working with an alternative authentication method, this is the Windows user name: ahelp
   The upload icon appears in the second column.

3. Click on the icon and select the existing image.
   By uploading the image file, a folder with the user name is automatically created under *userdata* and the uploaded image is automatically provided with the user name if a different file name was available.
   <working environment name>\userdata\%USERNAME%\%USERNAME%.png

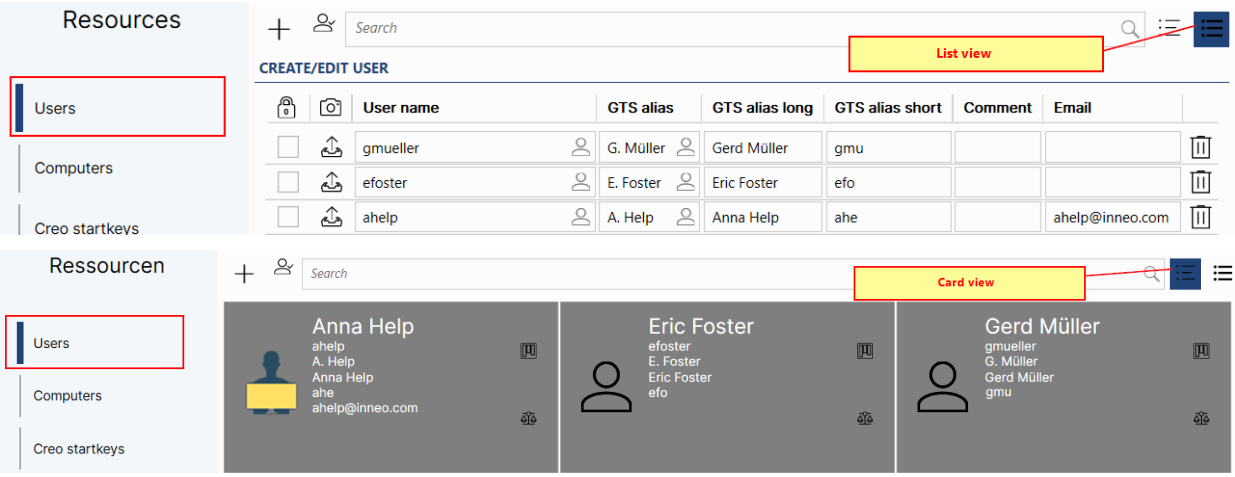




4. Enter the GTS alias: A. Help
   The alias is available as the environment variable `%GTS_USER%`.

© 2025 INNEO Solutions GmbH

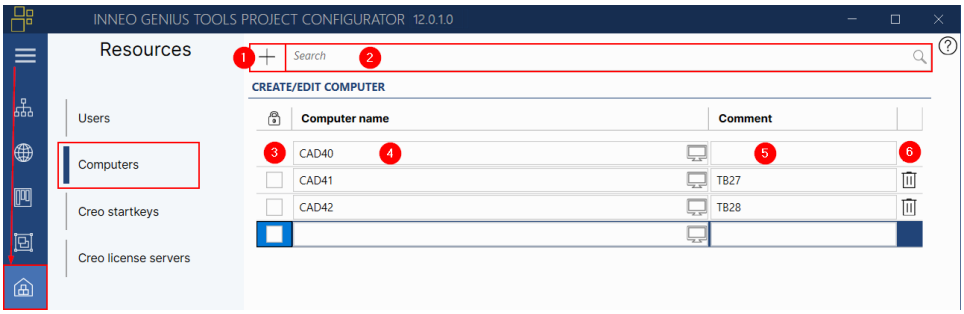
5. Enter the GTS alias long if your company has assigned it: Anna Help
   The long alias is available as the environment variable `%GTS_USERLONG%`.
6. Enter the GTS alias short: ahe
   The short alias is available as the environment variable `%GTS_USERSHORT%`.



7. Save the changes with in the sidebar.
   The changes are saved in the *sut.db* database, which is located in the caddepot.

5.9.2 Creating computers

Computers are created and managed as permanent entries in the *Resources* page under *Computers*. Each computer is identified by its Windows computer name.



▶ Adding computers

To add new computers, click on the Add symbol (1) or write in the last input field of the list.

▶ Searching computers

To find existing computers, enter a search term in the search input field (2).

▶ Editing computers

Blocked (3)
You can block a computer, which means that unit settings or role assignment will not be

© 2025 INNEO Solutions GmbH

used.

Yes/set: Settings or role assignment for this computer will not be considered.

No/not set: Settings and role assignment will be used.

Computer name (4)

Enter the Windows computer name. You can get the Windows user name for the current computer by clicking on the computer icon in the *Computer name* column. Instead of entering a user name you can also use regular expressions. See section in Creating users.

Comment (6)

Enter an optional comment on the computer.

Delete (7)

Click the recycle bin icon to the right of the *Comment* column to delete a computer.

5.9.3 Importing users and computers from Excel

GENIUS TOOLS Starter comes with an XML interface to import a large number of users into the GENIUS TOOLS Starter database in one step.

Follow the procedure described below to import users or computers. This will create static entries.

Static entries do not change automatically as dynamic user entries do. Changes to static entries must be made manually for each entry in GENIUS TOOLS Project Configurator.

Format of the Excel table for importing users or computer

The directory *caddepot\serveronly\tools\XML-Import* contains two Excel tables – *computer.xls* and *user.xls* – that serve as templates for creating XML files for import into the GENIUS TOOLS Starter database.

	A	B	C	D
1	USERNAME	ALIAS	DESCRIPTION	ROLES
2	meier	Meier	Bielefeld	Entwicklung;Key User
3	mueller	Mueller	Ellwangen	Administrator
4	schulze	Schultze	Leipzig	Entwicklung;Key User
5				

Excel table for importing users and assigning them to one or more roles

Please note: A role that does not yet exist will be created on import.

Requirements:

– The first line in the Excel table is the header line. The header line must not be removed and has to be formatted in all capital letters.

– Enter the name of the computer or user in the first column.

– You can use the following columns:

© 2025 INNEO Solutions GmbH

For users:	For computer:
USERNAME (mandatory)	COMPUTERNAME (mandatory)
DESCRIPTION	DESCRIPTION
ROLES	ROLES
ALIAS	
ALIASLONG	
ALIASSHORT	
EMAIL	

– For roles, you can enter multiple entries, separated by semicolons.

Creating an XML file from the Excel table

After filling in the Excel table, export it from Excel as CSV (comma-separated value) file.

Beispiel: Content of a CSV file with a user list:

```
USERNAME;DESCRIPTION;ROLE
ahelp;Leipzig;"Users DE;Key User"
efoster;Edinburgh;"Users UK;Key User"
jturner;Edinburgh;Users UK
sholl;Berlin;Users DE
mweber;Berlin;"Users DE;Key User;GTFC Admin"
```

Please note: The separator character used by Excel depends on your locale. GENIUS TOOLS Starter supports comma or semicolon as the separator character. You cannot use either commas or semicolons in the contents of the columns! Please also refer to Changing the separator for XML conversion.

The directory *caddepot\serveronly\tools\XML-Import* contains two batch scripts for converting the CSV files into the XML import format. Use *computer.bat* for converting computer lists and *user.bat* for converting user lists. The CSV file has to be called *computer.csv* or *user.csv* and be located in the same directory as the batch script. When you run the batch script, the XML import file will be written out as *computer.xml* or *user.xml* in the same directory.

The XML files created by the batch scripts can now be imported into GENIUS TOOLS Project Configurator. Open Project Configurator, go to the user menu and select *XML import*. Select an XML import file. You will be asked whether you want to delete existing users or computers. Make your decision. Confirm the import with *Yes*.

The imported users and computers are now available on the Resources page under Users or Computers. If the import has created one or more roles, these will be displayed on the Organization page in the *Access* tab under *Roles*.

© 2025 INNEO Solutions GmbH

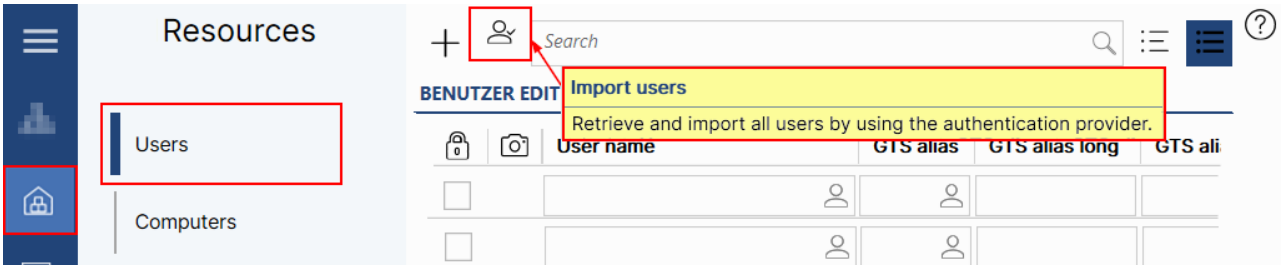
Changing the separator for XML conversion

The separator character used by Excel for CSV export depends on your locale. You can define the separator character in the batch scripts for CSV-to-XML conversion (*computer.bat* or *user.bat*) as follows. Comma and semicolon are supported as separator characters (sep) by default.

```
csv2xml -v -s:computer.csv -t:computer.xml -sep:;,
-m:1 -xsl:./extend/mode1-stylesheet.xsl
-alias:eRoot=ROOT,eRecord=RECORD >>result.log
```

5.9.4 Importing users with authentication provider

For importing users who need to authenticate themselves, e. g. Windchill users, the Import function is available. The button appears when switching to another authentication system than Windows in the unit settings.



For Windchill, all users are imported from the defined Windchill server and the following information is taken:

"Name" > Username / GTS Alias
"FullName" > GTS Alias Long
"AlternateUserName1" > GTS Alias Short
"Email" > Email

If you want to use other authentication systems you have to create a customized provider, see chapter Creating your own authentication provider.

5.9.5 Creo startkeys

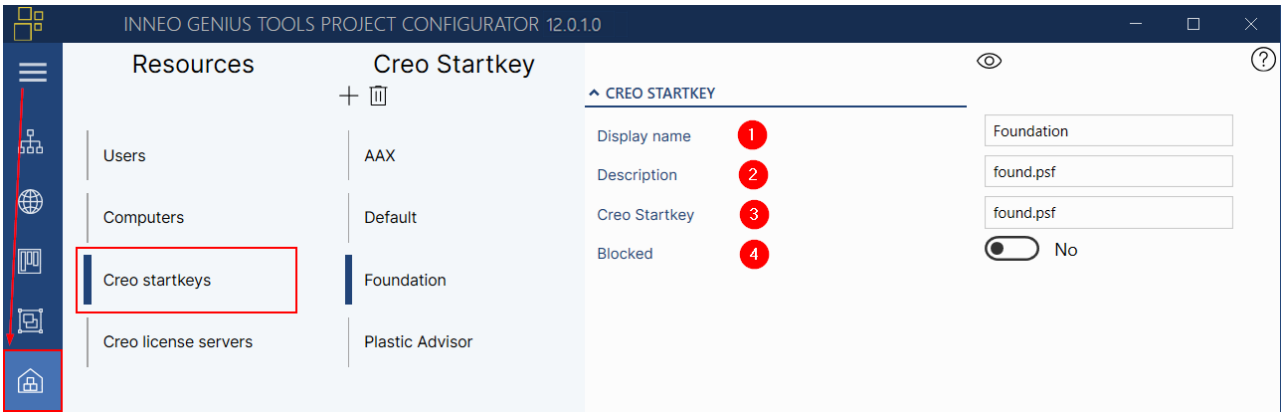
A startkey is a configured start command that opens Creo with one or several defined licenses or license extensions. Startkeys are created in PTC's installation assistant when setting up or reconfiguring Creo, see Creo startkeys (PSF keys).

An administrator can provide user with a choice of several Creo startkeys per project so that the quantity of projects can be minimized.

© 2025 INNEO Solutions GmbH

Warning: Using Creo startkeys as a resource is a new feature in GENIUS TOOLS Starter from version 6.0.1, which means that you need a subscription license to use it. Once you have configured startkeys in this section, you cannot go back to using perpetual licenses. See also License-dependent features.

In the main menu item *Resources* enter a display name and a comment for a Creo startkey which users view in GENIUS TOOLS Starter App.



Managing Creo startkeys in main menu Resources

If several start keys have been created, users can select a key when starting a project in GENIUS TOOLS Starter App. The order of the start keys in the user selection field is that of the order in the dialog window and can be changed by using drag-and-drop.

Display name (1)
Enter a name for the license key for display in GENIUS TOOLS Starter App.

Comment (2)
Enter a comment for the license key for display in GENIUS TOOLS Starter App.

Creo startkey (3)
Enter the name of the license key. This is the name of the PSF file in the bin directory of PTC (e. g. *parametric.psf*).

Blocked (4)
Yes: The Startkey can neither be used nor selected by users.
No: The Startkey can be either directly used or selected by users in GENIUS TOOLS Starter App.

Startkeys can now be

– directly assigned to a project (see chapter Assigning Creo licenses to projects),

– assigned to units and subunits which have access rights to particular projects and/or

– entered as a global standard (see Configuring global environments > Creo settings).

© 2025 INNEO Solutions GmbH

5.9.6 Creo license servers

In the main menu *Resources* you can group one or several Creo license servers into one resource and then assign this resource *Creo License Server* to a project or unit.

▶ Creo license servers

Display name (1)
Enter the name for display of the Creo license server(s).

Comment (2)
Enter an optional comment for the Creo license server.

Creo license server (3)
Enter one or more license servers in the notation `Port@Servername` (e.g. `7788@<licenseservername>`). Separate a series of license servers with semicolons.

Blocked (4)
Yes: The Creo license server cannot be accessed.

Warning: If you block the Creo license server here, the information from the Creo startkey (PSF file) will be used. Check whether these information are correct.

No: The Creo license server can be used.
The Creo license server(s) can now be assigned:

– directly to a project in *Projects* > *Tab: Creo* > *Section: Creo license server* (See chapter Settings for Creo projects)

– to units and subunits, which in turn can be granted access to specific projects (See chapter Settings for Creo projects)

– to the global settings in *Configuration* > *Creo settings* > *Tab: Application* > *Section: Creo license server* (See chapter Application)

5.10 Global settings: Standard

The next sections explain the potential of configuration options for Starter projects. The first step is to create the general, global configuration that is required for each system, the so-called standard configuration. In the next step, deviations from the basic configuration are made in units and subunits, see chapter Configuring heterogeneous environments.

The unit *Standard* is pre-installed for the global configuration of the system.

Please note: The group *Standard* contains the system-wide configuration settings and is preinstalled. No members can be assigned to it.

Settings are made in input fields and inherited, see Inheritance of the settings.

© 2025 INNEO Solutions GmbH

If you do not specify anything in the drop-down menus, the default settings of GENIUS TOOLS Starter apply. These are "No".

You can make the following settings:

– GENIUS TOOLS Starter App

– Additional Environmental Settings

– Synchronization

– GENIUS TOOLS License Manager

– Network Connections

– Creo Parametric

– Creo Elements/Direct Modeling

– SolidWorks

– Inventor

– Windchill Settings

Since these settings can be configured separately for all units, the input fields are explained in the chapter unit settings.

5.10.1 Authentication

By default, GENIUS TOOLS Starter uses the Windows user name, i. e. there is no separate login process.

However, administrators can specify that users log in with other user credentials, e. g. as a Windchill user or as a user of an ERP system such as SAP. This makes it possible to connect Starter projects to existing authorization groups of other systems. In this case, a login dialog appears when opening GENIUS TOOLS Starter App and GENIUS TOOLS Project Configurator.

Please note: Integrating an alternative authentication system with GENIUS TOOLS Starter requires a subscription license.

Authentication is always global, i. e. can only be set in the group *Standard*.

In the menu item *Configuration* , go to the settings for GENIUS TOOLS Starter App to change the authentication system. For Windchill, the required Authentication providers are supplied. How to proceed and how to create an authentication provider for other systems, is explained in the following chapters.

Changing the authentication method restarts GENIUS TOOLS Starter App.

© 2025 INNEO Solutions GmbH

Switching from Windows user credentials to other authentication methods

The user who changes the authentication provider is automatically saved as administrator, i. e. becomes a member of the Administrator role. For this purpose, the new credentials are requested before it is possible to save the database.

The query of the login credentials fails in the following cases:

1. The user name and / or the password are wrong.
   – An error message appears.
2. You are offline / user name and password are correct and were used during the last login.
   – A message appears that you are offline.
3. There is no EXE file in the *auth_provider* directory or it does not have a valid signature.
   – GENIUS TOOLS Project Configurator and GENIUS TOOLS Starter App are closed.

Note that it is possible to save a new authentication method even without successfully entering the credentials, namely by confirming the error message. If you want to make use of this possibility, e. g. because you access GENIUS TOOLS Project Configurator externally, make sure that you enter correct credentials and check the role assignments and function accesses.

Warning: If incorrect credentials are saved for the new authentication method, you may not be able to re-enter GENIUS TOOLS Project Configurator.

To avoid being permanently locked out of GENIUS TOOLS Project Configurator, you can manually add your alternative authentication system user name or assign "Everyone" to the Administration role.

Restoring authentication with Windows

If you have locked yourself out of GENIUS TOOLS Project Configurator when switching to an alternative authentication system, you can use the last used database *sut_*.db* in Caddepot under *<OperatingEnvironment>\configuration\database\BackupDefaultAuth* to restore the operating environment.

5.10.1.1 Authentication provider

An authentication provider is an executable file that requests or receives user data from an authentication system.

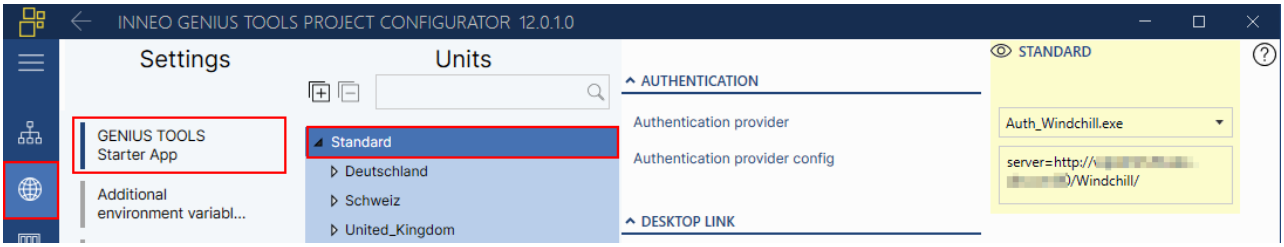
Any executable file in the *auth_provider* system folder is recognized as an authentication provider.

© 2025 INNEO Solutions GmbH

GENIUS TOOLS Starter addresses the authentication provider during the following operations::

1. To authenticate login credentials when starting GENIUS TOOLS Starter App and GENIUS TOOLS Project Configurator.
2. When querying static user entries.
3. When querying dynamic user entries from user groups.

In the menu item *Configuration* > GENIUS TOOLS Starter App the authentication provider is defined. For Windchill, two providers are supplied: *Auth_Windchill.exe* and *Auth_Windchill_SSO.exe*, see chapter Authentication for Windchill users.



Setting Windchill as authentication system in the Standard unit

If you use one of the supplied authentication provider for Windchill (*Auth_Windchill.exe*, *Auth_Windchill_SSO.exe*), the Windchill server must be entered in this field in the notation `server=<Windchill-Server-URL>`.
GENIUS TOOLS Starter automatically writes a configuration file named *<AuthenticationproviderName>.cfg* in the directory *auth_provider*. The content is the text of the field *Authentication provider config* in the *Authentication* section.
If you create your own authentication provider, you can enter additional information in this field, see next chapter.

5.10.1.2 Creating your own authentication provider

If users are to authenticate against a system other than Windows or Windchill, a separate provider must be created. This can be selected in GENIUS TOOLS Project Configurator under *GENIUS TOOLS Starter App* > *Authentication*.

An authentication provider is

– an executable file,

– which is signed and

– stored in the system folder *auth_provider*.

To create your own authentication provider, you need the following information for output and input.

© 2025 INNEO Solutions GmbH

Input

GENIUS TOOLS Starter passes the following information to the authentication provider:

– username (from the login credentials)

– password (from the login credentials)

– path to the config file *<AuthenticationproviderName>.cfg* (see *Authentication provider config*)

– transfer parameter -users (passed only when querying users)

– transfer parameter -groups (passed only when querying user groups)

Output

GENIUS TOOLS Starter expects the following output from the authentication provider:

For login
The output of the login result (point 1) must be done. All other output is optional.

1. Login result

   1 – successful
   0 – not successful (e. g. password and / or username wrong)
   2 – special case: not successful, system is unavailable

2. Current user as JSON object with the following structure:

   {"AlternateUserName1":"<GTS Alias Short>","Email":"<Email>","FullName":"<GTS Alias Long>","Id":"<Id>","Name":"<username>"}

3. Result of the group query for the current user

   1 – successful
   0 – not successful (e. g. password and / or username wrong)
   2 – special case: not successful, system is unavailable

4. List of groups for the current user as a JSON object with the following structure:

   [{"Description":"Description of the group","Id":"Group Id","Name":"Group name"},
   {"Description":"Description of the group","Id":"Group Id","Name":"Group name"},
   ...]

User query
A user query in the GENIUS TOOLS Project Configurator imports users and creates static entries.

Hint: We recommend that you decide whether you will work with static or dynamic user entries before creating users, as mixing both types of entries greatly reduces the clarity in GENIUS TOOLS Starter.

© 2025 INNEO Solutions GmbH

1. Result of the user query

   1 – successful
   0 – not successful (e. g. password and / or username wrong
   2 – special case: not successful, system is unavailable

2. List of all users as JSON object with the following structure:

   [{"AlternateUserName1":"<GTS Alias Short>","Email":"<Email>","FullName":"<GTS Alias Long>","Id":"<Id>","Name":"<Username>"},
   {"AlternateUserName1":"<GTS Alias Short>","Email":"<Email>","FullName":"<GTS Alias Long>","Id":"<Id>","Name":"<Username>"},
   ...]

User group query
A user group query imports user groups with their associated users and creates dynamic user entries.

1. Result of the user group query

   1 – successful
   0 – not successful (e. g. password and / or username wrong
   2 – special case: not successful, system is unavailable

2. The user group output must consist of the following two lines per user group:

   – Line 1: User group as JSON object with the following structure::

   {"Description":"Description of the group","Id":"Group Id","Name":"Group name"}

   – Line 2: A list of all users in the user group as JSON object with the following structure:

   [{"AlternateUserName1":"<GTS Alias Short>","Email":"<Email>","FullName":"<GTS Alias Long>","Id":"<Id>","Name":"<User name>"},
   {"AlternateUserName1":"<GTS AliasShort>","Email":"<Email>","FullName":"<GTS Alias Long>","Id":"<Id>","Name":"<User name>"},
   ...]

   In this way, all user groups must be output with their corresponding users.

5.10.1.3 Authentication for Windchill users

If you want to authenticate Windchill user data, this can be done either directly by a Windchill server or by a Windchill server with SSO (single sign-on) setup. The authentication providers (EXE files) required for this are supplied:

– *Auth_Windchill.exe*: Web authentication with BasicAuth (REST API)

– *Auth_Windchill_SSO.exe:* Web authentication is carried out via an SSO server

© 2025 INNEO Solutions GmbH

Authentication for Windchill users without SSO

To change the standard authentication with Windows to Windchill user data, follow this sequence of necessary steps.

Procedure:

1. Change global settings in the menu item *Configuration* > *GENIUS TOOLS Starter App* > *Authentication*.
   - In the drop-down menu, select: *Auth_Windchill.exe*
   - In the field *Authentication provider config*, enter the Windchill server using the notation: `server=<Windchill-Server-URL>`
2. Import users
   - Decide whether you are working with static or dynamic user entries.

Static entries do not change automatically as dynamic user entries do. Changes to static entries must be made manually for each entry in GENIUS TOOLS Project Configurator.

Dynamic user entries adopt changes from the system in which they have been created.

- Import static entries under *Resources* > *Users* using the import function .
- Import dynamic entries under *Organization* > *Access* > *Roles* using the update function. .

3. Assigning users to a role
   - Create a role.
   - You assign static entries individually under *Organization* > *Access* > *Roles* > *tab: Details* > *section: Users (GTS)*.
   - You assign dynamic entries through user group membership under *Organization* > *Access* > *Roles* > *tab: Details* > *section: Users (Authentication provider)*.
4. Editing users
   - All user entries can be individually edited and commented. A photo can be added.
   - Static entries can be deleted or locked under *Resources* > *Users (GTS)* > *Editing users*
   - Dynamic users cannot be deleted or locked because they are associated with a user group. A user group can be deleted or locked under *Roles* > *tab: Details* > *section: Users (Authentication provider)* > *User groups*.
5. Save changes with
   - The Save function requests the new access data. Please note the points when switching from Windows to other authentication systems and as well as the recovery options.

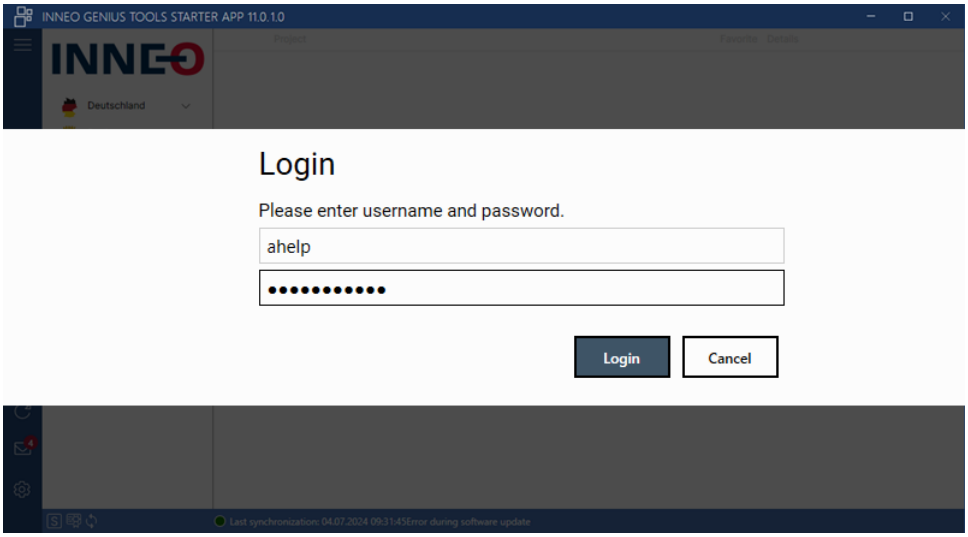
© 2025 INNEO Solutions GmbH

Result:

– Restarting the GENIUS TOOLS Starter App

– The Auth_Windchill.exe file performs web authentication with BasicAuth

– Input screen for user data appears in GENIUS TOOLS Starter App and GENIUS TOOLS Project Configurator



Authentication for Windchill users with SSO

For the SSO authentication of Windchill users, proceed as follows:

Procedure:

1. Ensure that the Windows setting *Named Pipe* is activated.
   - Change global settings in the menu item *Configuration* > *GENIUS TOOLS Starter App* > *Authentication*.
   - Under *Authentication provider*, select in the drop-down menu: *Auth_Windchill_SSO.exe*
2. In the field *Authentication provider config*, enter the Windchill server with SSO setup in the following notation: `server=<Windchill-SSO-Server-URL>`
3. Continue with point 2. of the previous procedure without SSO.

Result:

– GENIUS TOOLS Starter App is restarted.

– The file *Auth_Windchill_SSO.exe* opens the file *GT_SSO_Proxy.exe*, which transfers the authentication request to the SSO server.

- *GT_SSO_Proxy.exe* is also used by other GENIUS TOOLS products (e.g. MPUser) and may therefore already be present.
- *GT_SSO_Proxy.exe* requires the Windows setting *Named Pipe*.

© 2025 INNEO Solutions GmbH

– If Windchill users are authenticated by the domain when logging in, no input mask appears.

Please note: SSO authentication cannot be supported for server operating systems that allow several users to work simultaneously on one machine.

5.11 Configuring heterogeneous environments

IT landscapes very seldom have a homogeneous structure. There are different hardware setups and different user requirements, so that different configurations for starter projects arise automatically and heterogeneous environments have to be created. GENIUS TOOLS Starter has been designed to meet these requirements and makes it possible, to organize similar configurations into units and subunits. In this way, you may define the following unit-specific configurations:

– settings for GENIUS TOOLS Starter App

– settings for data synchronization

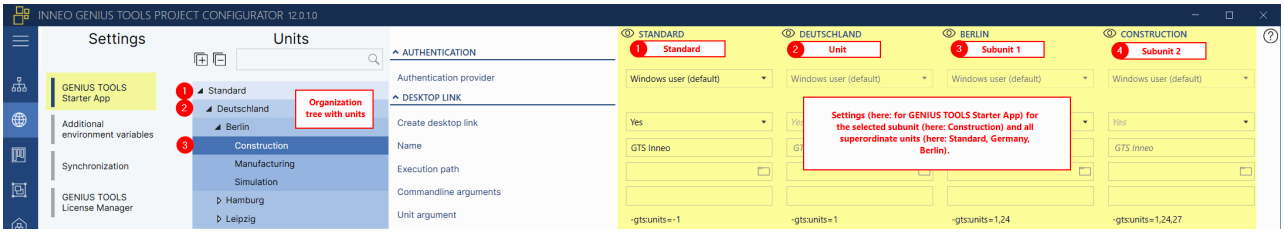
– use of license servers

– PTC data management software (e.g. PDM Windchill for Creo),

Differences from the standard configuration, that is, from the system-wide settings in the unit *Standard*, can be defined for units and subunits in the *Configuration* page.

Unlike the unit *Standard*, all other units have members that can be entered individually or dynamically. Use units to assign users dynamically through an LDAP connection. This is done through a role-based assignment, see chapter Accessing Windows user management.

A mouse click opens the settings for the selected a unit or subunit as well as for all higher-level units. These can be hidden with the eye symbol.



You may not make any specification, i. e. the selection field remains empty and values are inherited. (See next chapter.) Fields that contain inherited information can be overwritten by writing into the input field which then appear in black font.

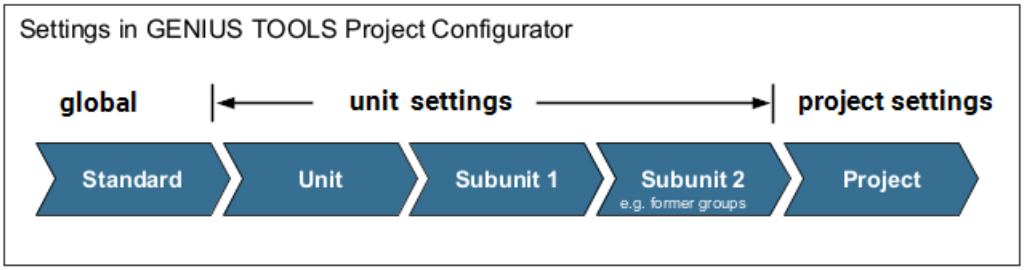
Please note: If an input field inherits values from the higher-level configuration levels, you will still only see the global default value displayed in gray.

© 2025 INNEO Solutions GmbH

5.11.1 Inheritance of the settings

It is possible to overwrite the global settings (Standard) in the lower configuration levels. If the input field of a unit or project remains empty, the setting of the higher configuration level is adopted.

The specifications in units and projects are inherited as follows. (See also Call sequence for settings.)



Hierarchy of settings made in GENIUS TOOLS Project Configurator

Default settings

If settings in a drop-down menus remain empty, the default setting of GENIUS TOOLS Starter will be inherited. This is "No".

Empty selection field

Please note: Default settings are inherited to the lower configuration level until overwritten.

5.11.2 Deviations from the standard configuration

This sections explains how to define the language of Creo Parametric as a user-defined setting as an example for configuring deviations from the standard setting.

5.11.2.1 Defining Creo language for specific users

Before Creo starts, the Creo UI language can be set to one of the following: English, German, Italian, French, Spanish, Japanese, Chinese (Simplified), Chinese (Traditional), Korean, Russian, Brazilian Portuguese. The languages are provided for Creo by PTC.

© 2025 INNEO Solutions GmbH

Please note: GENIUS TOOLS Starter does not influence the way different locale settings interact. For information on supported settings, please refer to the PTC website or the product documentation.

The UI language for Creo can be defined on four different levels in GENIUS TOOLS Project Configurator. The language can be set on four configuration levels. If you make settings on several levels, the last specification is valid, e. g. specifications in a project overwrite the specifications of units, see Call sequence for settings.

1. System-wide
   Main menu *Configuration* > *Creo Parametric* > *Standard* > *tab: Start* > *Startup settings*
2. Unit
   Main menu *Configuration* > *Creo Parametric* > *Select unit* > *tab: Start* > *Startup settings*
3. Group
   Main menu *Configuration* > *Creo Parametric* > *Select subunit* > *tab: Start* > *Startup settings*
4. Project
   Main menu *Projects* > *Select project* > *Creo tab* > *Startup*

The following example procedure refers to unit settings.

5.12 Unit settings

Having configured the standard settings, i. e. the global settings of the system, you can now realize deviations from this basic configuration by making settings in the menu item *Configuration* for the different units and subunits of the organization tree.

It is also possible to define settings directly on the project, see Project settings.

Be careful to take into account the order in which the settings are inherited in GENIUS TOOLS Project Configurator, see Inheritance of the settings.

5.12.1 GENIUS TOOLS Starter App

In the GENIUS TOOLS Starter App area you can set up the desktop link, the support and basic presentations of projects.

For the presentation of individual projects as well as the tabs that contain additional information and functions, please refer to Presenting projects to users.

5.12.1.1 Authentication

This setting can only be defined globally, i. e. for the Standard group, see chapter Global settings: Authentication.

© 2025 INNEO Solutions GmbH

5.12.1.2 Configuring the desktop link

By default, a desktop link for GENIUS TOOLS Starter App is created automatically on the application computers. You can define the properties of this desktop link in Project Configurator, including centrally-defined start parameters.

To configure the desktop link, go to the *Configuration* page, select a group, then select the settings item *GENIUS TOOLS Starter App*. Set *Create desktop link* to *Yes*. This setting determines that the desktop link is created or updated according to the configuration with each program start or synchronization process.

GENIUS TOOLS Starter App starts with the selection of the unit that was last selected by a user.

Alternatively, you can specify that a desktop link opens GENIUS TOOLS Starter App with a specific, pre-selected unit by defining the start parameter *-gts:units* with the ID string of a unit. This means the user is given a default setting of a unit. If the user is not assigned to this unit, the unit selection dialog will be displayed.

The ID string is displayed under *Unit argument* and can be used for copying.

Further transfer parameters can be used

– to start GENIUS TOOLS Starter in a specific language (*-gts:lang*)

– to open GENIUS TOOLS Project Configurator directly (*-gts:admin*)

– to open a specific project (*-gts:p*)

A list of all start parameters can be found in the GENIUS TOOLS Starter installation manual in the chapter *Customizing the GENIUS TOOLS Starter environment*.

You can define the following settings for the desktop link.

Name
You can define a name for the desktop link. Without an entry the desktop link will be named *GENIUS TOOLS Starter App - <operating environment name>*.

Execution path
Enter the path GENIUS TOOLS Starter App should be run in.

Commandline arguments
Enter any start parameters that should be used by GENIUS TOOLS Starter App.

© 2025 INNEO Solutions GmbH

Warning: If you used start parameters in version 6.0.0, take care to move them to this setting in Project Configurator. If the start parameters are not specified here, start parameters in local links will be deleted!

Unit arguments
Shows the start parameter *-gts:units* and the ID chain of the unit.

Warning: If the start icon is located in the *users\public\desktop* directory, it cannot be changed with user access rights. This means that the central icon definition cannot be applied!

Custom icon graphic

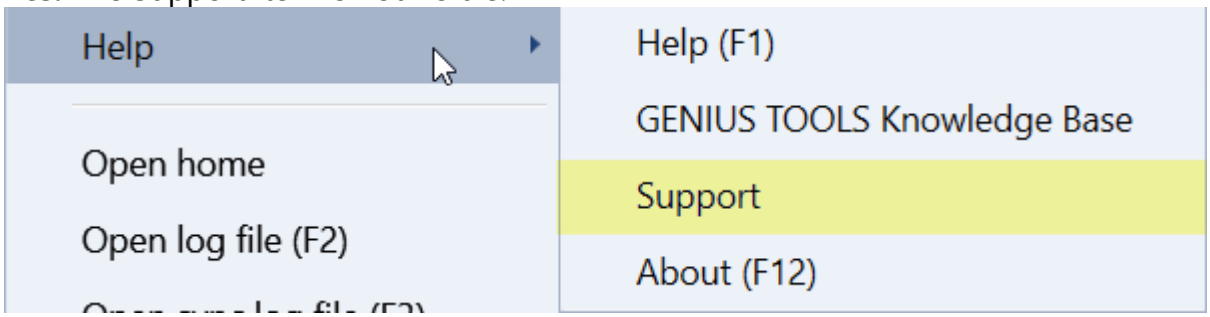
If you want to use a custom icon graphic, you have to place a file of 265*265 pixel in the *_Images* directory of the operating environment using the file name *<operating_environment_name>.ico*.

5.12.1.3 Support link and logging

In the *GENIUS TOOLS Starter App* settings under *General* you can define whether users should have access to the online support function of INNEO (TeamViewer) or to a company-specific link or document. You can also hide the Support menu item altogether.

▶ General

Hide support
Hides the menu item *Support* in the user menu item *Help* of GENIUS TOOLS Starter App.
No selection (Default): Users are referred to the Hotline website of INNEO.
No: The user sees the Support item in the menu.
Yes: The Support item is not visible.



Support
Enter the URL of a website or the path to a document. Set the above field *Hide support* to *No*.

Log projects without permission
Projects to which a user has no access rights are by default not displayed in the log file.
Yes: Information about the projects is displayed in the log file.

© 2025 INNEO Solutions GmbH

No (Default): Projects are not included in the log file.

Write crash report to Caddepot directory
Unexpected errors are written to a log file by GENIUS TOOLS Starter App (*gts_error.log*). The file can also be copied to the server and is saved there as *serveronly_ErrorLog\<Computer_name>.log*.

Yes: The client will copy its log file if an unexpected error occurs.
No (Default): The log file is only available on the client computer.

5.12.1.4 General display of projects

In the Projects area, settings are made for all projects that are available for the selected group or unit. These settings concern the display of invalid projects and the possibility to provide the language as a project option. They are described in the chapter Presenting projects to users.

5.12.1.5 Operating environment clean-up

In the *Cleanup of operating environment* section of the *GENIUS TOOLS Starter App* settings you can define whether an outdated operating environment should be deleted from the application computers, that is, from the Cadpool directories. The operating environment in the Caddepot is not affected. The user is asked to confirm before the deletion process is started.

5.12.2 Additional environment variables

You can define environment variables that are assigned to the client workstation under *Additional Environment Settings*. This allows you to define additional, company-specific variables that are available after starting an application without having to use batch files. For a list of the environment variables created or modified, please refer to the installation document (*GENIUS TOOLS Starter Installation.pdf*). The table in the installation document also lists the corresponding deprecated environment variables, which are still being generated for compatibility purposes.

Name
Enter the name of the environment variable here.

Value
Enter the value of the environment variable here.

Delete
Click the recycle bin icon to the right of the value input field to delete the line.

© 2025 INNEO Solutions GmbH

5.12.3 Synchronization

Synchronization allows for having all important files available locally on the local workstation. This ensures the fastest possible access to these files.
No toolkit applications will be synchronized while Creo is running.

> **Please note:** Options that cannot be selected in this dialog box can be changed in GENIUS TOOLS Environment Administrator.

> **Please note:** If an input field inherits values from the higher-level configuration levels, you will still only see the global default value displayed in gray.

▶ General

Activate synchronization
Shows whether synchronization from the Caddepot or Git repository to the Cadpool directory is active. If synchronization is deactivated, all computers will only operate locally. Synchronization is activated/deactivated with the *Modify* function of GENIUS TOOLS Environment Administrator (Step 3 > Client settings).

Target directory
Defines the Cadpool directory on the client workstation.

> **Please note:** Changing this entry leads to an initial installation of GENIUS TOOLS Starter App on the client.

Synchronization interval (minutes)
Specifies the interval at which synchronization is performed in minutes.

> **Please note:** For modifications of the synchronization interval to take effect, GENIUS TOOLS Starter App has to be restarted.

Start GENIUS TOOLS Starter App with Windows
Determine, whether GENIUS TOOLS Starter App is automatically started with Windows.
No: No autostart.
Yes, registry: Activates autostart via the registry entry.
Yes, start menu: Activates autostart via the shortcut in the user's Start menu. GTS stores the shortcut under *%APPDATA%\Microsoft\Windows\Start Menu\Programs\Startup*.

Save result to Caddepot directory
Determines whether the result of the synchronization should be transferred to the server. This includes the end time of the last synchronization, the number of copied files, warnings and errors. The user needs write access in the *Serveronly* folder.
Yes: The result of the synchronization is saved as *<hostname>.log* in *caddepot\serveronly_SyncResults*.

© 2025 INNEO Solutions GmbH

No: The result is not transferred to the server.

▶ Server

Checksum validation
Shows whether the checksum of a synchronized file is matched with that of the file on the server. The settings for validating checksums are entered in GENIUS TOOLS Environment Administrator with the *Modify* function (Step 2 > Synchronization server settings).
Yes: A checksum is determined for each transferred file and matched with the checksum from the server. If these differ, the file will be requested again.
No: Files are only copied.

Warning: Activating *Checksum verification* can significantly slow data transfer.

Server name
Displays the name of the synchronization server.

Comment
Displays the description for the server.

Synchronization type
File system: Each file is copied when synchronized.
Service: GENIUS TOOLS Starter Service checks all files for changes and updates only these changes during synchronization.
Git: GENIUS TOOLS Starter Gitea is used for data synchronization. When creating a Git repository with GENIUS TOOLS Environment Administrator, this option is selected here automatically.

Server path
Displays the UNC path to the synchronization server for file system and service and the URL address of the Git server.

5.12.4 GENIUS TOOLS License Manager

In order to use the full version of GENIUS TOOLS Starter, you will need a connection to GENIUS TOOLS License Manager. You can define the server from which GENIUS TOOLS Starter App should obtain licenses. Without a valid license server entry or when deactivating the entry, Creo projects can only be started with an academic or home-use license.
The specifications for license servers are possible for the system-wide settings as well as for individual units.

Warning: If you change any of the license server settings below, you need to restart GENIUS TOOLS Starter App.

© 2025 INNEO Solutions GmbH

▶ GENIUS TOOLS License Manager

Active
Activate/deactivate the license server(s).

License server(s)
Enter one or more license servers in the notation `Port@Servername` (e.g. `7766@<licenseservername>`). Separate a series of license servers with semicolons.
For license servers of INNEO Cloud, enter the URL address. Additional input fields are then displayed:

Tenant ID, Tenant short name
Enter the credentials for accessing the license server. You will receive these from the cloud operator.

Comment
An optional comment on the license server(s).

> **Hint:** The license server used can be found in *GT_LIC_SERVER* in Creo. You can use this variable, for example, in GENIUS TOOLS for Creo.

5.12.5 Network connections

▶ Network Drive

Here you can connect a shared network folder that will not be synchronized.

Connect
Specify whether to map the network drive.

Yes: The network drive is mapped when GENIUS TOOLS Starter App is started. If a drive with the specified drive letter already exists, this drive will be disconnected and then re-connected according to the configuration, but only if it is not already the drive to be mapped. This connection will remain active after you stop Creo.

No: Network drive is not mapped. Use this option if the drive mapping is already established by other means, such as a Windows login script.

UNC path
Specifies the path to any folder on the server.
Usually given as a UNC path: *COMPUTER**CreoData*.

Drive letter
Assigns a drive letter that the drive is mapped to.

Remap drive
Comparable to the Windows function map network drive.

Yes: After restarting the computer the drive will connect automatically.

No: The drive will not be remapped after a restart.

© 2025 INNEO Solutions GmbH

▶ User Drive

Here you can map an additional user-defined drive.

5.12.6 CAD applications

The unit settings for the various CAD applications are explained in the corresponding chapters:

– Creo Parametric

– Creo Elements/Direct Modeling

– SolidWorks

– Inventor

5.12.7 Windchill settings

For filling out this tab, read the chapter Automatic Windchill server registration.

5.13 CAD-specific project settings

For all projects of CAD applications the following can be specified:

– a specific release

– a project directory: This can contain project specific configuration and batch files.

– a data directory: This contains all object data.
For example, for Creo Parametric: *<GTS_ROOT_DIR>\parametric\data\sut_creo9*. (For Creo Parametric, object data is provided with the Startup TOOLS product package).

– the startup behavior

– project-specific environment variables

Hint: We recommend to define settings at the highest possible configuration level, i. e. to make as few settings as possible for individual projects. For example, individual projects may only contain the version-specific settings.

All other specifications differ according to the CAD application and are described in the respective chapters under Project settings:

– Creo Parametric

– Creo Elements/Direct Modeling

– SolidWorks

© 2025 INNEO Solutions GmbH

– Inventor

– AutoCAD

Installation directory

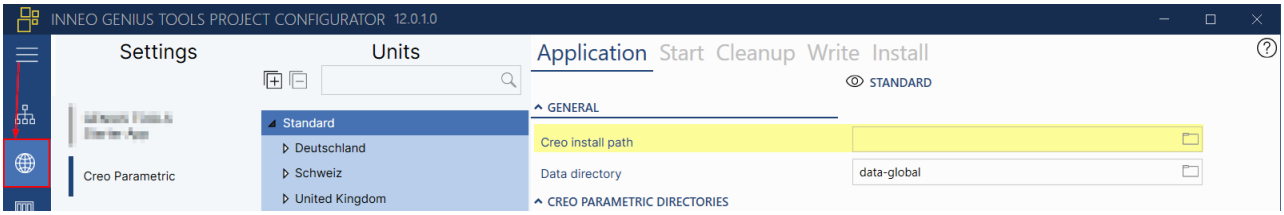
For projects of the CAD applications a specific software version can be defined. The corresponding installation directory is specified in the application in the *Configuration* menu item or searched for automatically.

There are three different ways in GENIUS TOOLS Project Configurator of configuring the installation directory and its start command:

1. Set a fixed install path on the Configuration page
2. Set a fixed install path in the project
3. Via the local Windows registry on the application computer

Depending on your requirements, each way of defining the installation directory can make sense. With several entries, the result is determined by the call order of the settings.

Configuration ▶ CAD application



Configuration > CAD application > Select group or Standard > Tab: Application > Segment: Application > Install path

Install path

– Specify a directory on the user computer where the CAD application is installed: This allows the path to be inherited to projects, if "Fixed Path" is selected on the project under Release and the entry is left empty. (see screenshot below, 1).

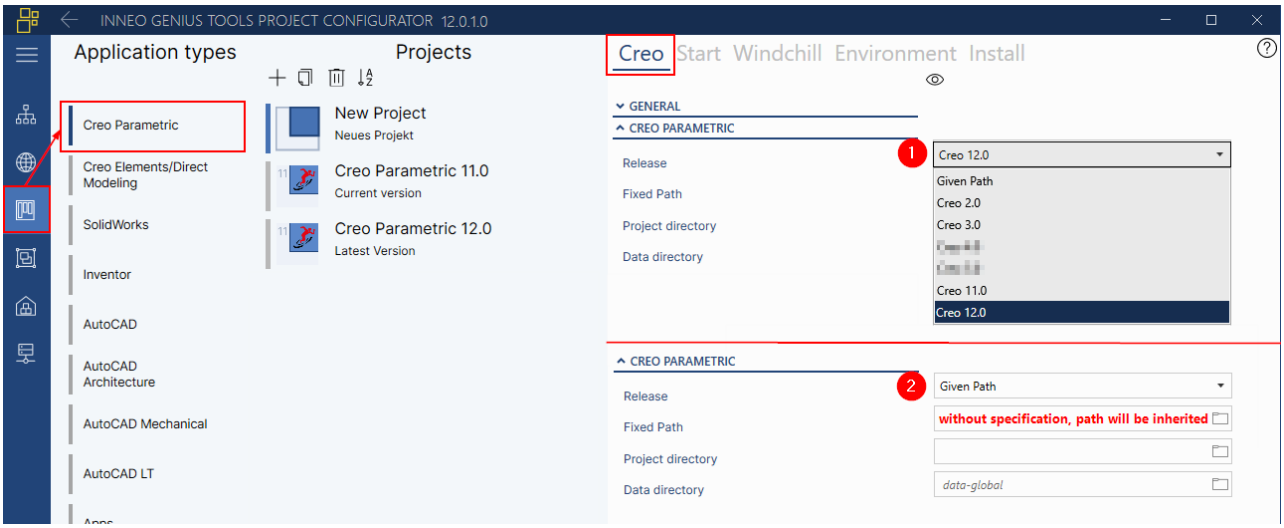
– Do not specify an installation path: This determines the installation directory automatically from the local Windows registry and usses the software version from the project details (2).

Please note: It is generally recommended to determine the installation path from the local Windows registry.

Projects ▶ CAD application

For an individual projects you can now specify a software version (1) or enter a fixed path (2).

© 2025 INNEO Solutions GmbH



Projects > CAD Application > Select project > Tab: CAD application > Segment: CAD application > Release: Select version or "Given path"

These rules apply:

– GENIUS TOOLS Starter finds the installation directory of an application on the user computer.

– Fixed path specifications are only necessary if the program is not automatically found.

– If you want to work with different releases or versions, e. g. as a construction service provider, this should be defined in the project.

– If the local installations are vary considerably or are not known in detail, the installation can be determined with the help of the local Windows registry.

– If no installation directory is specified, it is read from the registry.

5.14 Making use of project options

Administrators can provide users with choices for a project ("Project Options"). These appear as a drop-down menu or as a checkbox on all projects that are available to a unit.

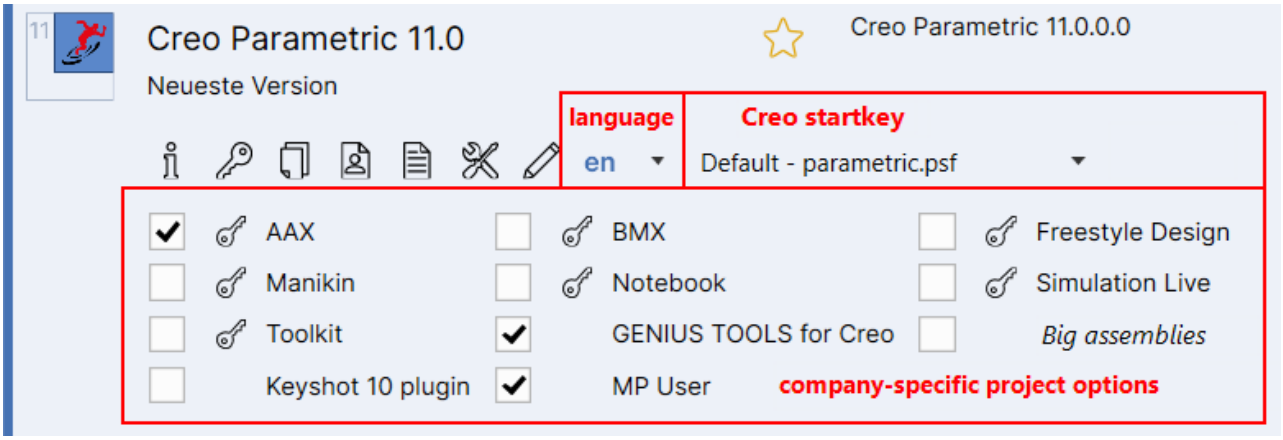
Project options can be used to significantly reduce the number of projects. The following project options can be provided.

– application language (drop-down menu)

– Creo startkey (drop-down menu)

– company-specific project options (checkboxes)

© 2025 INNEO Solutions GmbH



Options of a Creo Parametric project

The following table describes three options and the procedure for their creation.

Function	Description	Configuration / creation
Language	selects the language in which to start the application	configured in GENIUS TOOLS Project Configurator for all application, see next chapter
Creo startkey	selects the license package (PSF key) with which to start a Creo Parametric project	configured in GENIUS TOOLS Project Configurator, see Assigning Creo licenses to projects
Company-specific project option	activates license extensions, additional programs or further configuration settings	created with configuration blocks for each application, see Making use of project options

5.14.1 Language

You can grant user the right to select the language of the projects they have access to. If the right is not granted, neither selection field nor information about the applied language appears. If you want to provide users with information about this, you can include this in the name of the project or in the subtitle, e.g. *Creo Parametric 11.0. DE.*

Language selection field

The right to select a language is granted in *Configuration* > *GENIUS TOOLS Starter App* > *Select unit* > *Projects* and applies to all projects.

© 2025 INNEO Solutions GmbH

Project language in GENIUS TOOLS Starter App selectable
Projects of CAD applications support the use of project options. In this area, you can set up

- the right to select the project language (drop-down menu in GENIUS TOOLS Starter App)
- the arrangement of the checkboxes for license extensions, additional programs and other configuration settings. To create this type of project options, consult the chapter Making use of project options.

Specify whether users are allowed to change the preset language, in which the programm is to start. The language of a project can be preset in the *Projects* main page under *CAD application* > *Projects* > *Tab: Start* > *Startup settings* > *Language*.

Please note: This option requires that the selectable language has to be available in the programm installation used. This is not checked by GENIUS TOOLS Starter.

Yes: Users have the right to change the language of a project. If this options is activated, a drop down menu will be displayed in GENIUS TOOLS Starter App.
No (default): Users cannot change the language. There is no information about the language that the programm will start in.

5.14.2 Company-specific project options

Administrators can create company-specific project options. These become visible as checkboxes in the project area of GENIUS TOOLS Starter App.

For projects of the CAD applications, the following company-specific project options can, for example, be created.

Creo Parametric: additional applications GENIUS TOOLS for Creo, Model Processor User, Keyshot, mapkeys license extension such as Simulation Live, AAX, Manikin

Creo Elements/Direct Modeling: none

SolidWorks: SolidWorks Composer (Add-in), drawing frames

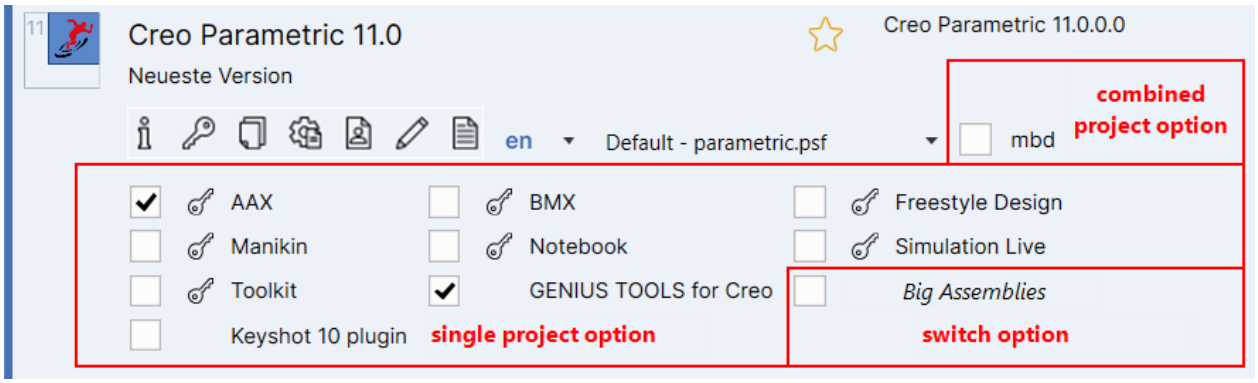
Inventor: Additive Manufacturing (Add-in), drawing frames, read-only mode

A detailed description of the possibilities to use project options for the respective application is described in the chapter *Project Display in GENIUS TOOLS Starter App* of each CAD application.

Types of company-specific project options

A distinction is made between individual and combined project options as well as switch options (in italics).

© 2025 INNEO Solutions GmbH



Project options of a Starter project

Administrators can create project options by placing a basic or a conditional configuration block in the required configuration layer. The table provides a general overview, while the following chapters explain the procedure step-by-step.

Function	Description	Configuration / creation
Single project option GTFC	is a configuration block which contains one or more configuration settings	settings valid according to the call hierarchy for files, created with basic configuration blocks, see Create single project options
Single project option with key symbol Simulation Live	is a configuration block that activates license extensions for Creo Parametric or additional programs	
Combined project option mbd	combines configuration settings from different directories and configuration layers, after selection further single project options may become available	settings valid according to the call hierarchy for files, if conditions are met created with conditional configuration block, see Creating combined project options

© 2025 INNEO Solutions GmbH

Function	Description	Configuration / creation
Switch option (italic) 	for all projects: switches between different values of one or more configuration options for SolidWorks projects: activates additional programs	settings valid according to the call hierarchy for files, created with basic configuration blocks, see Creating switch options

You can specify the number of columns for individual project options and switch options, see Arranging project options.

5.14.2.1 Single project options

A single project option can contain multiple configuration settings, batch command, license extensions or add-on programs.

Creating single project options

For each single project option that appears as a selectable checkbox in GENIUS TOOL Starter App, a basic configuration block must be created, which must contain certain GTS config variables. (See table below.)

Procedure:

1. Decide to whom the project options should be available to, using the subdirectories *standard, units, projects* or *users* of the configuration directory, see Directories of the configuration layers.
2. Consider that all settings are processed according to the Call hierarchy for configuration files.
3. Go the the desired directory, e. g. *<operatingenvironmentname>\<application>\configuration\projects\project_creo11p*.
4. Create a single configuration block in this directory for each project option. The name of the text file must comply with the application-specific specifications. (See step 6.)
5. Enter the following necessary GTS config variable as comment:
   ! gts_is_selectable = true for Creo Parametric configuration blocks,
   ; gts_is_selectable = true for SolidWorks configuration blocks and
   <!-- gts_is_selectable=true --> for Inventor configuration blocks.

© 2025 INNEO Solutions GmbH

6. Specify further GTS config variables in the file as required. The table below lists all variables.
   Take care to use the proper comment characters – they differ for each data type.

Application	Configuration block required (text file)	Comment character	Example
Creo Parametric	config_*.pro, config_*.sup	!	`! gts_display_name = Keyshot plugin`
SolidWorks	config_*.sldreg	;	`; gts_display_name = 3DConnexion`
Inventor	config_*.xml, ui_*xml, *.addin	<!-- -->	`<!-- gts_display_name = Additive Manufacturing -->`

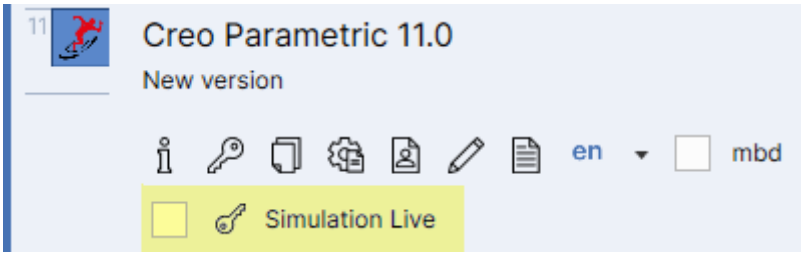
Result: A checkbox will be created below the project name in GENIUS TOOLS Starter App.

Example: Creating the project option "Simulation Live" for a Creo Parametric project

1. Choose the directory which controls the settings for the project (standard, units, projects, users), e. g. :
   <operatingenvironment>\parametric\configuration\projects\project_creo11p.
2. Create a textfile with the name *config_1_lic_sim_live.pro*.
3. Enter the following specifications in the configuration file:

```
! gts_is_selectable = true
! gts_selection_default = true
! gts_creo_lic = 379
! gts_display_name = Simulation Live (Echtzeitsimulation)
! gts_selection_name = Simulation Live
! gts_selectable_pos = 3
```

Result: Display in of a checkbox for the "Simulation Live" project option in the project Creo Parametric 11.0



gtpc_settingsApp_example.png

© 2025 INNEO Solutions GmbH

Example: Creating the project option "FeedbackAddIn" for an Inventor project

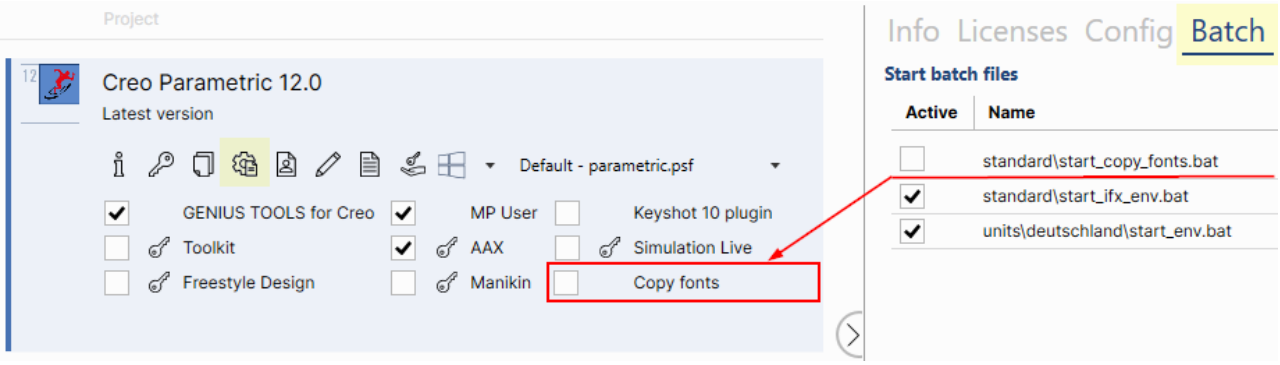
1. Choose the directory which controls the settings for the project (standard, units, projects, users), e. g.: *<operatingenvironment>\inventor\configuration\projects\inventor_23*.
2. Create a text file with the name *Feedback.Inventor.addin*.
3. Write:

```
<!-- gts_is_selectable=true -->
<!-- gts_selection_default=true -->
<!-- gts_display_name= FeedbackAddIn -->
<Addin>
<ClassId>{B99DB61B-F61E-4A56-AE2C-3FB608A2547D}</ClassId>
<ClientId>{B99DB61B-F61E-4A56-AE2C-3FB608A2547D}</ClientId>
<LoadOnStartUp>0</LoadOnStartUp>
</Addin>
```

Create individual project options for batch files

You can create batch files as project options by entering the GTS config variables with the comment characters “rem” or “::”.

```
rem gts_is_selectable = true
```
or
```
:: gts_is_selectable = true
```



Example: Creating the project option "FeedbackAddIn" for an Inventor project

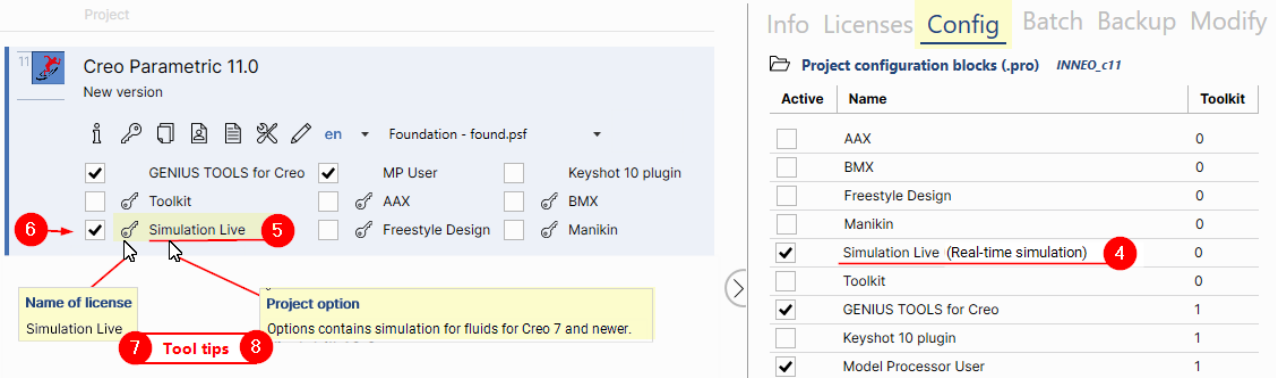
1. Choose the directory which controls the settings for the project (standard, units, projects, users), here: *<operatingenvironment>\parametric\configuration\standard*.
2. Create a text file with the name *start_copy_fonts.bat*.
3. Write:

```
rem gts_is_selectable=true
rem gts_selection_name=Copy fonts
```


© 2025 INNEO Solutions GmbH

Representing single project options

The display of individual project options is controlled by GTS config variables.



Displaying a project option (see table for numbering)

The following table lists the GTS Config variables for the example in the above screenshot. A full list of variables can be found in the appendix.

1	Creation of project option	! gts_is_selectable = true
2	Preselection of project option (checked box)	! gts_selection_default = true
3	License extension (key)	! gts_creo_lic = 379
4	Display name in Config tab	! gts_display_name = Simulation Live(Real-time - simulation)
5	Display name under project	! gts_selection_name = Simulation Live
6	Position in selection list (7the checkbox)	! gts_selectable_pos = 7
7	Text in tool tip of license symbol (key)	! gts_creo_lic_display_name = Simulation Live
8	Text in tool tip of project option (text)	! gts_description = Option contains simulation for fluids for Creo 7.0 and newer.

© 2025 INNEO Solutions GmbH

Options for Creo Parametric projects

For Creo Parametric projects you can create single project options that select license extensions such as AAX or Simulation Live.

GTS config variable	Specification / Example	Description
gts_creo_lic =	<licensenumber>, e. g. 379	Creo Parametric: License number(s) of the extension(s) to be added. Multiple numbers must be separated with empty space. – if this entry is set, an icon key appears next to the checkbox in the project – license numbers can be read from the license.dat file in the licensing folder under PTC/FLEXnet Admin License Server
gts_creo_lic_display_name =	<text>, e. g. Simulation Live	Creo Parametric: Tooltip text for license symbol (key) – if not specified, the line under License name is empty
gts_requires_base_lic =	<baselicense>, e. g. PROE_Foundation	Defines condition: if the base license is not available, the project option will be deactivated, i. e. no checkbox is displayed. – It checks if the base license is specified in the PSF key. – Multiple licenses must be separated with empty space. The project option will be deactivated, unless all of the listed licenses are available.

© 2025 INNEO Solutions GmbH

GTS config variable	Specification / Example	Description
gts_auto_activate_base_lic =	<baselicense>, e. g. PROE_Foundation	Defines condition: If the base license is available, the project option will be preselected, i. e. the box is checked. – Multiple licenses must be separated with empty space. The project option will be deactivated, unless all of the listed licenses are available. – Take care not to simultaneously set the variable ! gts_selection_default to true.

If the file is to control an auxiliary application, specify the corresponding configuration option, such as a protkdat entry. (Example: protkdat $GTS_ROOT_DIR\configuration\application\protk_keyshot.dat). These entries do not create icons next to the checkbox.

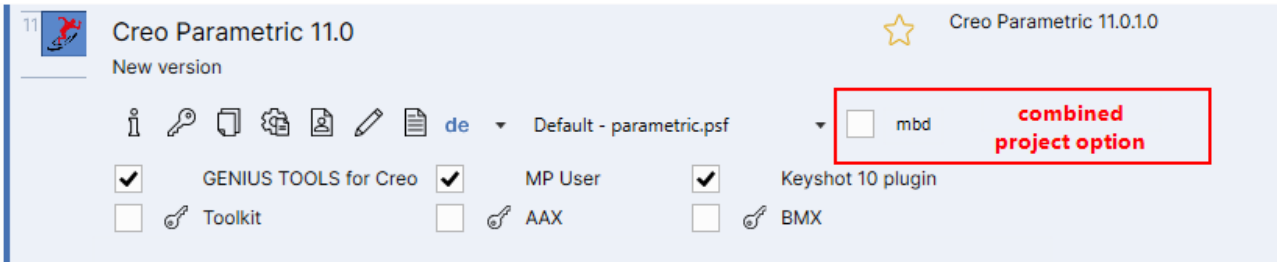
5.14.2.2 Combined project options

Combined project options can contain batch commands, configuration options, license extensions and/or add-on programs. They offer possibilities that single project options cannot and are particularly useful for companies with complex organization structure-

– With one click, several configuration options and/or batch commands can be activated that are located in different directories and levels. (Use case 1)

– Combined project options can be stored in directories other than the project directories. (Use case 2)

– After the selection of a combined project option additional single project options can be made available. (Use case 3 and 4)



Users must activate the checkbox of the project option in GENIUS TOOLS Starter App. The underlying configuration block is then read at project start.

© 2025 INNEO Solutions GmbH

1. Basics: Creating a combined project option

A combined project option appears as a selectable checkbox in GENIUS TOOL Starter App after having created at least one file with a free tag ID, see Conditional configuration blocks and batch files.

A **free tag ID** is an additional textual marking on a configuration block that defines a combined project option and limits the validity of the block to it. The tag ID must not be assigned to a unit, otherwise it can be freely choosen.

Example: *config_lic.mbd.pro* – "mbd" is the free tag ID, if there is no unit called "mbd".

The functionality of a combined project option only comes into its own when you create multiple configuration blocks with identical tag IDs. These are read across folders and levels, i. e. the content of all configuration blocks with identical tag IDs is combined (added). The following rules apply:

- The configuration options specified in the combined project option are read at project start if all conditions set by tag IDs are met.
- If configuration options conflict, the option is applied according to the Call hierarchy for configuration files.
- The first configuration block with the free tag ID creates the needed checkbox of the same name (here: mbd).

Use case 1: Different contents added across folders

Procedure: For *one* combined project option, assign *one* free tag ID to multiple files. The first free tag ID creates the checkbox to select.

1. Decide on which projects the project options should be available. Settings can apply to all ("Standard") or to individual units, projects, or users.
2. Go to a folder you selected in (1).
3. Create a text file with a meaningful free tag ID, e. g. mbd. The name must start with *config* and end with *.freetagid.pro*, e. g. *config_lic.mbd.pro*.
4. Specify the required Creo configuration setting(s) in the file.
5. Repeat this for all configuration blocks in all required folders and settings, for example:
   - *config_abc.mbd.pro* in the unit folder
   - *config_lic.mbd.pro* in the project folder
   - *config_mapkeys.mbd.pro* in the user folder

Result: The combined project option "mbd" has been created, which contains Creo configuration options from configuration blocks from three different configuration levels.

© 2025 INNEO Solutions GmbH

2. Further use cases for one combined project option

2.1. Creating a combined project option with restriction to one unit

Combined project options can be restricted to one unit by adding a unit tag ID to a configuration blocks with a free tag ID.

A **unit tag ID** is a textual marker that restricts the validity of a configuration block to a unit. The difference to a config.pro module that is located in a specific unit directory, project options with a unit tag ID can be located in all directories and can be activated by selecting the unit – independent of the storage location.

A unit tag ID is assigned when creating a unit in GENIUS TOOLS Project Configurator, see Using unit tag IDs.

Please note: A configuration block with a unit tag ID but without a free tag ID does not generate a project option.

Use case 2: A project should have two different project options depending on the selection of the unit available for selection.
Consult the example in Using unit tag IDs.

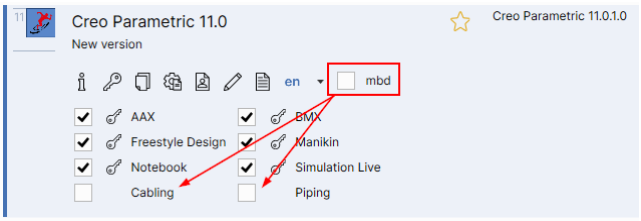
2.2. Creating a combined project option with restriction to several unit

A combined project option can be activated by multiple units, see Project options in a multi-unit environment.

2.3. Creating a combined project option and further project options

You can create a combined project option that generates further single project options after selection.

Before selecting "mbd"



After selection of the combined project option mbd

Use case 3: When the project option METAL is selected, three additional single project options (X, Y, Z) are displayed

Procedure: For a combined project option, assign *one* free tag ID to *multiple* files and write GTS Config.pro variables single project options in each of these files.

1. Decide the configuration levels for which the project option should be available, i.e. system wide ("Standard"), individual units, projects or users.

© 2025 INNEO Solutions GmbH

2. Go to a directory you selected in (1).
3. Create a configuration block with a free tag ID, e. g. *Metall*. The name of the text file must start with *config* and end with *.freetagid.pro*, e. g. *config_lic.metal.pro*.
4. Write into this file the GTS config.pro variables

   `! gts_is_selectable = true`

   `! gts_display_name = Cabling` – "Cabling" is the display name for the first single project option that will appear after selecting the project option *Metal*.
5. Specify further required GTS config.pro variables and/or further Creo configuration setting(s), see table.

3. Creating multiple combined project options

Each free tag ID creates a combined project option, hence, if two free tag IDs are used in a file name, there are two combined project options to choose from, e. g. *config.mbd.plastad.pro*. If there is no checkbox for selection yet, it will be created.

The order of the free tag IDs does not affect the validity of the Configuration block.

This case is typically used in connection with further project options (use case 4) or with further configuration options (use case 5).

3.1 Creating two combined project options that allow further project options only after joint selection

Use case 4: When selecting the project options MBD and PLASTAD together, an additional project option NC shall be displayed.

Initial situation: The configuration blocks *config_lic.mbd.pro* and *config_lic.plast.pro* already exist.

Procedure: Write GTS config.pro variables to a configuration block to create a single project option, and add the free tag IDs that already exist to the file name.

1. Decide on which projects the two project option selections should be available (Standard, unit, project or User).
2. Place a config.pro blokc (text file) in a directory you selected in (1).
3. Name the file *config_lic.mbd.plast.pro*.
4. Write in the file the GTS-Config.pro variables

   `! gts_is_selectable = true`

   `! gts_display_name = NC` – "NC" is the display name for the checkbox that will appear after s
5. Specify further required GTS config.pro variables and/or further Creo configuration setting(s), see table.

© 2025 INNEO Solutions GmbH

3.2 Creating several combined project options that set a configuration option after common selection without allowing further project options

It may be useful to apply a configuration setting when two combined project options are selected without allowing users to choose the setting.

Use case 5: When selecting the project options MBD and PLASTAD together, Creo is to be started with the license extension NC.

Initial situation: The configuration blocks *config_lic.mbd.pro* and *config_lic.plast.pro* already exist.

Procedure: Add the two existing free tag IDs to the configuration block that contains information for the license extension.

1. Proceed as in use case 4, steps 1-3.
2. In the file *config_lic.mbd.plast.pro* specify the corresponding license extension in the GTS config.pro variables, e. g. for NC-SHEETMETAL:

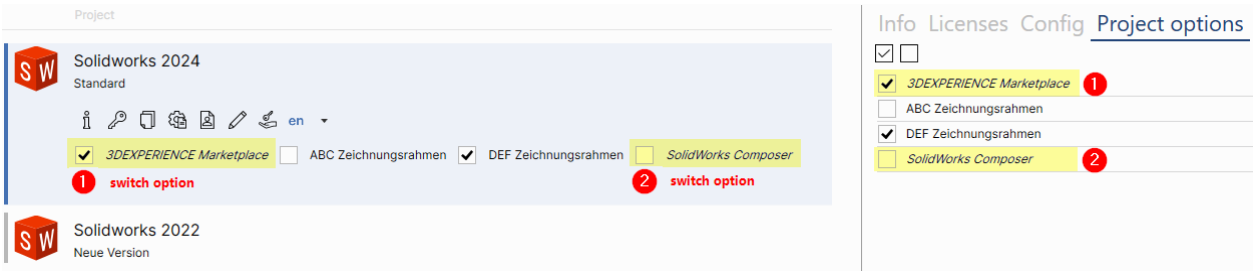
```
! gts_creo_lic = 116
```

5.14.2.3 Switch project options

Switch options are project options that toggle between two values of one or more configuration settings, such as YES/NO or NORMAL/HIGH.

There are two use cases for switch options:

1. In SolidWorks projects: to start additional programs (AddIns)



Integration of 3DExperience Marketplace as a project option for a Starter project

2. For all projects: to switch between two values of several configuration setting without having to provide two single project options. This is useful for setting multiple configuration options, e.g. for display settings in Creo Parametric.

Creating switch options

Switch options are not created by inserting a GTS config variable into a configuration block, but by using the expression *gts_choose*. The code is:

```
gts_choose{ Key || true value || false value }
```


© 2025 INNEO Solutions GmbH

The value for `Key` is displayed as the name of the project option next to the checkbox in GENIUS TOOLS Starter App. The value `true value` is read if the project option is checked, otherwise `false value` applies.

The entire expression can be assigned to one or more configuration options.

1. Example for SolidWorks: Option to start the add-on program "3DEXPERIENCE Marketplace" with a project

Procedure: The gts_choose expression must contain two values for registry entry.

1. Decide which users the project option should be made available to. Settings can apply to all ("default") or to individual units, projects or users. Pay attention to the configuration concept.
2. In the appropriate configuration directory, create a text file that starts with config and ends with the application-specific extension .sldreg, e.g. config_addin_experience.sldreg. (See also Configuration blocks für Solidworks .)
3. Write:
```
Windows Registry Editor version 5.00
[HKEY_CURRENT_USER\SOFTWARE\SolidWorks\AddInsStartup\{1A49690A-CC1F-4C81-9B96-303C52F14AC3}]
@=dword:gts_choose{SolidWorks Composer||00000001||00000000}
```

Result: The checkbox *SolidWorks Composer* appears under the projects. When checked, this AddIn is started with SolidWorks.

Please note: For integrating AddIns in SolidWorks projects write `true value = 00000001` (starts the AddIn) and `false value = 00000000` (does not start the AddIn).

2. Example for Creo Parametric: Option to minimize display settings for big assemblies

Procedure: The gts_choose expression is set instead of the value of the configuration option and must contain two values.

1. Decide which users should have the project option available. Settings can apply to all (default) or to individual units, projects or users. Pay attention to the configuration concept.
2. In the appropriate configuration level directory, create a text file that starts with *config* and ends with the extension *.pro,* e.g. *config_switch_bigass.pro*. (See also Configuration blocks für Solidworks .)
3. In the file, enter the gts_choose expression instead of the value of a configuration option, for example:
```
display_points gts_choose{big assemblies || NO || YES }
```


© 2025 INNEO Solutions GmbH

config_switch_bigass.pro

```
autoplace_single_comp           yes
check_interface_criteria        gts_choose{Big Assemblies || no || yes }
check_interference_of_matches   gts_choose{Big Assemblies || no || yes }
create_temp_interfaces          no
comp_interface_placement        gts_choose{Big Assemblies || interface_to_geom || interface_to_interface }
comp_assemble_with_interface    default_multi
comp_assemble_start             default

!########### TURN OFF ALL DISPLAY OPTIONS #####
gts_choose{Big Assemblies || display    SHADE || display    shadewithreflect }
display_axes gts_choose{Big Assemblies || NO || yes }
display_coordinate_sys gts_choose{Big Assemblies || NO || YES }
display_planes gts_choose{Big Assemblies || NO || YES }
display_points gts_choose{Big Assemblies || NO || YES }
display_annotations gts_choose{Big Assemblies || NO || YES }
display_silhouette_edges gts_choose{Big Assemblies || NO || YES }
edge_display_quality gts_choose{Big Assemblies || NORMAL || very_high }
shade_quality gts_choose{Big Assemblies || 3 || 50 }
skip_small_surfaces gts_choose{Big Assemblies || YES || NO }
fast_highlight gts_choose{Big Assemblies || YES || NO }
prehighlight gts_choose{Big Assemblies || NO || YES }
save_triangles_flag gts_choose{Big Assemblies || NO || YES }
spin_center_display gts_choose{Big Assemblies || NO || YES }
spin_with_notes gts_choose{Big Assemblies || NO || YES }
spin_with_part_entities gts_choose{Big Assemblies || NO || YES }
spin_with_silhouettes gts_choose{Big Assemblies || NO || YES }
tangent_edge_display gts_choose{Big Assemblies || dimmed || phantom }
texture gts_choose{Big Assemblies || NO || YES }
transparency gts_choose{Big Assemblies || NO || YES }
```

Switching values for the Big assemblies option

Result: The key *Big Assemblies* creates the checkbox of the same name below the project. If the option is checked (`true value`), the gts_choose expression is replaced by the corresponding value (e. g. NO).

Hint: The switch expression can be written in two ways:

```
display_points gts_choose{Große Baugruppen || NO || YES }
```

or

```
gts_choose{Große Baugruppen || display_points NO || display_points YES}
```

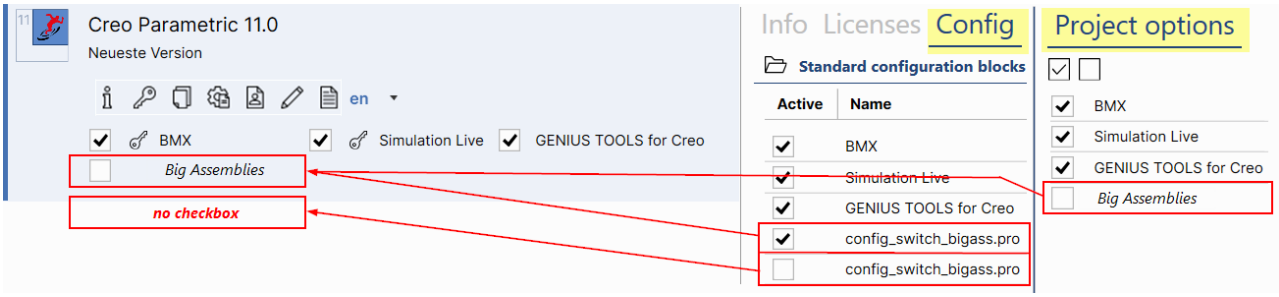
Deleting switch options in GENIUS TOOLS Starter App

In contrast to single project options, a value will be read from a switch option even if the option is not checked (disabled state = `false value`).

For users who have the right to deactivate configuration blocks in the Config tab of GENIUS TOOLS Starter App, this means:

1. Deactivating the configuration block will ignore the content of the configuration block, i. e. as with all configuration blocks, it will not be included into the configuration.
2. In contrast to single project options, the checkbox of the switch options then disappears, because neither the checked (`true value`) nor the unchecked setting (`false value`) is to be used for configuration.

© 2025 INNEO Solutions GmbH



Only checked configuration blocks (in the Config tab) generate checkboxes for switch options

5.14.2.4 Overview of project options by application

The following table lists examples of popular project options for each CAD application and the configuration blocks needed to create them.

Project options for batch files can be created for all applications.

	Additional programs	Optional configuration settings	Special feature
Creo Parametric	GENIUS TOOLS for Creo, Model Processor User, Keyshot – single project option – use config_*.pro file	mapkeys – single project option – use config_*.pro file switch between two values – switch option – use config_*.pro file	license extensions such as Simulation Live, AAX, Manikin – single project option – use config_*.pro file with license number(s)
Creo Elements/ Direct Modeling	—	—	—
SolidWorks	SolidWorks Composer – switch option – use config_*.sldreg file	drawing frames – single project option – use config_*.sldreg file	—

© 2025 INNEO Solutions GmbH

	Additional programs	Optional configuration settings	Special feature
Inventor	Additive Manufacturing – single project option – use *.addin file	drawing frames – single project option – use config_*.xml file	read-only mode – Special case: set in GENIUS TOOLS Project Configurator, like language selection

5.14.3 Special cases

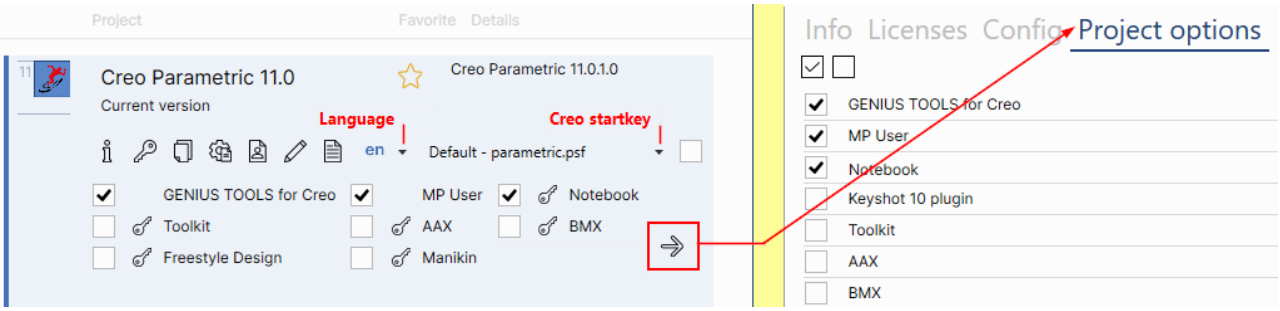
Inventor

For Inventor projects, it is possible to specify in GENIUS TOOLS Project Configurator whether users can select to open the project in read-only mode. With this setting, the checkbox *Read-only mode* is displayed in the project area. See Read-only mode.

Option to start read-only mode in GENIUS TOOLS Starter App

5.14.4 Arranging checkboxes

Single project options and switch options can be selected in checkboxes below the project name as well as in the Project options tab. The tab can be opened with the arrow symbol, which becomes visible if some checkboxes cannot be displayed below the project.



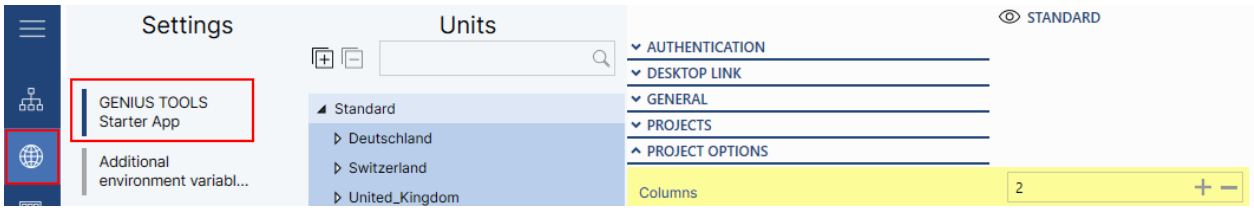
For displaying project options, such as display name, tooltip and position, can be defined, see Single project options.

The display of the checkboxes can also be affected by specifying the number of columns. The default setting is four columns.

© 2025 INNEO Solutions GmbH

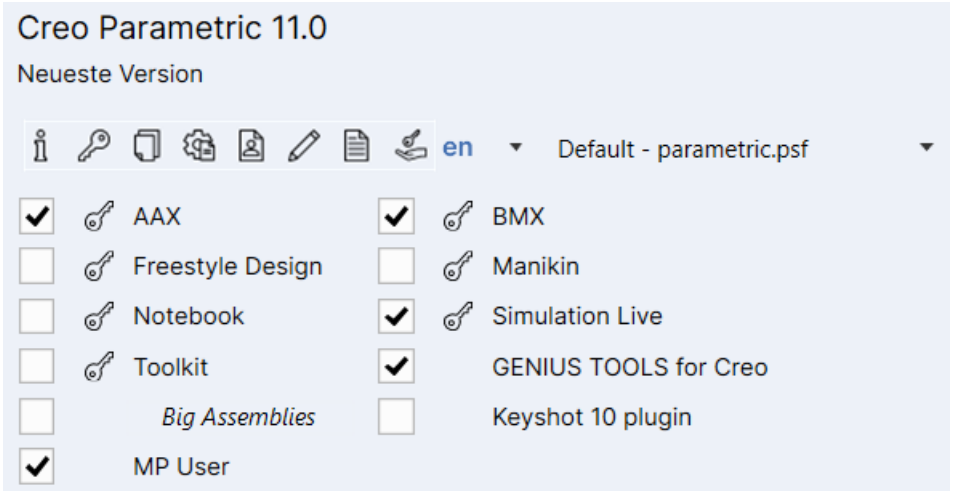
Procedure for arranging checkboxes for single and switch options

1. Open GENIUS TOOLS Project Configurator.
2. In the menu item *Configuration* go to *GENIUS TOOLS Starter App* in the Settings column.
3. Select a unit, or choose Standard for global settings.
4. In the the segment *Project options* specify the number columns, here: 2



Settings in GENIUS TOOLS Project Configurator

Result: The checkboxes are arranged in two columns below the project name in GENIUS TOOLS Starter App.



Display in GENIUS TOOLS Starter App

Please note: The arrangement of project options requires a subscription license.

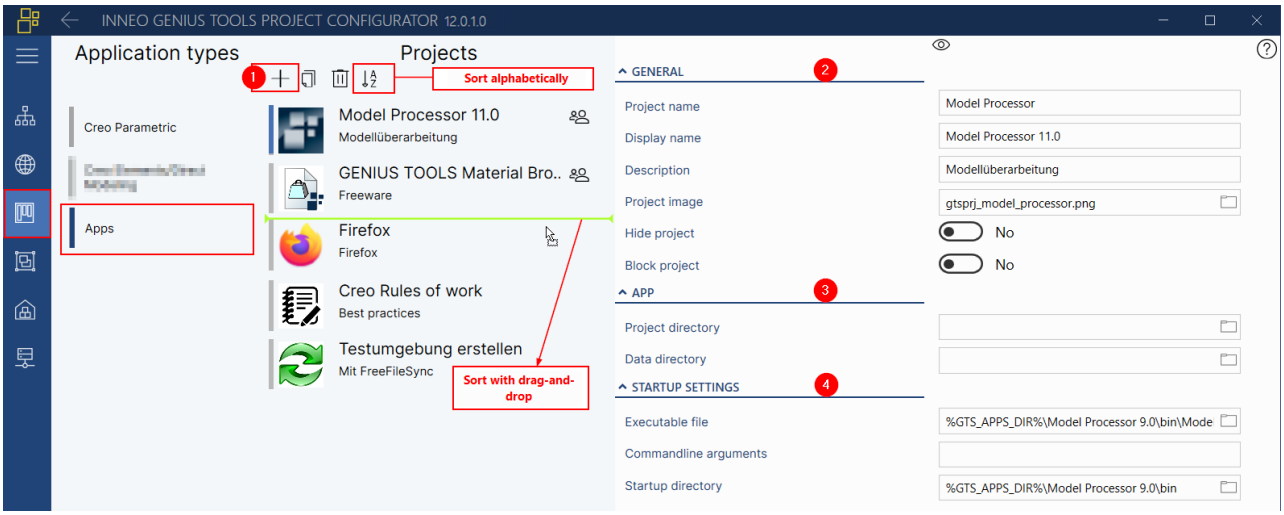
5.15 Apps-Projects: Creating projects of other applications

In the sub item Apps you can create projects with any other program. For such Apps projects you can only create one project per application, whereby the latest version is used.

For Apps projects only simplified settings are available, but specifications from configuration blocks and batch files can be made, as for all programms, in the four configuration layers of the directory *application*.

After filling in the general project settings (2), specify the required project and data directories (3) and the startup behavior (4).

© 2025 INNEO Solutions GmbH



Dialog box for Apps projects

In the GENIUS TOOLS Starter App, you can set the order of the projects for the users by dragging and dropping the projects. The *Change sorting* button (5) in the *Projects* column sorts the projects in the application alphabetically by display name.

▶ App

Project directory (optional)
Directory below *application\configuration\projects*. Batch files are copied from this directory to the user computer and executed at project start.

Data directory (optional)
Directory below *application\data*. From this directory data packages are copied to the user computer and applied at project start.

▶ Startup settings

Executable file
Enter the file that is to be started. It can either be an executable file (such as *.exe, *.bat) or a file for which a standard application is available on the user computer (such as *.docx, *.html). A command line (cmd) shell or cmd shell application will be executed visibly by following commands:

– do not stop cmd after execution: `start cmd /K "%1"`
– stop cmd after execution: `start cmd /C "%1"`

If a website is to be called, enter the following command: `cmd.exe`

Command line arguments
Enter commands that specify how the executable file is started. Set the commands in quotation marks.
If a website is to be called, enter it with the following scheme: `/c start https://www.inneo.co.uk`

Startup folder
Select the startup directory.

© 2025 INNEO Solutions GmbH

The information about the startup behavior and the required directories are displayed for each project in GENIUS TOOLS Starter App in the Info tab.

5.16 Auto projects

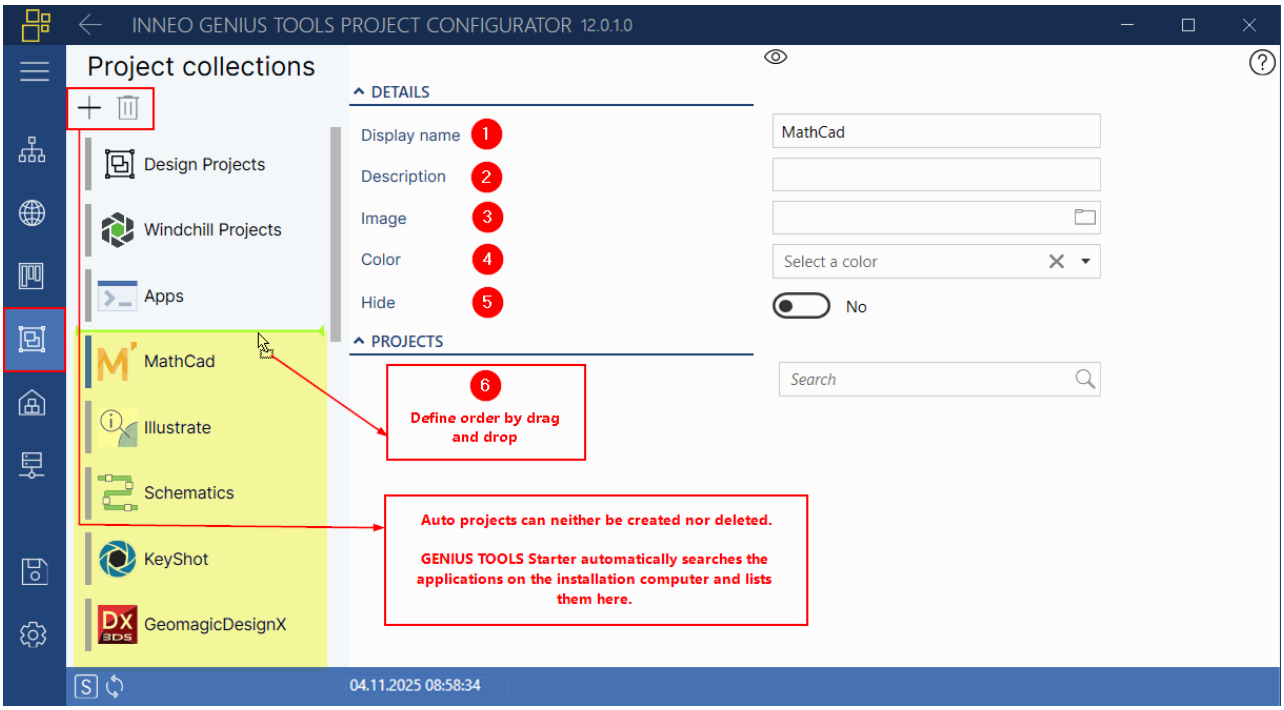
Auto projects are Starter projects of an application for which only one project can be created. This project will be automatically created by GENIUS TOOLS Starter App with the latest available software version on the user computer and will be displayed with an icon of the application.

Auto projects are generated from the following applications: Creo Elements/Direct Drafting, Creo Illustrate, Creo Schematics, Creo View, GeomagicDesignX, Keyshot and MathCad.

Please note: Auto projects are only available with a subscription license.

The applications are automatically searched on the user computer. If several versions are installed, the latest version will be used. If the application is not installed on the user's computer, the Auto project will not be displayed.

Auto projects can, like all projects, be configured in the four configuration layers (standard, units, projects and users). For each Auto Project, a new folder structure is created for this purpose which includes a project directory. In GENIUS TOOLS Project Configurator, they are listed in the *Project collections* page .



Individual Auto projects can be hidden in the user interface of GENIUS TOOLS Starter (5). You can also hide all Auto projects for specific user groups (roles) in the user rights.

© 2025 INNEO Solutions GmbH

In the main page *Project collections* you can set the display of the Auto projects in GENIUS TOOLS Starter App, see next chapter.

5.17 Project collections

In the main menu item *Project Collections* you can organize individual projects into collections, which are displayed to users in GENIUS TOOLS Starter App. This is especially helpful for companies that work with many projects.

Warning: Creating collections for projects requires a subscription license. If you create a project collection without having a subscription license, you will not be able to continue using GENIUS TOOLS Starter with a perpetual license.

The order of both collections and individual projects can be defined here by using drag and drop.

Project collections are displayed to all users, but within a collection only those projects a user has access to are displayed. If a user has no access to any of the projects, the button for the collection will not be displayed.

A distinction is made between company-specific and application-specific project collections. You can create company-specific project collections and assign individual projects. Application-specific project collections, on the other hand, already contain all projects that have been assigned to the an applications in the menu item *projects*, i. e. Creo Parametric, Creo Elements/Direct Modeling as well as Apps projects

	Company-specific project collection	**Application-specific project collection**
Collection can be created and deleted	yes, see below	no
Collection can include any project	yes	no, contains all projects of an application, – Creo Parametric – Creo Elements/Direct Modeling – or Apps projects
Individual projects can be added and deleted	yes	no

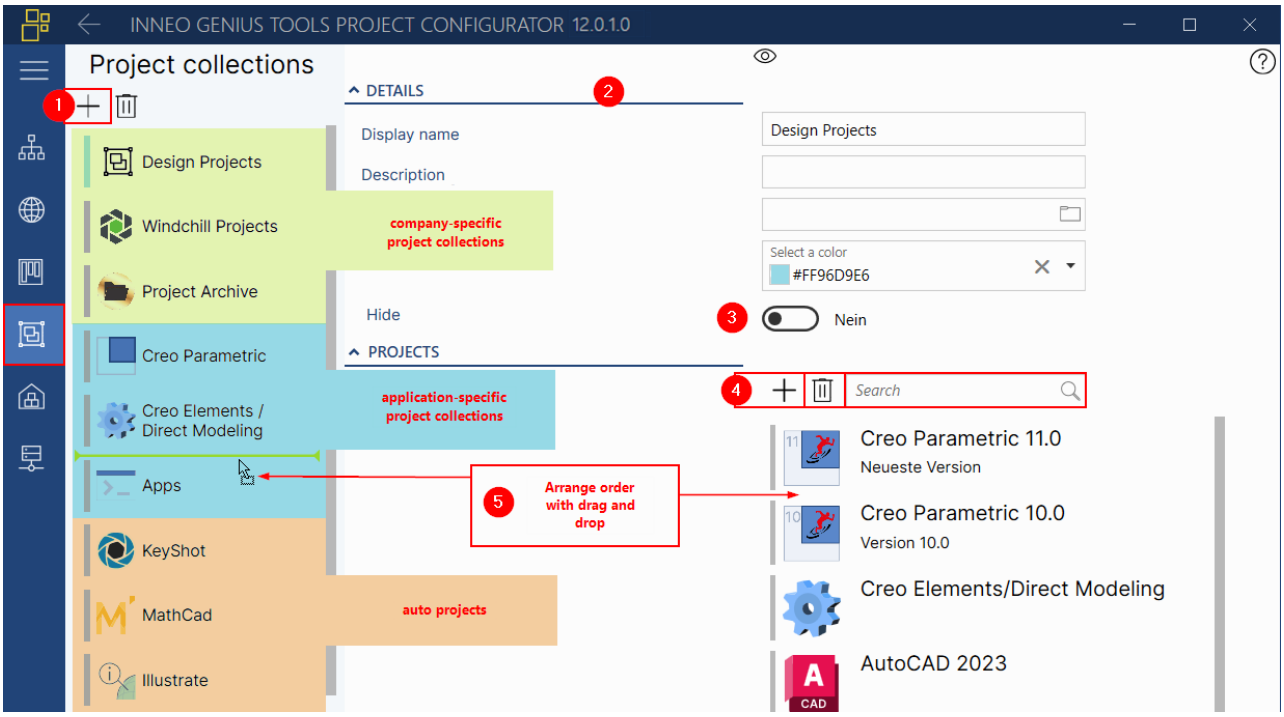
In addition, this area lists all auto projects, which are displayed automatically.

© 2025 INNEO Solutions GmbH

Creating a new project collection

Create a company-specific project collection by clicking the Plus button *Add (1)*.

Application-specific project collections as well as auto project are generated automatically and cannot be created nor deleted.



Displaying project collections to users

In the *Details* dialog (2) on the right, fill in how the project collection should be displayed in GENIUS TOOLS Starter App.

For application-specific project collections and auto project display names and comments cannot be edited.

Display name
Enter a name for the project collection. The name of a project collection must be unique. Duplicate names for project collections are not permitted

Description
Enter an optional description for the project collection

Image
A collection can be fitted with an image file in JPG, PNG or SVG format.

Color
A collection can be displayed with an individual color for better visualization.

Hide (3)

No (default): The project collection is displayed in GENIUS TOOLS Starter App.

Yes: An project collection is not displayed.

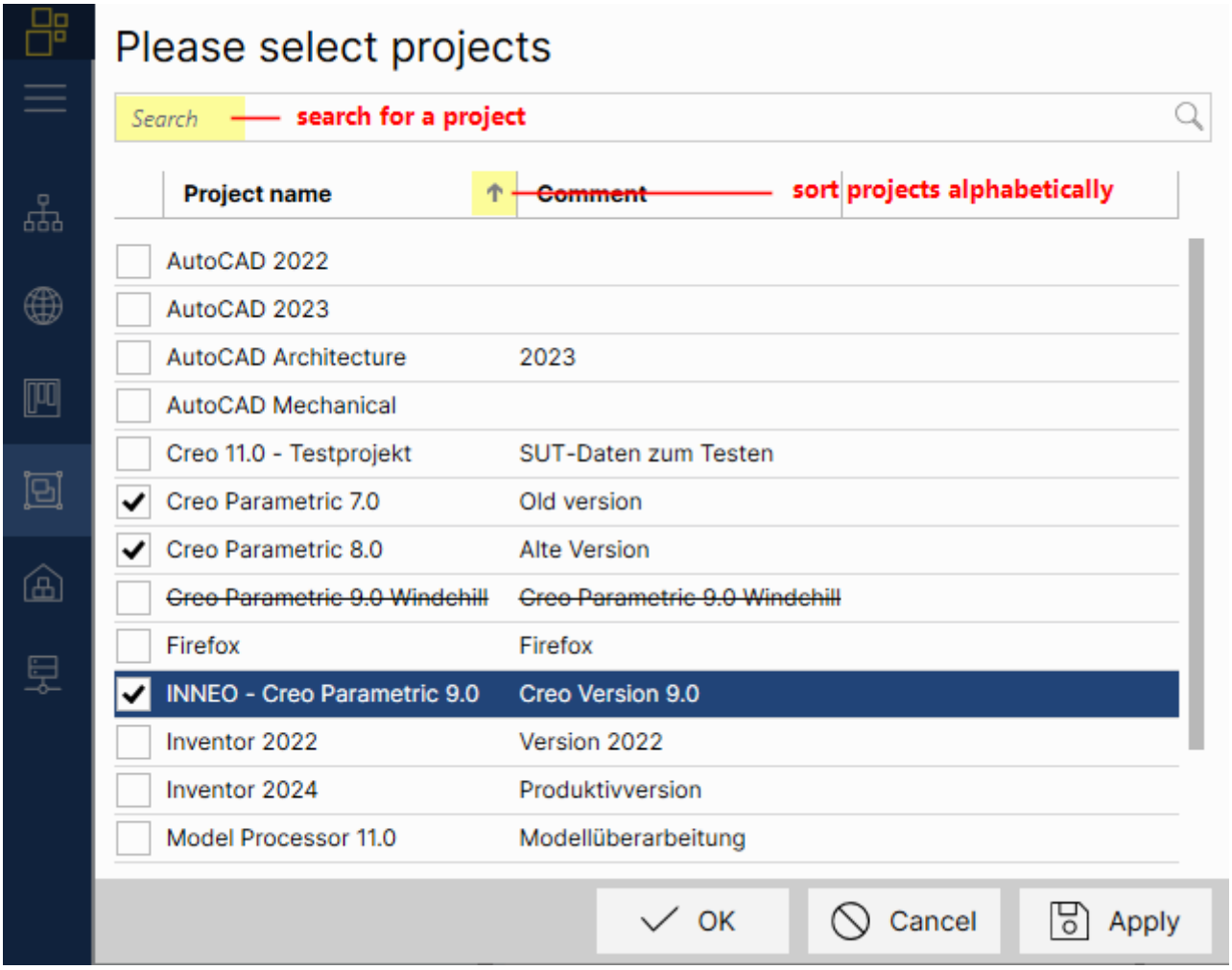
© 2025 INNEO Solutions GmbH

Define order (5)
Put projects in the order needed by using drag and drop.

Adding projects to a collection

You can add single projects only to company-specific collections.
The visibility of a project in GENIUS TOOLS Starter App is defined by the affiliation of a user to a unit and the access rights granted.

Add (4)
Add projects that have been created in the *Projects* menu item.
A window will open where you can select, search and sort projects.



Delete
Select a project to delete it.

Search
Search a project by keywords.

© 2025 INNEO Solutions GmbH

User-defined project collection

With version 11.0.0.0, users have the option of marking individual projects as favorites, which are listed in GENIUS TOOLS Starter App under *Favorites*, see chapter GENIUS TOOLS Starter App > Favorites.

5.18 Presenting projects to users

The display of projects in GENIUS TOOLS Starter App can be defined for a unit, subunit or for individual projects.

Unit settings

In the menu item *Configuration* of GENIUS TOOLS Project Configurator, settings are made for all projects that are available for a unit. These are.

– the display of faulty projects as well as

– the option of providing the language selection as project option.

The menu item *Resources* lets you control what information about a project or additional features, such as license analysis, are made available to users, see Providing project information.

Project settings

In the menu item *Projects*, individual projects can be provided with an icon and an additional line of information, see General project settings.

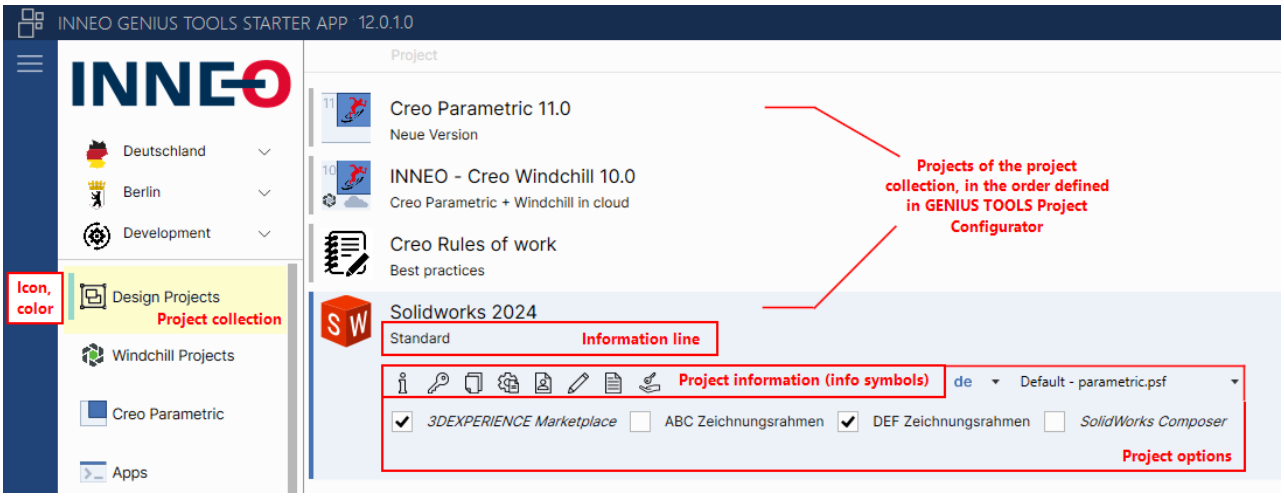
Projects can contain selectable options that are created with configuration blocks, see Project options.

You can also restrict access to a project to certain units. To do this, assign the permitted projects to this unit, see Restricting project access

Project collections

The menu item *Project collections* allows you to group individual projects into collections and define their order, see Project collections. Project collections can be provided with an individual colored bar and an icon.

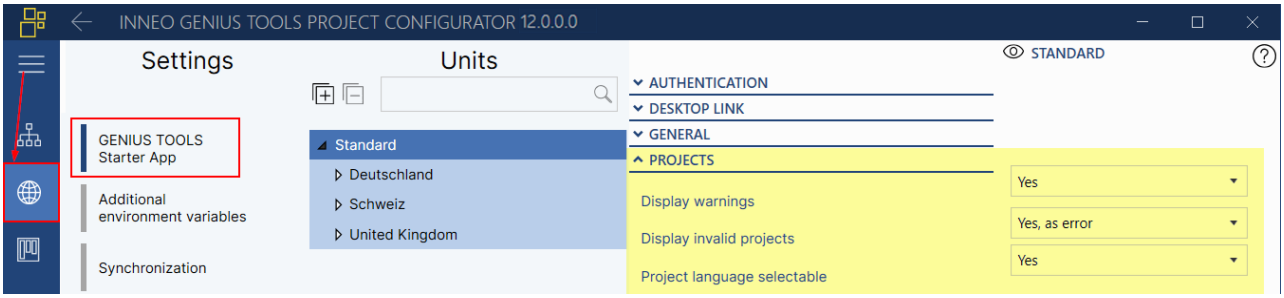
© 2025 INNEO Solutions GmbH



Projects from the "Design Projects" collection in GENIUS TOOLS Starter App

5.18.1 Marking faulty projects

Administrators can control whether and how users see projects that cause warnings or for which they do not have the required license.



Global settings ("standard") for displaying projects in GENIUS TOOLS Starter App

Projects with warnings

Project settings can cause warnings other than missing licenses, e. g. if the project directory cannot be found.

You can define in GENIUS TOOLS Project Configurator The following actions and warning colors can be set in the menu item *Configuration* > *Group (select)* > *Settings: GENIUS TOOLS Starter App* > *Segment: Projects*. The project bar will then be orange and a warning triangle ⚠ appears, which opens the Warning tab.

Display warnings

Warnings appear for projects e. g. without a valid license (Creo Parametric, SolidWorks).

No: No warnings are issued.

Yes: Projects are marked with a yellow bar. The Warning tab appears.

© 2025 INNEO Solutions GmbH

Invalid projects

For Creo Parametric and SolidWorks projects, it is possible to check available licenses. You can control whether and how projects for which the required licenses are not available are displayed in GENIUS TOOLS Starter App, see Display of invalid projects.

Display invalid projects
Specifies how projects that cannot be started with GENIUS TOOLS Starter, e. g. because no PSF key is found, are displayed to the user.

No: Projects are hidden.
Yes, as error (default): Projects are marked with a red bar. The Error tab appears.
Yes, deactivated: Projects are greyed out and cannot be clicked on.

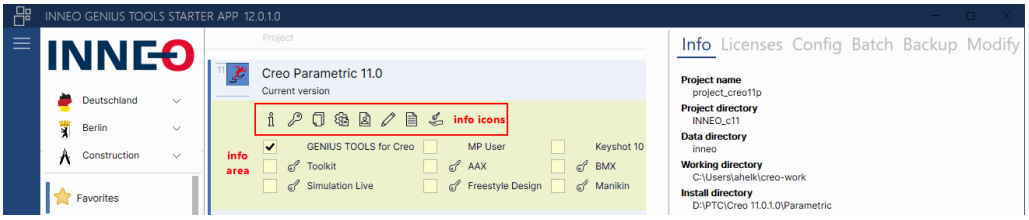
Please note: Projects for which no corresponding software version can be found are never displayed.

5.18.2 Customizing project information

The info area opens when a project is selected. The info icons open tabs with the corresponding information.

All projects display the Info tab. The other tabs – Licenses, Config, Options and Backup – differ depending on the application, see the respective chapters in GENIUS TOOLS Starter App.

The Error and Warning tabs are appear for faulty projects.



Selected project with open Info tab

Most info icons and tabs can be hidden by the administrator in GENIUS TOOLS Project Configurator under *Organization* > *Access* > *Role* > *Tab: Function access*. Consult the chapter Granting function access for detailed instructions.

© 2025 INNEO Solutions GmbH

Function	Description	Configurable with function access?
Information	opens Info tab with – project name – path to project, data and working directories – language, and more	info icon and tab can be disabled with *Can see project information*
Licenses	opens Licenses tab – shows licenses and license servers – button for analyzing licenses	info icon and tab can be disabled with *Can see licenses*, see Displaying license details
Configuration blocks (Config)	opens Config tab – lists all used configuration blocks (config files) and additional applications (Toolkit Application) in the selected project	info icon and tab can can be disabled with *Can see configuration blocks*
	– configuration blocks can be deactivated by unchecking the checkbox	Access right: *Can deactivate configuration blocks*
	– configuration blocks can be opened by double clicking, see Editing configuration blocks	Access right: *Can open configuration blocks*
Configuration blocks (UI)	opens UI tab in Inventor projects – lists lists all used configuration blocks (ui files) and – behavior like config tab	like Config tab
Batch files	opens Batch tab – lists all batchfiles for the selected project – batch files can be deactivated by unchecking the checkbox	info icon and tab can can be disabled with *Can see batch files* Access right: *Can deactivate batch files*

© 2025 INNEO Solutions GmbH

Function	Description	Configurable with function access?
Backup	opens the Backup tab – users can create a backup of user-specific settings – für Creo Parametric: displays the *customization.ui* file, see Backup mechanism in GENIUS TOOLS Starter App.	info icon and tab can be disabled with *Can save user specific settings / customization.ui file*
Project report	Creo Parametric: opens PDF file containing all information about the selected project	info icon can be hidden with *Can create project report*
Borrow licenses	Creo Parametric, SolidWorks: Opens Borrow license dialog	info icon can be hidden with *Can borrow licenses*
Warning	icon appears only if project settings trigger a warning, opens Warning tab	no
Error	icon appears only if project cannot be started, opens Error tab	tab can be disabled, see Marking faulty projects

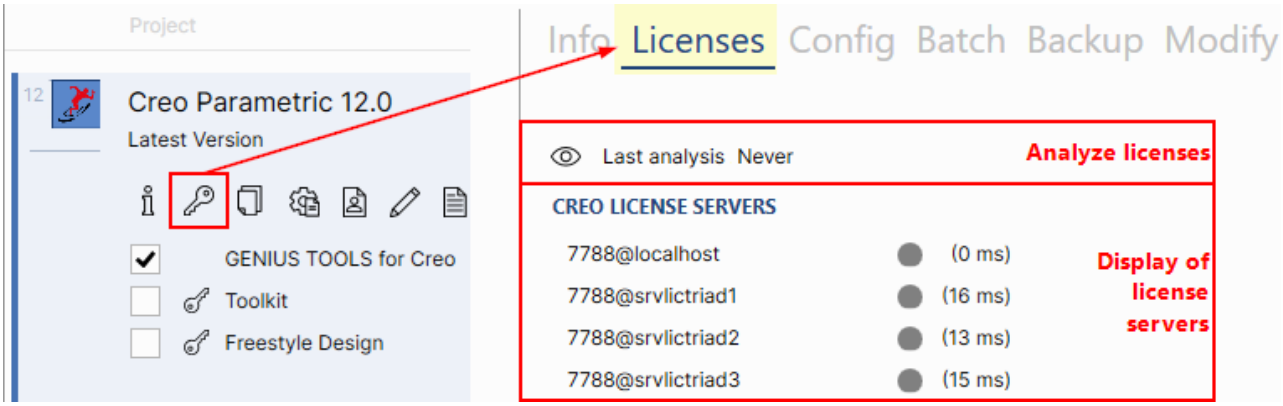
5.18.3 Displaying license information

The *Licenses* tab is available for projects of Creo Parametric and SolidWorks. The info icon and the tab appear when the user is granted the function access right *Can see licenses*.

Please note: Function access rights are always cross-unit: If a user has different rights in different roles, the granted access applies regardless of which unit is selected in GENIUS TOOLS Starter App. See chapter Granting function access rights.

The Licenses tab contains information on the license servers assigned to the selected project as well as a function to analyze licenses.

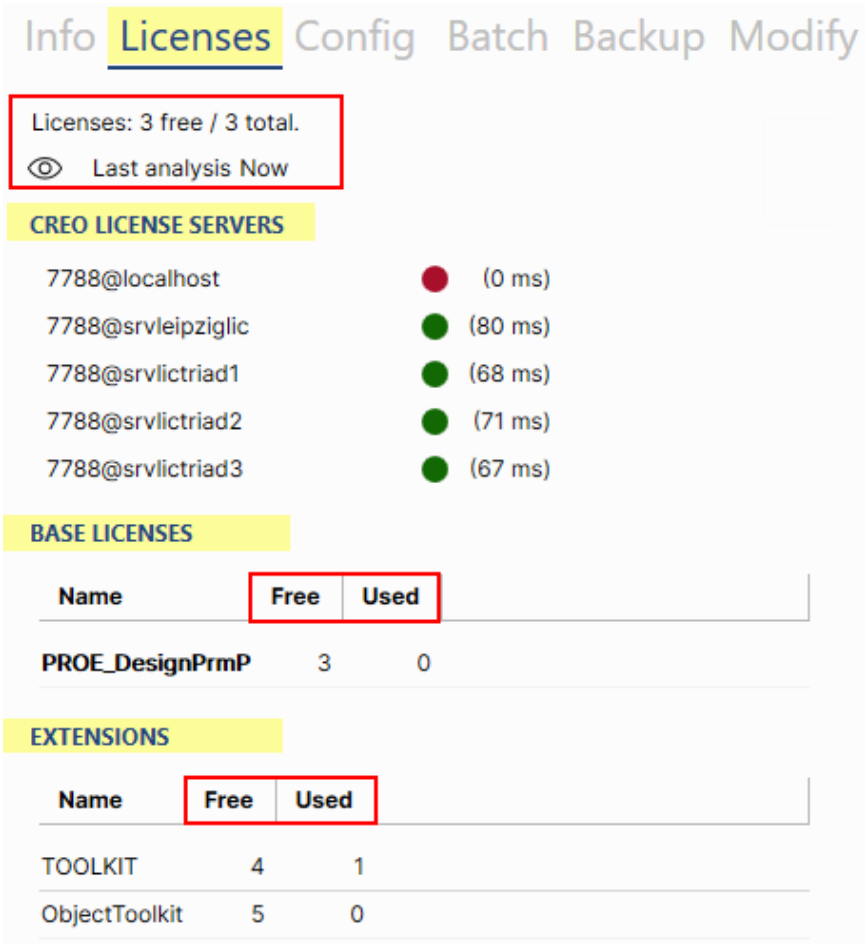
© 2025 INNEO Solutions GmbH



Licenses tab before analyzing licenses

Display license servers
All Creo license servers are listed for the selected project to which the user has access to.

Analyze licenses
Pressing the button shows all available licenses and extensions as well as the time that has passed since the last analysis.

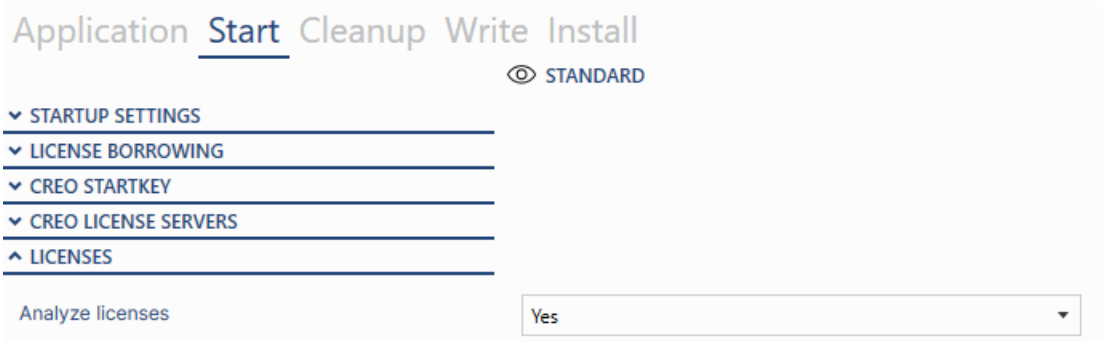


Licenses tab after analyzing licenses

The display of the Analyze button is defined in GENIUS TOOLS Project Configurator in *Creo Parametric* > *Tab: Start* or in *SolidWorks* > *Tab: Start* in the section *Licenses* > *Analyze*

© 2025 INNEO Solutions GmbH

Licenses. This setting only comes into effect, if users have been granted the access right *Can see licenses*.



Start-Tab für Uniteinstellungen für Creo Parametric

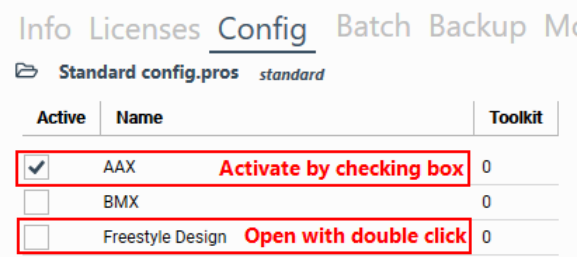
The Borrow licenses function is started via the info icon on the project.

5.18.4 Editing configuration blocks

In the Config tab, users can view and may edit configuration files which configure a project, so-called configuration blocks.

1. Open / edit configuration blocks

Double-clicking on a line will open GENIUS TOOLS Config Editor. For this, the user must be granted the access right *Can open configuration files from Starter App*, see chapter Granting function access rights.



2. Disable / enable configuration blocks

Activated configuration blocks are used for the project configuration. For being able to check the corresponding box, users must be granted the access right *Can disable configuration blocks*, see chapter Granting function access rights.

3. Edit personal settings

Users have the ability to edit their local configuration block and write it back to the administration computer in the userdata directory, see next chapter.

© 2025 INNEO Solutions GmbH

5.18.5 User-driven configuration

Users may overwrite or append the settings established by the administrator, by managing private configuration blocks on their own. To do so, private configuration blocks must be saved in the *userdata* directory to which the user needs to be given write access.

The private configuration blocks in the userdata directory are appended to the configuration blocks in the users, projects, units and standard directories, i.e. they overwrite the entries made there. See also the chapter Call sequence for files.

Special characteristic of Creo Parametric configuration blocks
The personal Config_*.pro file is attached to the Config_*.pro files in the users, projects, units and standard directories as a supplement. The user-defined Customization_*.ui file, on the other hand, replaces the Customization_*.ui files in the other directories.

Userdata directory

There are two ways to provide users with a *userdata* directory.

– The Userdata directory is located in the Caddepot of the administration computer, from where it is synchronized to the Cadpool on the user computer. Users can use the directory with their Windows user name in the Userdata directory. For this the userdata directory must be located under GTS_ROOT_DIR. (See chapter Directory structure.)

– A *userdata* directory can be set up on any location on the client computer where it does not undergo data synchronization.

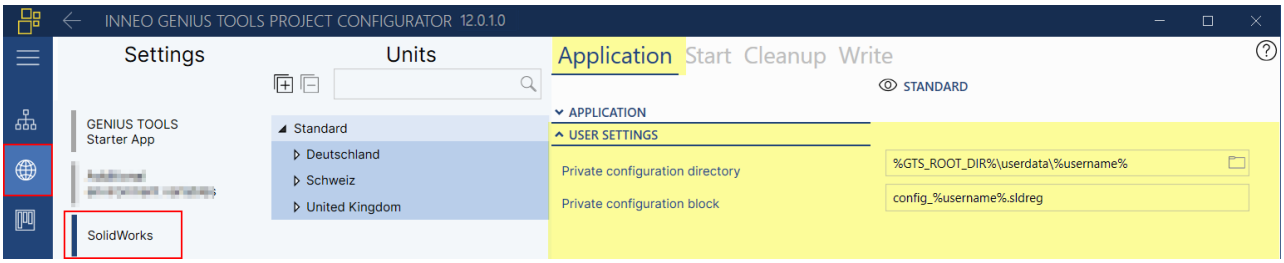
Defining private configuration blocks

Administrators specify the path to the user data directory and the spelling of the file names of the configuration blocks in GENIUS TOOLS Project Configurator.

Procedure using SolidWorks as an example

1. In the menu item Configuration, go to SolidWorks under Settings.
2. In the Application tab, go to the User Settings section.
3. In the field Private configuration folder, enter the path to the userdata directory.
4. In the field Private configuration block, specify the notation for the configuration module, here for an SLDREG file: *config_%username%.sldreg*. (There is an overview of the file endings in the chapter Configuration blocks.)

© 2025 INNEO Solutions GmbH



Application tab in the configuration settings for SolidWorks

Result: The section in the Config tab is visible when an SLDREG file is in the userdata directory.

Display of a private configuration block in GENIUS TOOLS Starter App

Editing private configuration blocks

Users can edit their local, private configuration module in GENIUS TOOLS Starter App. A double click opens the file.

The Upload button is used to write the configuration block back to the administration computer in the userdata directory. The button is visible if the user has the access right *Can save personal configuration blocks to server.*

Please note: Data synchronization must be paused during editing.

5.19 AutoCAD

Starter projecte for the applications AutoCAD, AutoCAD Architecture und AutoCAD Mechanical are created with

– essential specifications

- a defined release
- application-related data packages

– specifications for the start behavior

– settings for additional applications / linkages (batch files)

© 2025 INNEO Solutions GmbH

Please note: No unit settings can be defined yet for projects of the AutoCAD applications and no configuration blocks can be created.

Creating starter projects for AutoCAD applications is a feature that requires a subscription license.

For general information consult the chapter Starter projects.

5.19.1 Project settings

Project settings are the specifications you make in the main page *Projects* under *Applications* > *AutoCAD, AutoCAD Architecture* or *AutoCAD Mechanical* in the tabs *AutoCAD*, *Start* and *Umgebung*

The applications AutcoCAD Architecure and AutoCAD Mechanical have the same input fields since all AutoCAD applications are started with the same execution file (EXE file). GENIUS TOOLS Starter generates the correct start command for the applications in the background.

5.19.1.1 Essential specifications

After having created a new project with the general project specifications, fill in the following input fields.

Release
Define the version to be used. The path can be fixed or determined automatically from the registry of the application computer.

Fixed path: Select the directory from the newly appearing drop-down menu. If you do not specify a directory, the settings for the standard unit will be used. (*Configuration* > *Application* > *Standard* > *Tab: Application* > *Install path*)

Versions: Specify a certain version. For example, the selection <2022> will determine the path to the latest installation of the version from the registry.

Please note: The application has to be installed locally on the application computer in order to have registry entries available. The user must have read permission in HKLM.

Project folder
Directory in <*application*>*configuration**projects*. From this directory configuration blocks are copied to the application computer.

Please note: Configuration blocks should be stored separately from the data structure due to their potential multiple use. They should be managed in the specific subdirectories of the configuration directories *units*, *projects* or *users*, or in the *standard* directory for global settings. See Configuration concept.

© 2025 INNEO Solutions GmbH

Data folder
Main directory of an operating environment in which application-related data is located.

5.19.1.2 Start behavior

In the *Start* tab you define the startup behavior for a single project.

Starting behaviour
Select the application that will open the project.
AutoCAD(default): The project is started with the selected AutoCAD application.
External: The project is started with another application (e. g. SAP).

If *External* is selected two additional fields open:

External start command
Enter the path to the executable file that is to start the project.

Command arguments for external start
Enter commands that specify how the executable file is started. Set the commands in quotation marks.

Startup directory
Enter the working directory of AutoCAD.

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.
No (default): No data is synchronized before opening a project.
Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

5.19.1.3 Environment variables

The variables set here are added to the variables defined for units. Values set here for an existing environment variable will overwrite the values for units.

Outdated environment variables will continue to be created for compatibility reasons. A list of created and affected environment variables can be found in the appendix.

5.20 Creo Parametric

A configured Creo Parametric project consists of the following components:

- a defined Creo release or version
- the licenses to be used (Creo-Startkeys)
- configuration blocks for settings of
  - functions and behavior of Creo Parametric (config_*.pro files)
  - user interface ((config.ui)

© 2025 INNEO Solutions GmbH

- additional applications, toolkit applications (GENIUS TOOLS for Creo)
- settings and link-ups for additional applications (batch files)
- Windchill availability in the Creo Parametric session
- start object templates, drawing frames
- project libraries
- plot settings
- ModelCheck configurations
- and many other settings relevant to working with Creo, such as
  - data referenced in the configuration files (colors, materials, templates etc. in the data directory)
  - data for other tasks (information documents, additional tools)

Data packages and configuration directories

A project configuration consists of Creo object data – filed in the data directory – and Creo configuration files, which can be stored in any of the project-relevant directories *standard, units, projects* and *users*. Separating the Creo object data from the Creo configuration data and the additional applications ensures that Creo objects in an operating environment can be used in multiple projects.

Both Creo object data and project-specific configuration files for several Creo versions are included in the product package Startup TOOLS.

For Creo Parametric the configuration for a Starter projekt is made up by the following directories:

1. Data directory:
   <GTS-OperatingEnvironment>\parametric\data

The data directory is a system directory under which all object data for an application can be found, the so-called Creo data packages.

The directory *configuration* contains the directories *standard, units, projects* and *users*. Their behavior applies to all applications, see directories of the configuration layers and the call sequence.

2. Standard directory
   <GTS-OperatingEnvironment>\parametric\configuration\standard
3. Unit directory:
   <GTS-OperatingEnvironment\parametric\configuration\units\%GTS_UNIT_DIR_NAME%
4. Project directory:
   <GTS-OperatingEnvironment\parametric\configuration\projects\%GTS_PROJECT_DIR%
5. User directory:
   <GTS-OperatingEnvironment\parametric\configuration\user\%USERNAME%

© 2025 INNEO Solutions GmbH

Please note: In order to work with data for other CAD systems in the future, the entire directory structure has been changed in version 9.0.0 of GENIUS TOOLS Starter. Consult the comparison of the old and new directory structure. The adjustment of the paths is done automatically during an update.

Installation directories of Creo

There are different ways to specify an installation directory and its start command. These are described in the chapter CAD-specific project settings.

Consider the following criteria:

1. If you want to make sure that each application computer throughout your company uses the same Creo version, configure the Creo installation directory for the Standard group in the Configuration page. In this way, you will not have to specify it for each project.
2. If a variety of releases and versions is in use, for example because you are providing services for different customers, configure the Creo version for each project.
3. If local installations are inconsistent or not known in detail, a fall back on the local Windows registry can determine the Creo installation directory. You can specify which Creo release to look for – the highest version will be used.

Please note: It is generally recommended to determine the installation path via the local Windows registry.

5.20.1 Configuration and batch files

For Creo Parametric projects you can create configuration blocks and place them in the configuration levels where they will be processed according to the call hierarchy for files, see chapter Configuration concept.

All batch files can be used, see also chapter Batch files.

5.20.1.1 Creo configuration files

The behavior of Creo Parametric is largely determined by the configuration file *config.pro*. This is a text file storing all settings that determine how Creo Parametric runs.

Settings in config files are called configuration options – the calculation accuracy is, for example, set by the command `enable_absolute_accuracy yes`.

The config.pro file of Creo can be located in three different folders:

– in the text directory (<*installdir*>*Common Files**text*),

– in the home directory,

© 2025 INNEO Solutions GmbH

– in the user directory (start directory of the user).

In this order Creo copies the configuration options defined there to a single config.pro file. If a configuration option is set more than once, the last entry is the valid option value, i. e. the config.pro file is read from top to bottom.

Configuration options can also be specified in another configuration file, the config.sup file. The options set there cannot be overridden by the options in the config.pro file.

The following configuration files determine the settings for a Creo application.

Configuration file	Function
config.pro	crucial configuration file of Creo contains settings for a user, e. g. – appearance of objects and of the graphics window – behavior when creating, saving or opening objects – units, tolerances, search paths and default directories – printing, import and export settings – settings for optional modules such as Pro/NC, Pro/Sheetmetal, Pro/Mold – layers and mapkeys If a configuration option is not defined, the default value will apply to Creo.
config.sup	contains settings that the user may not modify, i.e., that cannot be overwritten by the config.pro file, for example to ensure drawing standards
config.val	contains validation settings for data import
creo_parametric_customization.ui	contains UI customizations for a user
creo_parametric_admin_customization.ui	Created by administrator, contains UI customizations

5.20.1.2 Configuration blocks

By using GENIUS TOOLS Starter, configuration options are not written to the Config.pro file of Creo, but to different fragmented configuration files of GENIUS TOOLS Starter, called configuration blocks.

A configuration block for Creo Parametric:

© 2025 INNEO Solutions GmbH

– is a text file that must start with "config_" and

  · end with ".pro", e.g. *config_sut_de_c6p_dir_file.pro, config_c8p_mapkeys.pro* or

  · end with ".sup", e. g. *config_de.sup*.

– is one of many configuration files that are read by GENIUS TOOLS Starter and converted into a config.pro file for starting Creo,

– can contain one or more multiple Creo configuration options, i. e. settings for users,

– is not to be mistaken for the config.pro file of Creo, which exists only once,

– is also called config file.

Configuration blocks are created manually and distributed to the desired configuration layers: standard, units, projects and user. Thus they provide company-wide settings as well as settings for specific departments and projects. Take note of the Call sequence for files

There are two types of configuration blocks: simple and conditional, see Types of configuration blocks.

Create configuration blocks (.pro) for Creo Parametric

1. Create a text file in the desired configuration directory starting with *config_* and ending with *.pro*.
2. Write the configuration options for Creo Parametric.

Please note: For the correct display of German umlauts in GENIUS TOOLS Starter App, configuration blocks must be written in UTF8.

You can conveniently create and modify configuration blocks and Config.pro files using the add-on program GENIUS TOOLS Config Editor, which features color highlighting, auto-completion as well as error messages and which allows you to compare entries of two configuration blocks.

Example: Configuration settings for welding
Create a text file with the name *config_c9p_welding.pro*. Write:

```
pro_weld_params_dir              $GTS_DATA\library_dir\weld_params_dir
weld_fillet_preferences_file     $GTS_DATA\library_dir\weld_params_dir\iso.spwx
weld_plug_slot_preferences_file  $GTS_DATA\library_dir\weld_params_dir\iso.spwx
add_weld_mp                      yes
weld_color                       100 50 0
weld_ui_standard                 ISO
weld_ask_xsec_refs               no
weld_dec_places                  3
weld_edge_prep_driven_by         PART
weld_edge_prep_groove_angle      45
```


© 2025 INNEO Solutions GmbH

```
weld_edge_prep_groove_depth        6
weld_edge_prep_instance            YES
weld_edge_prep_root_open           1
weld_edge_prep_visibility          GENERIC
weld_geom_type_default             SOLID
```

Example: Create single project option for additional application GENIUS TOOLS for Creo

Create a text file with the name *config_1_lic_sim_live.pro*. Write:

```
! gts_display_name = GENIUS TOOLS for Creo
! gts_selection_name = GTFC
! gts_selection_default = true
! gts_is_selectable = true
protkdat   $GTS_CONFIGURATION_DIR\application\protk_gtfc.dat
```

When creating single project options, note that an exclamation mark (!) must be used as a comment character, e. g. *! gts_is_selectable = true*. See chapter Single project options.

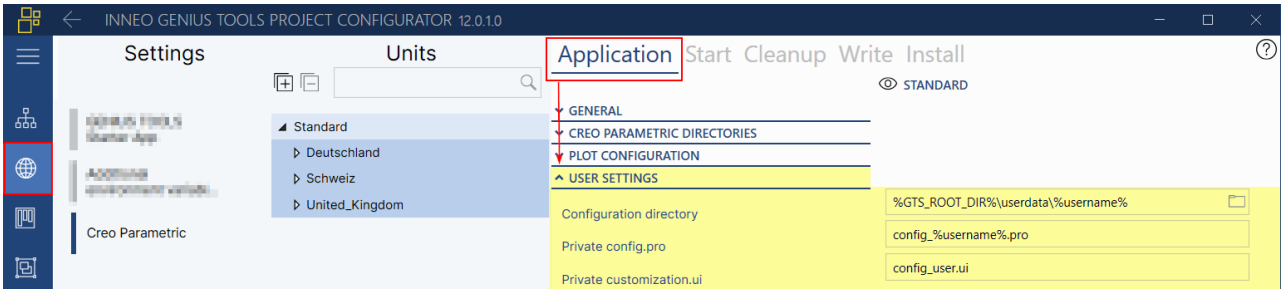
As well as the file *protk.dat* GENIUS TOOLS Starter supports the file *creotk.dat*.

5.20.1.3 User-driven configuration for Creo Parametric

Users may manage configuration blocks on their own, if granted the appropriate right, and are thus able to overwrite or append the settings established by the administrator. This is often done, for example, when working with user-defined mapkeys.

For a user to administer his or her own settings the configuration files have to be saved in the *userdata* directory, see chapter Userdata directory.

Define the storage location in GENIUS TOOLS Project Configurator under *Configuration* > *Settings: Creo Parametric* > *Select a group* > *Tab: Application* > *User settings*, as well as the notation of the private configuration block.



Entering path to the userdata directory and file names

▶ User Settings

Configuration folder

The configuration files of each user can be stored in the directory *userdata*.

© 2025 INNEO Solutions GmbH

Private config.pro
Name of a user-defined *config.pro* file, e. g. *config_%username%.pro*. It is appended to the *config_*.pro* files in the *users, projects, units* and/or *standard* directories.

Please note: For storing their private config.pro file, users must have write access to the userdata directory, as well as the access right *Can save personal Config.pro file* [to userdata directory] *on server*. See also Backup tab in GENIUS TOOLS Starter App.

Private customization.ui
Name of a user-defined *customization.ui* file, e. g. *config_user.ui*. It replaces any *customization.ui* file in the *users, projects, units* and/or *standard* directories. See also Backup tab in GENIUS TOOLS Starter App.

5.20.2 Use in complex organizations

For companies with complex structures GENIUS TOOLS Starter offers advantages through the following functions.

Company structure	GENIUS TOOLS Starter Functions	Procedure
Global distribution of locations	Working with satellites	See Installation Manual, chapter GENIUS TOOLS Starter Service.
	Working with Units	Creating units
Many departments and subdepartments	Map organizational structure	Creating subunits
Complex configuration for license distribution	Optimize Creo license distribution	Distribute Creo start keys (PSF key) automatically to user computers
	1. Define license server per project	Define license server per project
	2. Assign multiple base licenses or packages to a project	Provide several Creo startkeys (PSF key) for selection in the project

© 2025 INNEO Solutions GmbH

Company structure	GENIUS TOOLS Starter Functions	Procedure
	3. Assign selectable license extensions to individual projects	Create project options with configuration blocks
Many additional applications	Selectable options per project	Create project options with configuration blocks

5.20.3 Allocating Creo licenses with GENIUS TOOLS Starter

Companies that only have a few workstations may be able to maintain license files at each workstation individually, but as corporate structures grow this will be a tedious task: different workstations require different licenses, the expiration of licenses must be monitored, but most importantly an efficient assignment of licenses and license extensions to projects becomes difficult.

With GENIUS TOOLS Starter you can:

1. Specify license servers
You can assign one or more license servers to a project.

2. Assign licenses and license extensions to a project
Creo licenses can be made available to users in various ways, especially to minimize the number of projects and provide choices for users. See chapter Optimally assigning licenses.

3. Distribute Creo startkeys (license keys, PSF keys) automatically
You can distribute Creo startkeys automatically to all user computers. GENIUS TOOLS Starter copies all PSF files located in the configuration folder (Cadpool) of the user computer to the bin directory of the Creo installation folder. Alternatively, only those PSF keys that control a specific project can be copied. See chapter Start.

Automatic copying is greatly beneficial when changes are made to the PSF keys as the maintenance effort is reduced significantly.

4. Work offline by license borrowing
Borrowing licenses for a certain period of time is especially advantageous for mobile working. Users who have the right to borrow licenses can see the button in the Licenses tab in GENIUS TOOLS Starter App and can use it to start the license borrowing process of PTC.

© 2025 INNEO Solutions GmbH

5.20.3.1 Basic information

This chapter introduces Creo licenses and Creo startkeys.

Creo licenses

When purchasing Creo Parametric software from PTC, you receive a FlexNet license key (license key for FlexNet). This consists of the name of the base license and – if available – the numbers of the license extensions (modules), e.g. #116 for NC-SHEETMETAL, #339 for Mold Analysis.

1. **Creo Parametric base license**, e. g. Creo Foundation (*PROE_Foundation*)
   – is necessary to start Creo Parametric
   – depending on the purchased product, a base license can contain a list of modules and is then labeled **base license package**, e. g. Creo Advanced XE
2. **Creo Parametric license extensions** (also called license key features), e. g. Plastic Advisor (*134*)
   – extends a basic license (package) with functions
   – can be purchased separately
   – always requires a base license package
   – a **license extension package** contains several license extensions, e. g. Creo Advanced Assembly Extension (*AAX*)

Creo Parametric – together with the previous products Pro/ENGINEER and Wildfire – has been on the market for over 30 years. During this time many modules have been created and many products were sold by PTC and resellers. In addition, countless product packages were created as part of sales initiatives. Thus, it is hardly possible to keep track of all basic license packages and their diverse functions. As a result, all long-time users of Creo Parametric have a different license key architecture.

The following table lists some examples of products and their license keys.

Product	Description	License key
Creo Foundation	Base license	PROE_Foundation
Creo Advanced SE	Basic license package with the additional modules Surface, Design Animation, Modelcheck, Mold Analysis Lite and others	PROE_AdvSE

© 2025 INNEO Solutions GmbH

Product	Description	License key
Creo Advanced XE with AAX	Basic license package with the additional modules Assembly/AAX and other modules	PROE_FAPAAX
Assembly	License extension	6
Creo Advanced Assembly Extension (AAX)	License extension package with Notebook (0), Assembly (6), Process for Assemblies (97), WebLink (108), Creo Layout 3D Integration (292), Creo Options Modeler Basic (329)	PROBUNDLE_10119 0,6,97,108,292,329

Administrators of Creo Parametric have the task of correctly assigning existing as well as newly purchased licenses to users. In other words, administrator are faced with a license structure and have to set up the Creo Parametric startup options, i.e. the Creo startkeys, accordingly.

Creo startkeys (PSF keys)

A startkey is a configured start command that opens Creo with one or more specified licenses or license extensions.

Creo startkeys are created as PSF files and are located in the directory *<creoinstalldir>\Parametric\bin*. Startkeys are generated during setup with the PTC installation wizard or can be reconfiguared later (*<creoinstalldir>\Parametric\bin\reconfigure*). Refer to the Creo manuals from PTC for more information.

When the program starts, Creo reads the startkey to determine which licenses and extensions are to be searched for on which license server(s). This is defined in the environment variables PTC_D_LICENSE_FILE- and CREOPMA_FEATURE_NAME.

GENIUS TOOLS Starter intervenes in this process and

– *replaces* the PTC environment variables:
when settings are made in GENIUS TOOLS Project Configurator, i. e. for license server and base license specifications.

or

– *adds* additional information to the PTC environment variables:

© 2025 INNEO Solutions GmbH

when settings are entered into configuration blocks, i. e. for license extensions and other project options, such as add-on programs.

Assigning licenses to a startkey

Each startkey should contain information about the base license package and the license extensions. One startkey can contain several license extensions, as well as several base licenses.

Usually, multiple startkeys are created for Creo, since the same license structure is typically not available for all workstations. The actual number of startkeys required and the license information they contain depends on the procedure you choose to optimize license usage, as described in the next chapter.

Examples for license information in start keys:

Feature in der Datei *found.psf*: `ENV=CREOPMA_FEATURE_NAME=PROE_FOUNDATION ()`

Feature in der Datei *manikin.psf*: `ENV=CREOPMA_FEATURE_NAME=PROE_FOUNDATION (277 278)`

Feature in der Datei *AAX.psf*: `ENV=CREOPMA_FEATURE_NAME=PROE_AdvSE ()`

5.20.3.2 Determining license servers

If multiple license servers exist in an organization, you can assign one or more license servers to a specific project, unit or subunit.

You can also assign multiple license servers to a project and define the order in which the servers are accessed.

Example: For the unit United Kingdom the license server in the United Kingdom should be searched first and the license server in Asia last.

1. In the Resources main page create the resource Creo license server with the name *ALLSERVERS*, which contains all license servers, e. g. *7788@licserverUK;7788@licserverUS;7788@licserverAS*

   The order of the servers corresponds to the search query.

2. Go to the unit United Kingdom and select the license server *ALLSERVERS* in the tab *Start* in *Creo Settings*.

5.20.3.3 Optimally assigning licenses

There are three ways to use GENIUS TOOLS Starter to assign licenses and extensions to one or more projects.

– Method 1: Fixed assignment of a startkey to a project

– Method 2: Assigning several startkeys to one project

© 2025 INNEO Solutions GmbH

– Method 3: Assigning license extensions to a project

Choose the method according to the license structure.

The three methods can best be explained using an example.

Methods of license usage by example

The following example describes an optimal creation of Creo startkeys for different typical situations.

Assumptions: The license server CADLICENSES is used. Creo startkeys (PSF keys) are created by default with the PTC Setup or edited with "reconfigure". They are located in the bin folder of PTC, e. g. *PTC\Creo 8.0.0.0\Parametric\bin*.

Initial scenario: One type of license
A company employs 10 Creo users and has 10 "Creo Foundation" base license packages.

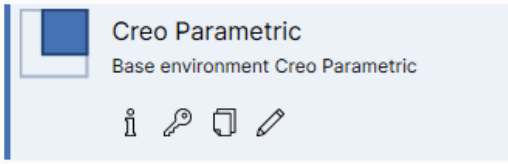
Solution / **Method 1**: You require one Creo startkey which is assigned to one project.

– Content of the file *parametric.psf:*

```
ENV=PTC_D_LICENSE_FILE-=7788@cadlicenses
ENV=CREOPMA_FEATURE_NAME= PROE_Foundation ()
```

– In GENIUS TOOLS Project Configurator, assign the startkey *parametric.psf* to the project *Creo Parametric*. (Consult the chapter Assigning Creo licenses to projects for a step-by-step guide).

Result: 10 users can start the project without any options.



Scenario A: Several types of licenses
Two construction engineers join the team. The base license package "Creo Foundation" no longer exists, so the base license package "Creo Advanced SE" is purchased.

Situation: There are 10 Creo Foundation base license packages and 2 Creo Advanced SE base license packages for 12 users.

Solution / **Method 1**: The existing PSF key is extended.

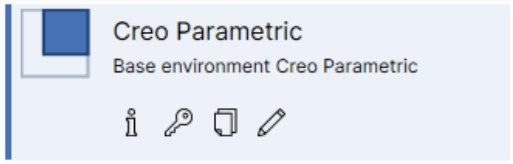
– In the *parametric.psf* file the license specification for Creo Advanced SE has to be added:

```
ENV=PTC_D_LICENSE_FILE-=7788@cadlicenses
ENV=CREOPMA_FEATURE_NAME= PROE_Foundation PROE_AdvSE ()
```

– No editing needed in GENIUS TOOLS Project Configurator for the 12 users to work.

© 2025 INNEO Solutions GmbH

Result: 12 users can start the project without any options.



Result: The project is started without any selections in the GENIUS TOOLS Starter App user component.

Scenario B: One license type with license extension package
The top-down technology (skeleton models, reference control etc.) is to be used. For this purpose, two license extension packages "Creo Advanced Assembly Extension" (AAX) are purchased.

Situation: There are 10 Creo Foundation base license packages and 2 AAX license extension packages for 10 users. Creo Parametric can be started without AAX and with AAX (but only 2 times).

Solution: You can use all three methods. For all of them users are given the option to start a project with or without an AAX license extension.

– Content of *parametric.psf* (as in initial scenario):

```
ENV=PTC_D_LICENSE_FILE-=7788@cadlicenses
ENV=CREOPMA_FEATURE_NAME= PROE_Foundation ()
```

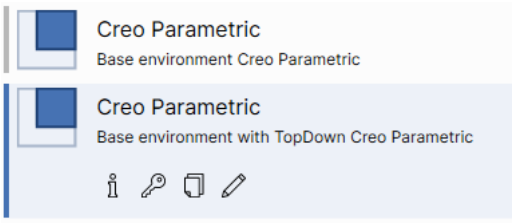
– For methods 1 and 2, a second startkey is created with the content:

```
ENV=PTC_D_LICENSE_FILE-=7788@cadlicenses
ENV=CREOPMA_FEATURE_NAME= PROE_AdvSE (0 6 97 108 292 329)
```

Method 1: Assigning a startkey permanently to a project.

– GENIUS TOOLS Project Configurator a new project is created with the second Creo startkey *aax.psf*.

Result: Two projects can be started without any options.



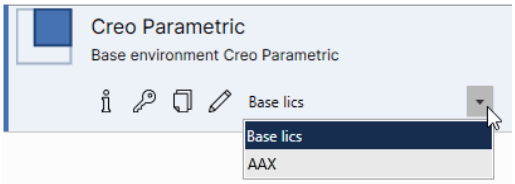
Hint: Project permissions can be used to grant selected users only the right to see the project with AAX.

Method 2: Assigning multiple startkeys to a project.

– The second startkey *aax.psf* is assigned to the project. (See Projects with several startkeys to choose from).

© 2025 INNEO Solutions GmbH

Result: The project has an option for selecting the Creo startkey.



Method 3: Assigning license extensions to a project

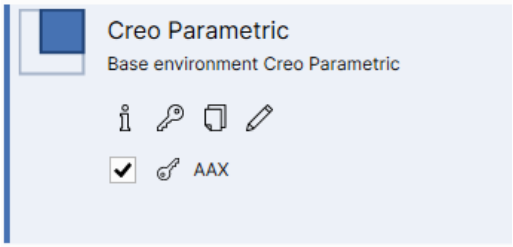
– The *aax.psf* startkey is not used.

– Create a configuration block in the project folder which contains information about the AAX license extension package. (See chapter Single project options for details).

– Contents of the *config_aax.pro* file:

```
! gts_creo_lic = 0 6 97 108 292 329
```

Result: The project has an option for selecting the AAX license extension (checkbox).



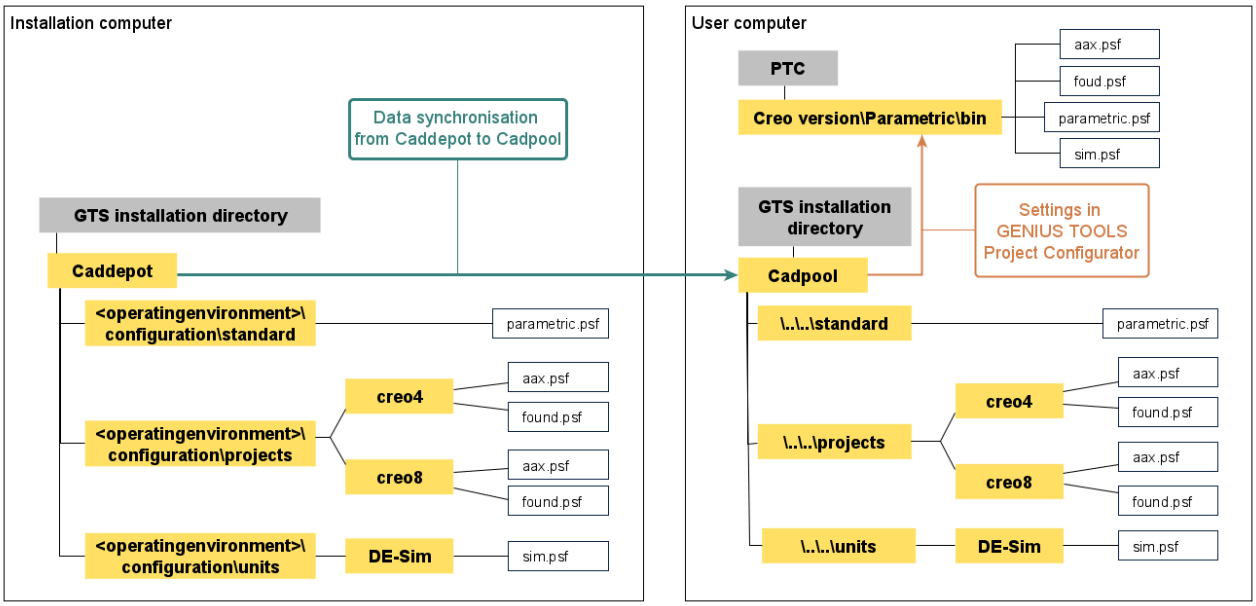
Tabular overview of license usage methods:

	Method 1	**Method 2**	**Method 3**
Description	Fixed assignment of a startkey to a project	Assigning several startkeys to one project	Assigning license extensions to a project
Project options in GENIUS TOOLS Starter App	No options for project	Selecting a startkey from a list of startkeys	Activating one or more project option(s)
Settings	*Projects* > *Application* > *Project* > *Tab: Start* > *Creo startkey*	*Projects* > *Application* > *Project* > *Tab: Start* > *Creo startkey configuration*	Creating a configuration block (config_*.pro) in a configuration directory
Advantage	Quick provision of a simple configuration	Number of projects is minimized	Number of projects is minimized significantly

© 2025 INNEO Solutions GmbH

5.20.3.4 Automatic distribution of Creo startkeys

You can automatically distribute Creo startkeys (PSF keys) to all user computers. GENIUS TOOLS Starter copies all PSF files located in the configuration directory (Cadpool) of the user computer to the bin directory of the Creo installation directory of the user computer. The files are copied to the bin directory of the Creo version that is assigned to the project.



Automatic copying is useful when PSF keys were edited. The maintenance effort is significantly reduced.

The function to copy startkeys is activated in GENIUS TOOLS Project Configurator in the menu item *Configuration* under *Creo Settings* > *Tab: Start* > *Dialog: Creo startkey*. There you can choose:

- whether all Creo startkeys are copied to the bin directory or
- whether only project-relevant startkeys are copied to the bin directory oder
- whether the bin directory is cleaned up before, i. e. all startkeys are deleted before copying. (This is only possible for startkeys in the units and users directories).

The startkey used for the project depends on the call hierarchy for configuration blocks.

5.20.4 Installing Creo on user computers

Concept

The installation of Creo Parametric can be configured by providing a Creo setup that is synchronized on all user computers. Installing can then be done automatically or manually.

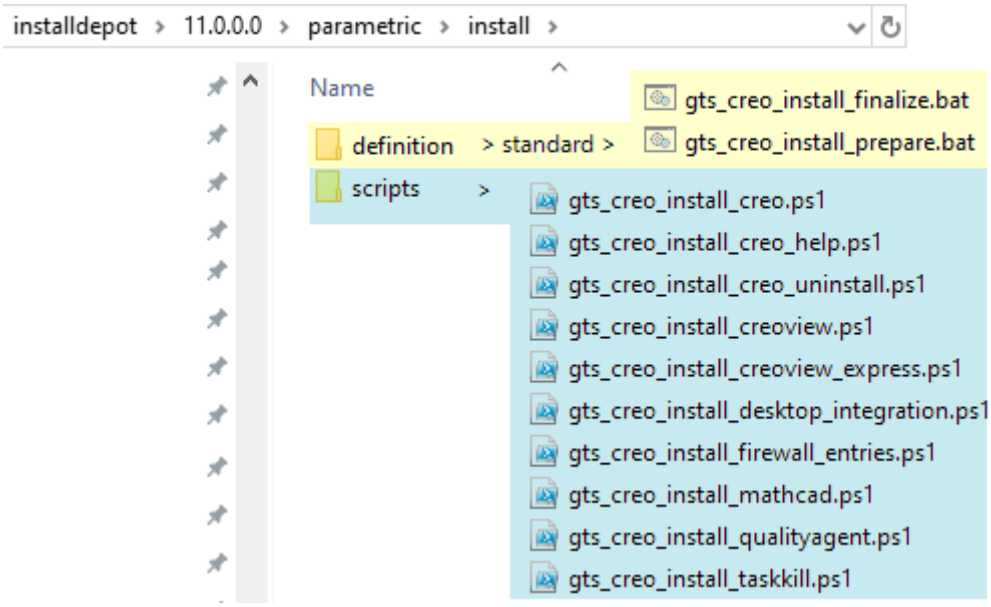
© 2025 INNEO Solutions GmbH

– Automatic installation: The installation is started when Starter projects are fully synchronized and validated.
– Manual installation: The installation is started when you double-click on the corresponding project.

Warning: If the path to the setup folder is incorrect, users cannot open Creo Parametric projects in GENIUS TOOLS Starter App.

Prerequisites

All folders required for the installation are located under *caddepot/<operating environment>/parametric/install*. This folder structure is supplied and should not be changed so that Creo can be installed without any problems. In addition, certain files must be stored in this folder so that they can be executed correctly. There is a separate folder with installation definitions for each Creo main version.



Predefined folder structure:

© 2025 INNEO Solutions GmbH

Folder	Subfolder	Contents and meaning
definitions	standard* > add_files** > creoX > XML > creoX > XML > help_creoX*** > setup The following files are located directly under standard: *gts_creo_install_finalize.bat* *gts_creo_install_prepare.bat*	*The folder standard is a complete template with all folders and subfolders for the installation of Creo version 7-11. This folder can be copied and renamed for units. ** The folder add_files is optional. *** A setup and an XML file can also be stored for the help.
scripts	–	The following files are located here: Scripts required to execute the Creo installations. Do not copy or change any files in the scripts folder!

Please note: The required batch files – *gts_creo_install_finalize.bat* and *gts_creo_install_prepare.bat* – run before and after the start of the setup under the logged-in user, i. e. not under admin access rights.

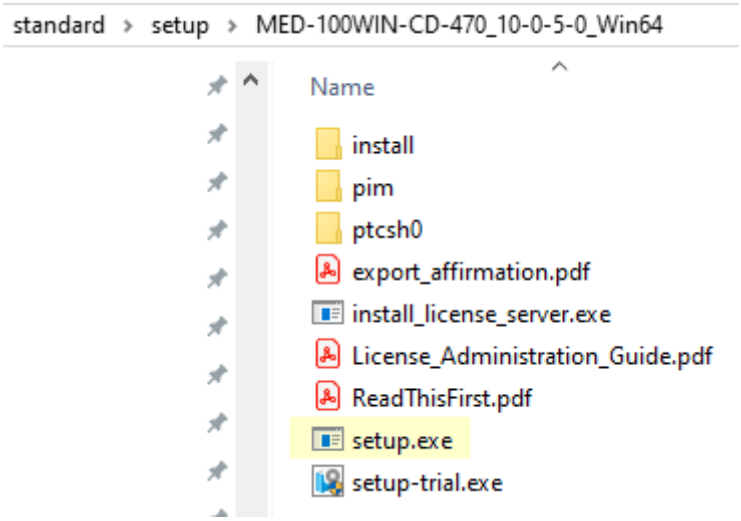
Procedure

The installation of Creo Parametric is configured as follows.

Please note: There is no hotline support for setting up the installation of Creo Parametric, e. g. Creo setups and assigning Windows rights.

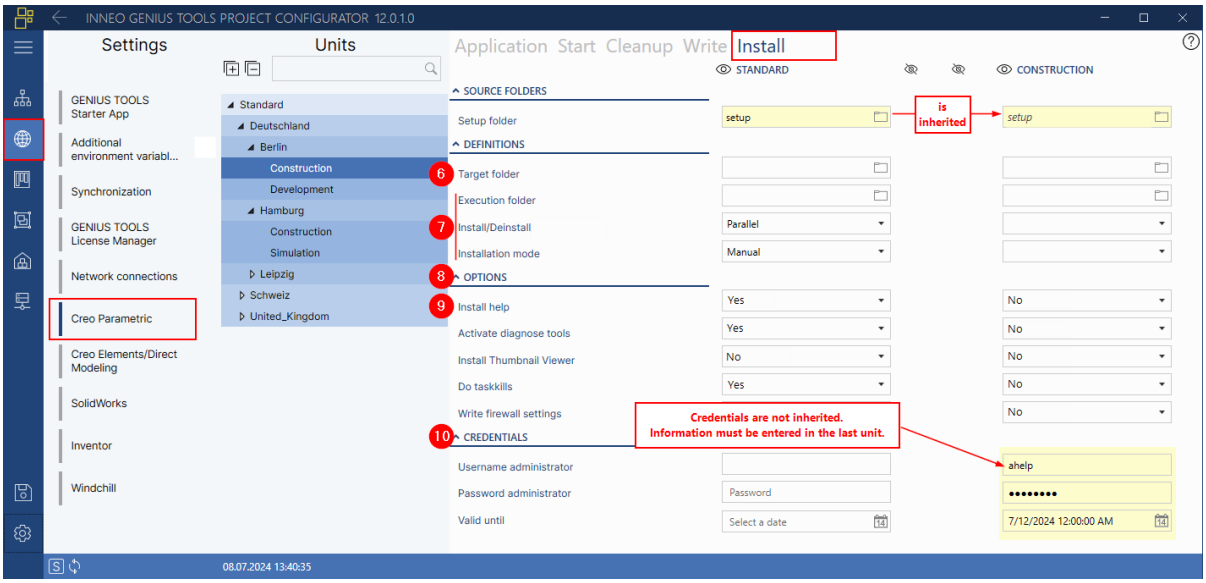
1. Under *caddepot/<operating environment>/parametric\install\definitions\<standard or UnitDirectory>* are all folders you need for a Creo installation. These must be filled with the required files.
   a. In the event that unit-bound different installations are to be executed, the folder structure must be copied from the *standard* folder to unit level.
2. Download the Creo Parametric setups to any computer. Save this setup under *standard* > *setup* > *Setup-Name* > *setup.exe*.

© 2025 INNEO Solutions GmbH



3. Start the *setup.exe* from the Creo installation directory and complete the entire Creo setup including the installation in any directory.
4. Copy the following XML files and paste the files into the caddepot of your operating environment for the Creo version from which you copied the XML files:
   a. *<CreoInstallationTargetDirectory>\Creo<CreoVersionNumber>*[...]
      i. [...]*Common Files\bin\pim\xml* > Copy file *creobase.p.xml* to *\XML\creo<CreoVersionNumber>*
      ii. [...]*Parametric\bin\pim\xml* > Also copy file *pma.p.xml* to *\XML\creo<CreoVersionNumber>*
5. If you need additional files for the setup, e. g. PSF keys, copy these to the directory *add_files\Creo<CreoVersionNumber>*.
6. In menu item *Configuration* under *Creo Parametric* > *Tab: Install*, select the setup and target directory for the global settings (default) or a unit. You can only enter "setup", in which case the front file path is selected automatically.
   a. For a setup from a synchronized resource, enter the path accordingly: e. g. `%GTS_ROOT_DIR% ...`

© 2025 INNEO Solutions GmbH



7. Define how Creo is installed in the section *Definitions*.

Execution folder

Enter the execution path.

Install / deinstall

Upgrade: The old Creo version in the target directory is replaced. Enter the installation directory of the previous version as the target directory.

Parallel: All versions are kept.

Deinstall: The version configured in the project is deinstalled.

Installation mode

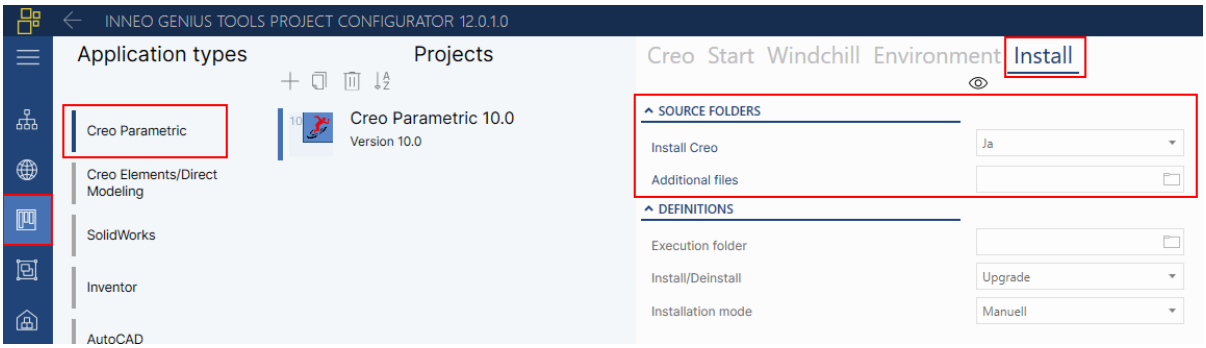
Manual: Setup is executed when the user starts a project in GENIUS TOOLS Starter App.

Automatic: Setup is executed when the setup for the defined Creo version is available on the computer and the project is validated.

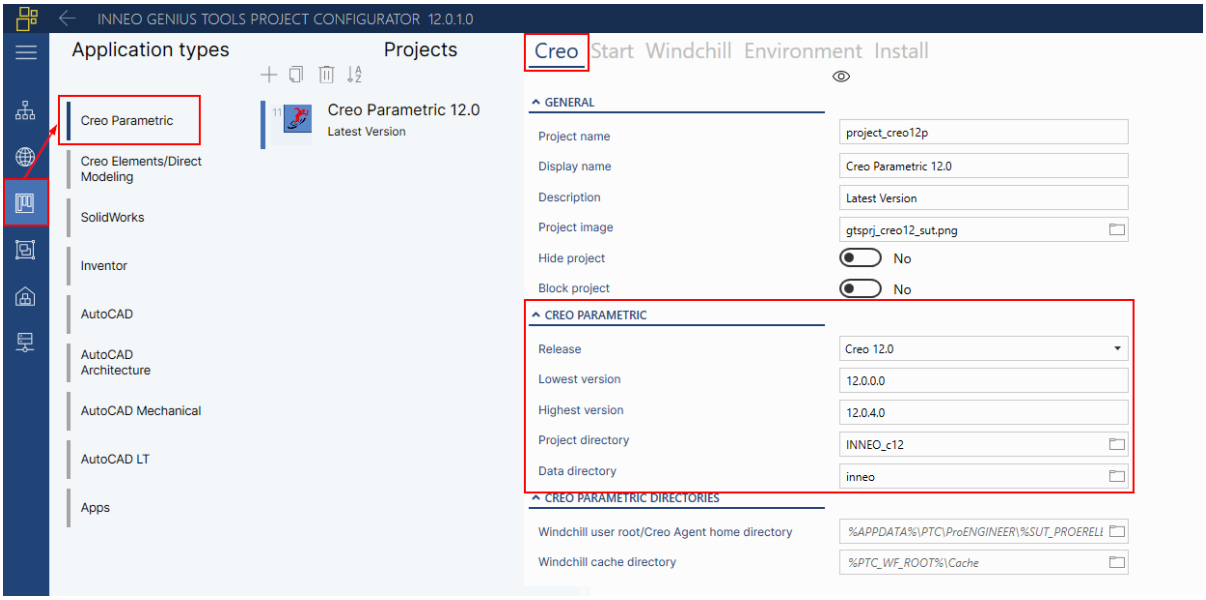
Warning: *Deinstall* can only be executed with the Installation mode *Manual*.

8. You can also make further specifications for global settings and units: Select additional functions to be installed in the section *Options*, see Installing.
9. A setup and an XML file can also be stored for the help. Also set *Install help* to *Yes*.
10. Enter the administrator's access data and optionally a validity date for the access data for the desired unit in the section *Credentials*. Please note that the credentials are only taken from the last subunit, i. e. if setups are to be carried out in several units, *Credentials* must be entered in each of these units.
11. Go to the menu item *Projects* > *Creo Parametric*:
    a. In the *tab: Install* > *Source folders*, specify that Creo Parametric is to be installed for this project. If no entries are made, the information from the menu item *Configuration* is loaded.

© 2025 INNEO Solutions GmbH



b. In the *tab: Creo*, use the information for the lowest and highest version in the section *Creo Parametric* to restrict the automated Creo installations to permitted versions only.
If a Creo version with the same release is already installed and you are installing a minor update, you must enter the lowest and highest version.



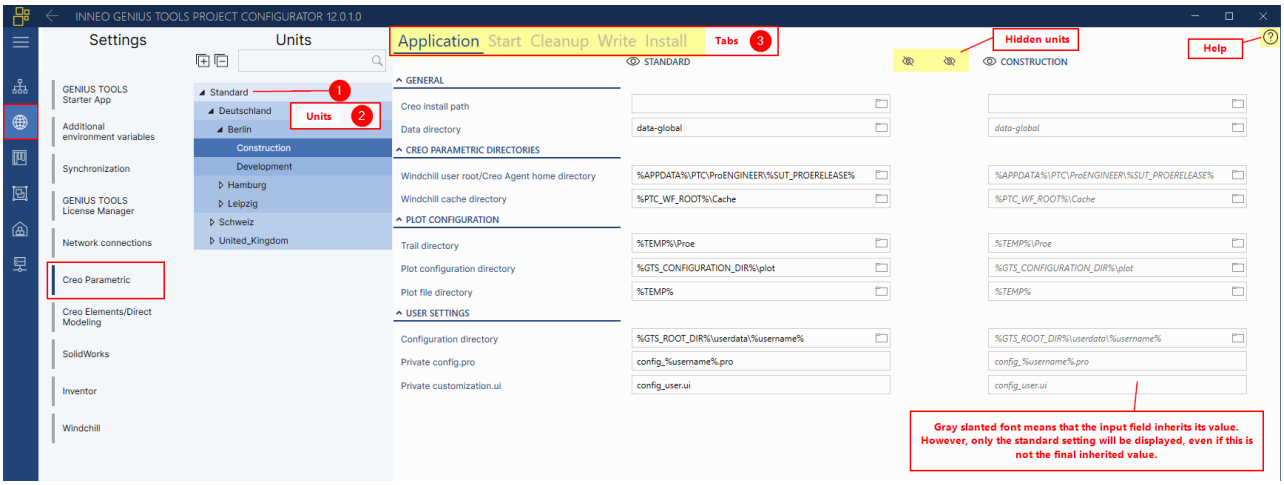
12. Save the settings in the Project Configurator. GENIUS TOOLS Starter checks whether a new setup is available and installs it.

5.20.5 Unit settings

In the main page Configuration you can define the behavior of Creo Parametric. You can set the behavior here for the system-wide standard (1) as well as for units (2) and groups (3).

To switch between tabs click on Application, Start, Cleanup or Write (4).

© 2025 INNEO Solutions GmbH



The Application tab in the Creo Parametric settings dialog.

Please note: If an input field inherits values from the higher-level configuration levels, you will still only see the global default value displayed in gray.

You can also specify settings directly for individual projects, which will overwrite the data specified here for a unit. (*Projects* > *Creo Parametric* > *Select project* > *Creo tab.)*

For general information on units, see the chapter Configuring heterogeneous environments: and for the inheritance of settings go to the chapter Call sequence for settings.

5.20.5.1 Application

▶ Startup Settings

Creo install path
You can specify a directory on the user computer where Creo is installed, or leave the field empty, which means the installation directory is searched for automatically from the local Windows registry and the Creo version is used as specified in the project settings. For more information consult the chapter CAD-specific project settings.

Please note: It is generally recommended to have the installation path be determined from the local Windows registry.

Data directory
Enter the data directory to be used. The data directory is the main directory of an operating environment containing Creo-related data.
The following data is stored in the data directory:

- ***Libraries:*** all library parts and their directories with MNU file
- ***Configuration:*** bend table, search.pro, hole chart, DTL file for drawing representation, DMT file for colors in Creo, FMT file for displaying parts lists in the browser
- ***Materials:*** material files for Creo in the MAT format

© 2025 INNEO Solutions GmbH

- ***ModelCheck:*** configuration files for ModelCheck
- ***NC:*** templates and configurations for NC machining.
- ***Drawings:*** files for drawing frames, notes and symbols

Please note: The files *config_*.pro*, *config_*.sup* and *customization.ui* can be stored separately from the data structure due to their potential multiple use. If you want to use project-specific configuration files, set the folder for them as the project folder in *GENIUS TOOLS Project Configurator* > *Projects* > *Creo*.

▶ Creo Parametric directories

The input fields are described in the chapter Workspace for Windchill.

▶ Plot Configuration

Trail folder
Creo trail files, recording all production steps, are written to this directory, e.g. *%TEMP%\Proe*.

Plot configuration folder
This directory contains the configuration files (PCF and PNT) for the plotters, e.g. *%GTS_ROOT_DIR%\parametric\configuration\plot*.

Plot file folder
Directory on the workstation in which Creo stores the plot files. e.g: *C:\Temp*.

▶ User Settings

Configuration folder
The configuration files of each user can be stored in the directory *userdata*.

Private config.pro
Name of a user-defined *config.pro* file, e. g. *config_%username%.pro*. It is appended to the *config_*.pro* files in the *users, projects, units* and/or *standard* directories.

Please note: For storing their private config.pro file, users must have write access to the userdata directory, as well as the access right *Can save personal Config.pro file* [to userdata directory] *on server*. See also Backup tab in GENIUS TOOLS Starter App.

Private customization.ui
Name of a user-defined *customization.ui* file, e. g. *config_user.ui*. It replaces any *customization.ui* file in the *users, projects, units* and/or *standard* directories. See also Backup tab in GENIUS TOOLS Starter App.

5.20.5.2 Start

In the Start tab you can define the start behavior of Creo Parametric for a unit.

© 2025 INNEO Solutions GmbH

For managing the behavior of a single project, go to the *Start* tab in *Projects* main menu.

▶ Startup Settings

Startup directory
Enter the working directory of Creo.

Language
The language in which the application starts can be specified. If no setting is selected, the application will select the operating system language automatically.

<not specified / empty>: GENIUS TOOLS Starter does not create a language variable (`LANG`) on the application computer (recommended).

System: The country-specific settings of the operating system are adopted.

<language>: This language is used, and the language variable `LANG`, if defined on the application computer.

Show only installed languages
By default only languages of installed versions are displayed in the drop-down menu (see above setting).

Yes: Menu contains only installed languages.

No (default): Menu contains all languages supported by the application.

Enable stop batches

Yes: Additional batch files can be executed after Creo has been stopped.

No: No stop batch files can be executed after Creo has been stopped.

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.

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

Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

Activate Creo Update Notifier
Specify whether a notification should be displayed in Creo Parametric when new versions are available, including information about new functions.

Yes: The notifier from Creo appears. The environment variable CREO_MOR_NOTIFY_DISABLE is set to "false".

No: No notifier. The environment variable CREO_MOR_NOTIFY_DISABLE is set to "true".

▶ License Borrowing

Maximum duration
Specify for how many days licenses may be borrowed at most. Please note that in Creo, the maximum borrow duration is determined by the environment variable `LM_BORROW_DURATION`. Project Configurator does not check whether the value you enter is valid for Creo.

© 2025 INNEO Solutions GmbH

Default duration
Specify the borrow duration in days that is set as the default when a user borrows licenses.

▶ Creo Startkey Synchronization

Copy Creo startkeys
GENIUS TOOLS Starter copies all Creo license keys (PSF files), which are located in the operating environment of the user computer (cadpool), to the BIN directory of the user computer or – from Creo 10.0.2.0 – to the TEMP directory, if copying into the BIN directory fails. For each PSF file, a matching BAT file is created automatically. If you only want to copy startkeys required for a specific project to the application computers, set *Copy project-related startkey only* to *Yes*.

Yes: Up to Creo 10.0.1.0 all Creo startkeys located in the directory *configuration* or *userdata* are copied to the BIN directory of the Creo installation before project selection.
From Creo 10.0.2.0 all Creo startkeys that cannot be copied to the BIN directory are copied to the TEMP directory. The environment variable USES_TEMP_PSF_LOCATION is set.
Yes, cleanup before: All startkeys in the BIN directory of the specified Creo version or the TEMP directory are deleted before the copy process, except *cocreatesim.psf* und *gts.psf*. This option can only be set for units, not for projects.

Warning: Setting this option may lead to invalid projects, if no Creo startkey(s) are copied.

No: Creo startkeys will not be copied. USES_TEMP_PSF_LOCATION is not set.

Copying behavior
Define, whether all or only the startkey required for the selected project are copied. This option can only be used if the above option *Copy Creo startkey* is set to *Yes*.

All: All startkeys are copied.
Only project-related: Only the project relevant startkey(s) are copied to the BIN directory or – from Creo 10.0.2.0 – to the TEMP directory, if copying into the BIN directory fails.

▶ Creo License Servers

Creo license server
Select the Creo license servers to be used for the selected unit. The list is created in *Resources > Creo license servers*.

No selection (default): The license server, which is specified in the Creo startkey, is used.

© 2025 INNEO Solutions GmbH

▶ Licenses

Show licenses
Specifies whether the licenses specified in a project are displayed in the licenses tab of GENIUS TOOLS Starter App.

Yes: Creo licenses are listed. The license status is not obtained; validation is possible by using the see licenses function.
No: Creo licenses are not displayed. The settings *Get extensions*, *Calculate licenses by extension* and *Identify license users* can not be utilized.

PTC license reusable per host
State whether your PTC licenses can be used several times.

Yes: Use this option if you have DUP_GROUP in your PTC license file. The license validation will calculate the free PTC licenses in a way that PTC licenses that are already in use by another session on the same application computer will show an amount of at least one, making the project valid.
No: Use this option if you are unsure or cannot find DUP_GROUP in your PTC license file.

Please note: For this option to produce the correct result, the PTC license must contain the keyword DUP_GROUP according to CS234779. This information cannot be determined by GENIUS TOOLS Starter App.

Get extensions
Define whether extensions should be queried. To use this setting, *Show licenses* has to be set to *Yes*.

Yes: In addition to the basic license, extensions are also queried on the license server.
No: Only the basic license is queried.

Calculate licenses by extensions
Define whether a free license is calculated based on the basic license or on extensions. To use this setting, *Get extensions* has to be set to *Yes*.

Yes: Extensions are also used for license calculation.
No: Licenses are calculated on the basic license.

Identify license users
Define whether users of a license are identified.

Yes: User names are displayed on the client as a tooltip of the corresponding license name. The GTS alias as defined under *Resources* > *User* is used.
No: No user names are obtained or displayed.

Please note: To display the name, the user names must be configured via *Resources* > *Users*. Otherwise, the Windows user name is displayed

© 2025 INNEO Solutions GmbH

Timeout for FlexNET server

Enter a maximum duration for the license query in seconds. The license servers are pinged before the license query is started. If the server does not respond to the ping, the query will still be executed.
The duration you enter is also used as a maximum time for the license query.
If you expect licenses to be unavailable form time to time, set the timeout to 0, which means that there is no timeout specified.

Default: 0 (no timeout specified)

▶ Creo Startkey Configuration

The query for license keys corresponds to the general query sequence: Standard > Unit > Subunit > Project. See chapter Assigning Creo licenses to projects.

Default Creo startkey
Specify the license key (PSF file) of the respective Creo installation, which is defined in the Creo tab under *Release*. If multiple startkeys are permitted for a project in the section *Creo startkeys* below, the input field changes to a drop-down menu.

Please note: If the Creo startkey is not in the BIN or TEMP directory on the user computer, the user cannot use it.
If a startkey cannot be found on the user computer, the project becomes invalid. The display of invalid projects can be defined, see chapter *Marking faulty projects* > *Invalid projects*.

Empty field: The default Creo startkey is inherited from the higher configuration layer.
Enter a PSF file: You can either enter a file name (e. g. parametric.psf) or a complete path (e. g. *D:\PTC\Creo 9.0.0.0\Parametric\bin\parametric.psf*) or you can tick a box in the section Creo startkey configuration below.
Drop-down menu: - *Subscription* - Appears, if multiple startkeys are checked in the Creo startkeys section below.
– ***Select Creo startkey:*** This startkey is the default startkey in the selection menu of GENIUS TOOLS Starter App.
– ***Last used:*** GENIUS TOOLS Starter App starts Creo with the startkey last used for this project.

Please note: If you want a unit or project to inherit multiple Creo startkeys from the higher configuration layer (empty field), no drop-down menu with the selection *Last selected* will appear. However, you can create this option by entering a text that does not end with ".psf" in the input field, e. g. *Last selected* or *Abcd*.

© 2025 INNEO Solutions GmbH

Creo startkeys - *Subscription* -
The startkeys displayed here are the startkeys created under *Resources* > *Creo Startkeys*. If you select several startkeys, that should be available for a Creo Parametric project, a drop-down menu (project option) is created in GENIUS TOOLS Starter App that displays as default value either a specific Creo startkey or the last startkey used for this project – depending on the setting in the upper section *Default Creo startkey*. See Using project options.

5.20.5.3 Cleanup

Configuration files of Creo Parametric are not overwritten by default. If a new file is to be created, a previous deletion of the old configuration file is necessary. Here, you can manage the cleanup settings of GENIUS TOOLS Starter App for Creo projects.

▶ Text Directory

Config.pro, Config.sup, Customization.ui and – from Creo version 11.0.0.0 – Mapkeys.pro
Defines whether these configuration files are deleted or retained in the text directory of a Creo installation.
Yes: Delete
No: Retain

Please note: Make sure the user has access rights to delete files in the text directory of a Creo installation. This will be of special importance if Creo is installed in *Programs*.

▶ Home Directory

Config.pro
Determines whether this configuration file in the user's home directory is deleted or retained.
Yes: Delete
No: Retain

Customization.ui and – from Creo version 11.0.0.0 – Mapkeys.pro
Determines whether these files in the directory *.Settings* in *PTC_WF_ROOT* are deleted or retained.
Yes: Delete
No: Retain

▶ Startup Directory

Config.pro, Customization.ui, Config.val
Define whether these configuration files are deleted or retained in the start directory of a Creo installation.
Yes: Delete

© 2025 INNEO Solutions GmbH

No: Retain

▶ Alternative Path

Config.pro, Config.sup, Creo_parametric_admin_customization.ui and – from Creo version 11.0.0.0 – Mapkeys.pro
Define whether these configuration files in the alternative target directory are deleted or retained.

Yes: Delete
No: Retain

5.20.5.4 Write

Configuration files for Creo can be located in three different places, which can affect the configuration of Creo. Here, you can influence the copy settings of GENIUS TOOLS Starter and define target directories.

Warning: A new configuration file will only be written if no configuration file is yet stored at the location. Use the settings in the *Cleanup* tab to avoid difficulties.

▶ Target Directories

Use alternative path (from 9.0.2.0)
As of Creo version 9.0.2.0, it is possible to write the Creo configuration files *config.pro, config.sup* as well as *creo_parametric_admin_customization.ui* in a directory other than Text, Home or Start.

Yes: The alternative path below is used and the environment variable PTC_CREO_ALT_SETTINGS_PATH is set. The target directory for the file *config.pro* is no longer used for version 9.0.2.0 and later. For projects of older Creo versions, the config.pro file is written to the target directory up to 9.0.1.0 and the config.sup file is written to the text directory.
No: Do not use an alternative path.

Alternative path
Specify a directory for which users have write access. The directory is displayed in the Info tab of GENIUS TOOLS Starter App.

Config.pro location (up to 9.0.1.0)
Select the directory to which the *config.pro* file will be copied. If no directory is selected, the file will be copied to the home directory.

Text: The *config.pro* file is copied to the text directory of the Creo installation.
Home (Default): The *config.pro* file is copied to the home directory of the user.
Start: The *config.pro* file is copied to the startup directory.

© 2025 INNEO Solutions GmbH

Please note: Make sure the user has access rights to create files in the text directory of a Creo installation. This will be of special importance if Creo is installed in the *Programs* directory.

UI file location
Select the directory to which the *customization.ui* file will be copied. If no directory is selected, the file will be copied to *PTC_WF_ROOT*.

PTC_WF_ROOT: The file *creo_parametric_customization.ui* is copied to the Settings directory in *PTC_WF_ROOT*. If the file *creo_parametric__admin_customization.ui* exists and no alternative path is specified from Creo version 9.0.2.0 and later, it will be copied to the text directory.

Start: When existent, the *creo_parametric__admin_customization.ui* file is copied to the text directory. The *creo_parametric_customization.ui* file is copied to the Creo startup directory.

Please note: If Creo is to read the *customization.ui* file from the startup directory, the following option must be set in the *config.pro* file: `load_ui_customization_run_dir yes`.

▶ Config Handling

Specify whether the following configuration files should be written.

Please note: To copy current configuration files, the corresponding files in the target directory have to be deleted first (see *Cleanup* tab). This makes sure that the *config.pro* settings defined by the administrator will always be used.

Config.pro

Yes: A *config.pro* is compiled and copied to the target directory unless a *config.pro* file exists there already.

No: Writing *config.pro* is skipped.

Transfer mapkeys from config.pro (from 11.0.0.0)
As of Creo version 11.0.0.0 mapkeys must be saved in a separate file. GENIUS TOOLS Starter can extract existing mapkeys and create the new mapkey file *mapkeys.pro*. If the home or start directory is specified as the Config.pro target directory, the mapkeys are created as user mapkeys, otherwise they are created as administrator mapkeys.

Yes: Mapkeys from the *config.pro* file are extracted if there are no mapkeys in *config.sup*.

Yes, transfer all: Mapkeys from the *config.pro* file are extracted, if mapkeys are found in *config.sup*.

No: No support by GENIUS TOOLS Starter. Creo automatically loads user or administrator mapkeys into the mapkeys dialog, but does not create a mapkeys file for administrators. A message window appears.

© 2025 INNEO Solutions GmbH

Config.sup

Yes: If a *config.sup is* found in the project folder, it will be copied to the target directory unless a *config.sup* file exists there already.
No: Writing *config.sup* is skipped.

Transfer mapkeys from config.sup (from 11.0.0.0)

As of Creo version 11.0.0.0 mapkeys must be saved in a separate file. GENIUS TOOLS Starter can extract existing mapkeys and create the new mapkey file *mapkeys.pro*. The mapkeys are created as administrator mapkeys.

Yes: Mapkeys from the *config.sup* file are extracted and written to the text directory, or if defined, to the alternative path.
No: No support by GENIUS TOOLS Starter. Creo automatically loads administrator mapkeys into the mapkeys dialog, but does not create a mapkeys file. A message window appears.

Customization.ui

Yes: If a *customization.ui* is found in the project folder, it will be copied to the target directory unless a *customization.ui* file exists there already.
No: Writing *customization.ui* is skipped.

Config.val

Yes: If a *config.val* is found in the project folder, it will be copied to the target directory unless a *config.val* file exists there already.
No: Writing *config.val* is skipped.

5.20.5.5 Installing

In the *Install* tab, you define how Creo Parametric setups are executed on user computers. First create a template setup. Consult chapter Installing Creo on user computers for step-by-step instructions.

▶ Source Folders

Setup folder

Enter the directory that contains the Creo Parametric and Help setups: \\<*mainservername*>*caddepot*\<*operatingenvironmentname*>*parametric**install**definitions**standard**setup*. There must be at least one subfolder under Setup. The file *setup.exe* is searched for in the first three levels of subfolders.

▶ Definitions

Target directory

Specify the directory to install on user computers.

Execution folder

Enter the execution path.

© 2025 INNEO Solutions GmbH

Install / deinstall

Upgrade: The old Creo version in the target directory is replaced. Enter the installation directory of the previous version as the target directory.
Parallel: All versions are kept.
Deinstall: The version configured in the project is deinstalled.

Installation mode

Manual: Setup is executed when the user starts a project in GENIUS TOOLS Starter App.
Automatic: Setup is executed when the setup for the defined Creo version is available on the computer and the project is validated.

Warning: *Deinstall* can only be executed with the Installation mode *Manual*.

▶ Options

Install help
Determines whether the help is installed.

Install diagnostic tools
Determines whether Creo diagnostic tools are installed.

Install Thumbnail Viewer
Determines whether the thumbnail viewer is installed.

Activate taskkill
Defines whether potentially disruptive Creo processes are terminated.

Write firewall entries
Defines whether Creo is allowed to pass through the firewall.

▶ Credentials

Username and password of the administrator
Enter the Windows access data with admin rights. Domain users must enter the spelling `username@domain`. Local users only enter the user name.

Validity
Enter an expiration date for the validity of the access data.

5.20.6 Project settings

Project settings are the specifications you make in the main page *Projects* under *Applications* > *Creo Parametric* in the tabs *Creo, Start, Windchill and Environment*.

After having created a new project with the general project specifications, fill in the following input fields. These entries overwrite both the unit-specific entries and the standard settings for the startup behavior of the application, which are made under *Configuration* > *Creo Parametric* > *Tabs: Application / Start*. For more information, see the chapter Configuration concept.

© 2025 INNEO Solutions GmbH

5.20.6.1 Settings for Creo projects

After having created a new project, specify the following settings in the *Creo* tab.

▶ Creo Parametric

Release
Defines the Creo Parametric version to be used. A path can be configured, or determined automatically from the registry of the application computer. See Installation directories of a CAD application.

Fixed path: Select the Creo directory from the drop-down menu. This may differ from the Creo directory for the global standard settings. Without a directory defined here, the settings for the standard unit will be used. (See *Configuration* > *Creo Parametric* > *Unit: Standard* > *Application* > *General* > *Startup settings* > *Creo install path)*.

Creo versions: It is possible to preset the Creo version. If you select Creo 9, for example, the installation directory for the latest Creo 9 release on the application computer will be determined from the registry.

Please note: Creo has to be installed locally on the application computer in order to have registry entries available. The user has to have read permission in HKLM.

Lowest version (optional)
Select the lowest usable version. There is a dropdown list for versions up to Creo 4. Starting with Creo 5, enter the required version manually in a four-digit format such as *10.0.1.0*.

Highest version (optional)
Select the highest usable version. There is a dropdown list for versions up to Creo 4. Starting with Creo 5, enter the required version manually in a four-digit format such as *10.0.8.0*.

Project folder (optional)
Folder in *configuration\projects*. The files *config.pro, config.sup, customization.ui* and *config.val* are copied as templates from this directory to the application computer.

Data folder (optional)
Main directory of an operating environment to which Creo-related data is saved, see Creo data packages.

Please note: The files *config_*.pro*, *config_*.sup* and *customization.ui* should be stored separately from the data structure due to their potential multiple use. These configuration files should be managed in the specific subdirectories of the configuration directories *Units*, *Projects*, or *Users*, or in the *Standard* directory for global settings.

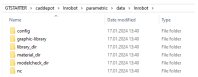
The next section *Creo directories* is explained in the chapter Workspace for Windchill.

© 2025 INNEO Solutions GmbH

5.20.6.2 Creo data packages

All Creo object data is stored in subdirectories for each operating environment, the data packages, for example *<GTS_ROOT_DIR>\parametric\data\sut_creo9*.

The Creo data is stored in the following directory structure within a data directory:



- ***config:*** bend table, search.pro, hole chart, DTL file for drawing representation, DMT file for colors in Creo, FMT file for displaying parts lists in the browser
- ***library_dir:*** all library parts and their directories with MNU file.
- ***material_dir:*** material files for Creo in the MAT format
- ***modelcheck_dir:*** configuration files for ModelCheck
- ***nc_dir:*** templates and configurations for NC machining
- ***Drawings (texture):*** files for drawing frames, notes and symbols

All references to data in the data directory are defined in project configuration files, i. e. in configuration blocks (*config_*.pro* files) in the projects directory. If there are no project-specific references, the general configuration files in the *standard* directory will be used, i. e., the *config_*.pro* files under *<GTS-OperatingEnv>\parametric\configuration\standard*.

It is recommended to consistently use variables in your references. For example, a reference to a data directory from a *config_*.pro* uses the variable `$GTS_DATA`.

Example: A reference in the configuration file *config_sut_de_c9p_dir_file.pro* in the project directory *project_creo9p_de* reads

```
pro_library_dir $GTS_DATA\library_dir
```

This reference points to the directory *library_dir* within the data directory.

Hint: It is recommended to use variables where possible.

Please note: Many configuration options can be set only once in Creo. In this case, the value of the latest entry is used, that is, the value from the file that is copied last. There is a defined call hierarchy for the files, see Call hierarchy.

5.20.6.3 Defining start behavior for a project

In the *Start* tab specify the start behavior of an individual project. These specifications overwrite the specifications for the start behavior set for units or the default settings (main menu item *Configuration > Group (select) > Creo Settings > Tab: Application > Area: Startup behavior*). For more information consult Configuration concept.

© 2025 INNEO Solutions GmbH

▶ Startup settings

Starting behaviour
Select the application which will open the project.
Creo (default): The project is started with Creo.
External: The project is started with another application (e. g. SAP). For more information got to chapter Linking projects with SAP.
If *External* is selected two additional fields open:

External start command
Enter the path to the executable file that is to start the project.

Command arguments for external start
Enter commands that specify how the executable file is started. Set the commands in quotation marks.

Copy Creo startkey(s)
Specify whether the startkey (PSF file) required for the project is copied to the BIN directory of Creo (up to Creo 10.0.1.0) or the TEMP directory (from Creo 10.0.2.0).
Yes: All project-relevant startkeys are copied.
No: Project-relevant startkeys are not copied.

Please note: For this option, write permissions are required on the application computer in the Creo BIN or TEMP directory.
Take care when copying startkeys. A configuration error may lead to an unintended distribution of startkeys to user computers that should not have certain licenses available.

Language /Show only installed languages

See chapter Language of a Creo project.

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.
No (default): No data is synchronized before opening a project.
Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

5.20.6.4 Language of a Creo project

The language of the user interface of Creo Parametric can be set in the *Projects* main page under *Creo Parametric* > *Select projects* > *Tab: Start* > *Startup settings*. The following languages are available: English, German, Italian, French, Spanish, Japanese, Chinese (simplified), Chinese (traditional), Korean, Russian, Brazilian Portuguese.

Define the following settings:

© 2025 INNEO Solutions GmbH

Language
The language in which Creo should run can be specified. If no setting is selected, Creo Parametric will select the operating system language automatically.

<not specified / empty>: GENIUS TOOLS Starter does not create a language variable (`LANG`) on the application computer (recommended).
System: The country-specific settings of the operating system are adopted.
<language>: This language is used, and the language variable (`LANG`, if defined on the application computer, will be set to that language.

Show only installed languages
By default only languages of the installed Creo versions are displayed in the drop-down menu (see above setting). This input overwrites any unit setting.

Yes: Menu contains only installed Creo languages.
No (default): Menu contains all languages supported by Creo.

Creo language as a project option

Administrators can also grant users the possibility to select a language, see Define project options > language selection field.

5.20.6.5 Default settings for license borrowing

You can define the maximum duration of borrowing PTC and GENIUS TOOLS licences in *Creo Parametric* > *Projects* > *Tab: Start*. This information overwrites the unit-specific settings.

▶ License Borrowing

Maximum duration
Specify for how many days licenses may be borrowed at most. Please note that in Creo, the maximum borrow duration is determined by the environment variable `LM_BORROW_DURATION`. Project Configurator does not check whether the value you enter is valid for Creo.

Default duration
Specify the borrow duration in days that is set as the default when a user borrows licenses.

▶ Creo License Servers

Creo license server
Select the Creo license servers to be used for the selected unit. The list is created in *Resources* > *Creo license servers*.

No selection (default): The license server, which is specified in the Creo startkey, is used.

© 2025 INNEO Solutions GmbH

5.20.6.6 Environment variables

In the Environment tab you can set environment variables for a Creo Parametric project.

The variables set here are added to the variables defined for units. Values set here for an existing environment variable will overwrite the values for units.

Outdated environment variables will continue to be created for compatibility reasons. A list of created and affected environment variables can be found in the appendix.

5.20.6.7 Installing Creo

In the *Install* tab, you define how Creo Parametric setups are executed on user computers for the selected project. First create a template setup. Consult chapter Installing Creo on user computers for step-by-step instructions.

5.20.6.8 Assigning Creo licenses to projects

A project can be started with a Creo Parametric license packages by assigning one Creo startkey to it or by giving several for selection.

A startkey is

– a configured start command that opens Creo with one or several defined licenses or license extensions,

– a PSF file located in PTC's bin directory.

The Start tab of the group as well as project settings lists all startkeys that have been created as a resource.(See chapter Creating Creo startkeys.) The checked startkeys will be those that users can select in GENIUS TOOLS Starter App. (See Making use of project options.) If users are provided with several keys to choose from, the number of projects can be greatly minimized.

Administrators can create projects that either have

1. one startkey or

2. several startkeys that users can choose from in GENIUS TOOLS Starter App.

Projects with several startkeys can either

2.1. have a startkey set as default or

2.2. use the startkey last selected by the user.

Please note: All settings described here can be made both in a project and in the higher-level configuration levels (units, standard). The query of the Creo startkeys corresponds to the general query sequence: Standard > Unit > Subunit > Project.

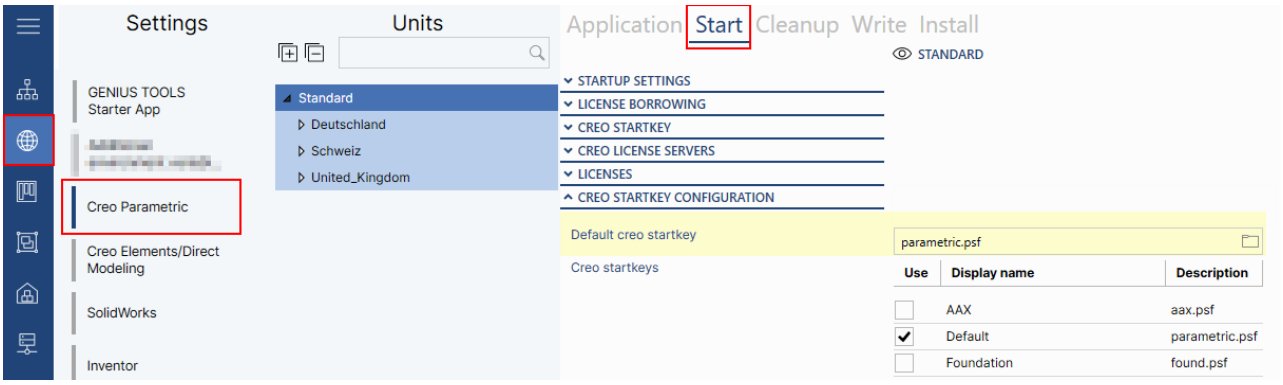
© 2025 INNEO Solutions GmbH

Individual startkeys can be locked independently of the assigned options to select for users under *Resources* > *Creo startkeys* > *Block: Yes/No*.

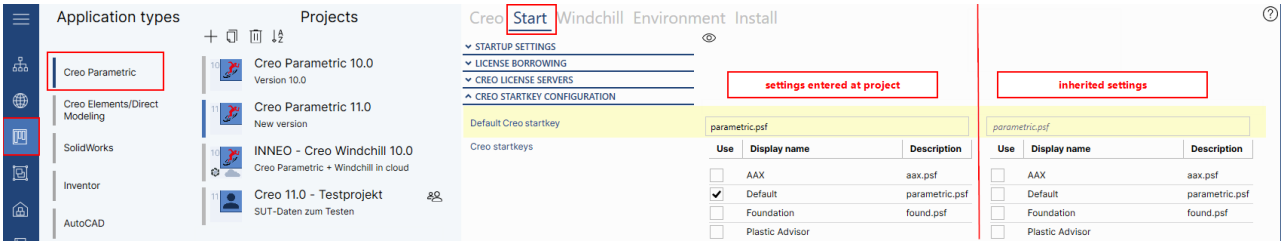
1. Projects with one defined startkey

Enter a Creo startkey in the Start tab in the Creo startkey configuration area. You can either enter the file name (e.g. *parametric.psf*) or a complete path (e.g. *D:\PTC\Creo 11.0.0.0\Parametric\bin\parametric.psf*).

With a subscription license, you also have the option of selecting a startkey from the Creo startkeys section below.



Global settings (unit Standard) for the startkey parametric.psf



Defined vs inherited project settings for startkey parametric.psf

2. Projects with several startkeys to choose from

If several Creo startkeys are permitted for a project, a selection field (project option) is created in GENIUS TOOLS Starter App.

– In Creo startkeys segment of the Start tab tick the Creo startkeys that should be available for the project (project settings) or for all projects assigned to a unit (unit settings).

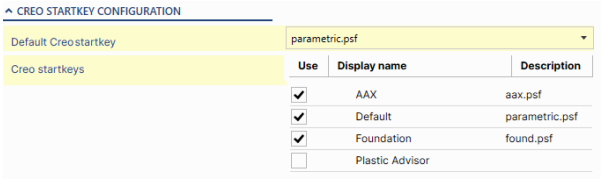
– Decide which default setting the drop-down menu should contain. There are two possibilities:

2.1. Projects with several startkeys and a default startkey

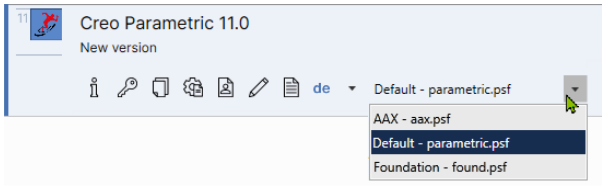
In the Default Creo startkey area, select the startkey that is to appear as the default setting in the drop-down menu. This means that users do not have to make a selection to start a

© 2025 INNEO Solutions GmbH

project. If users want to use a different Creo startkey, this must be actively selected in the selection field.



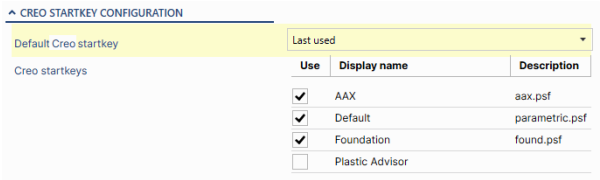
Several startkeys with parametric.psf as default value



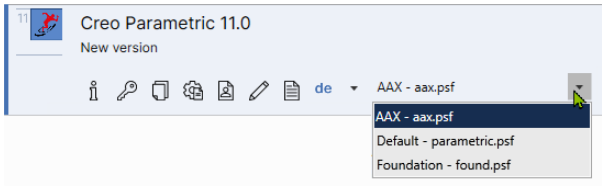
Selecting a startkeys on a project in GENIUS TOOLS Starter App

2.2. Projects with several startkeys without a default startkey

If you select the entry *Last used* in the Default Creo startkey section, GENIUS TOOLS Starter App remembers the startkey that a user last used for this project and uses it to start Creo Parametric.



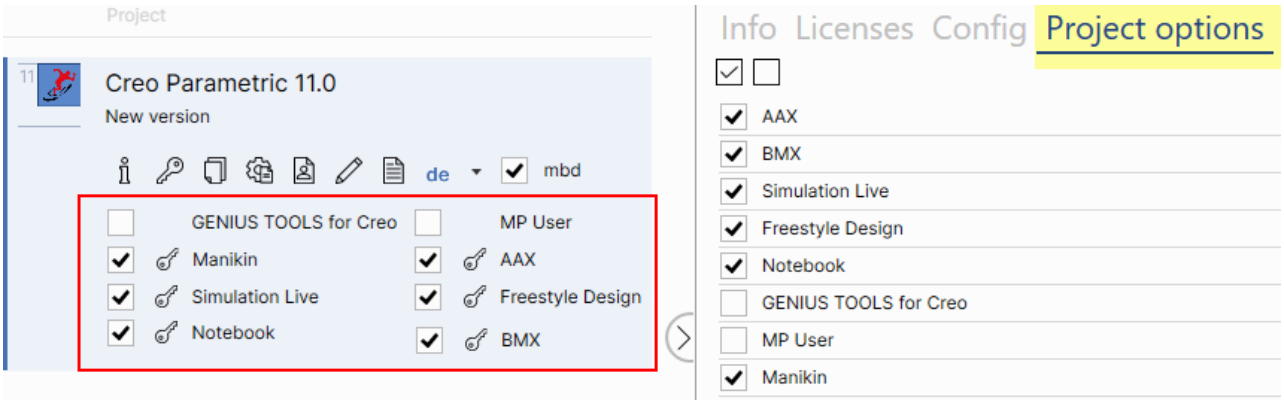
Several startkeys with the default set on the startkey used last



Selecting a startkeys on a project in GENIUS TOOLS Starter App

5.20.6.9 Assigning Creo license extensions to projects

In addition to selectable Creo start keys, you can create the option for license extensions to be selected individually, i.e. independently of the start key for a project. Users see this as a checkbox in a project.



Project options in GENIUS TOOLS Starter App: checkboxes for license extensions

© 2025 INNEO Solutions GmbH

Advantages:
Assigning selectable license extensions to a project can reduce the number of Creo startkeys created, and therefore reduce the number of projects available to users in GENIUS TOOLS Starter App. If the license conditions allow it, you can, for example, dispense with the selection of a Creo start key altogether by creating all license extensions as project options

These project options are not created in GENIUS TOOLS Project Configurator, but with configuration blocks. The procedure is explained in the chapter Using project options.

5.20.6.10 Workspace for Windchill

Set workspace directories for Windchill and Creo in the dialog *Creo Parametric directoires* in the *Creo* tab.

You can also define these entries on a unit-specific basis in the *Configuration* menu item under *Creo Parametric* > *Tab: Application*.

▶ Creo Parametric Directories

Windchill user root folder / Creo Agent home directory
Specify the *PTC_WF_ROOT* directory in which the workspace and user-specific settings can be stored.
The Creo Agent home directory, in which data relevant for Creo Agent, such as server information, is saved, has to be set to %PTC_WF_ROOT%.
If no path is specified, the two variables are not set and a note about the default path of Creo Agent home (APPDATA/PTC/Creo/Platform/<CPA_Version> is written to the log file.

> **Please note:** If you want to specify separate Windchill directories for various Creo versions you can use variables, like %GTS_PROERELEASE%, which will resolve to the Creo version, e. g. Creo6, or %GTS_PROJECT_NAME% in building your path.

Windchill cache directory
Cache directory for caching of Windchill data. To use automatic server registration, the Windchill cache directory must be located below the Windchill user root folder, see chapter Automatic Windchill Server Registration.

> **Please note:** Try not to modify this option. To change the storage location of the cache, rather change the setting Windchill user root directory.

Use the Windchill tab is to register the servers. Detailed information about the procedure are in the chapter Automatic Windchill server registration.

© 2025 INNEO Solutions GmbH

Dynamic server settings for different Creo versions

When you change the Creo version, the local cache directories should be deleted from the disk and re-created with the current Creo version. This means that when you use different Creo versions, you also need to create different cache directories. Also, the storage location for Windchill server registration information should be different.

There are two ways to ensure separate cache and server registration storage for different projects:

1. Configure independent Windchill user root directories for different projects.
2. Use variables in configuring the Windchill user root directory.

The following variables can typically be used:

Variable	Description
`%GTS_PROERELEASE%`	Returns the Creo version as Creo3, Creo4 etc.
`%GTS_PROJECT_NAME%`	Returns the project name
`%username%`	Returns the name of the Windows user
`%computername%`	Returns the computer name

These variables can be used in the setting the path for the Windchill user root directory.

Example: *D:\ptc\workspaces\%username%\ %GTS_PROERELEASE%\%GTS_PROJECT_NAME%*

The Creo Agent home directory, where server registration information is saved, should also depend on the Windchill user root directory. To set this up, you can define a variable for the Windchill user root directory under *Configuration* > *Standard* > *Additional Environment Settings*.

Name	Value
Creo Agent Home	`%PTC_WF_ROOT%`

Making the Windchill user root directory dependent on the Creo version by using `%GTS_PROERELEASE%` and making the Creo Agent home directory dependent on that via `%PTC_WF_ROOT%` will lead to all server information and data being stored separately per version.

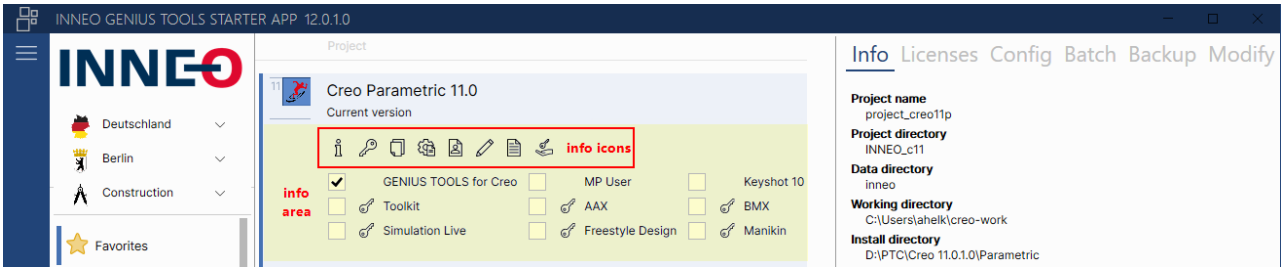
If you also make the Windchill user root directory dependent on the project name using `%GTS_PROJECT_NAME%`, the storage location will be project-dependent and will change with a new Creo version.

© 2025 INNEO Solutions GmbH

Do not use %GTS_PROJECT_NAME% if you use GENIUS TOOLS Starter projects to manage different Creo license packages, because you cannot use local workspaces for multiple projects in this way.

5.20.7 Displaying projects in GENIUS TOOLS Starter App

You can define general settings to present projects in GENIUS TOOLS Starter App, as well as provide the following project details and functions that are specific to Creo Parametric projects.



Analyse and borrow licenses

The key icon opens the Licenses tab with the functions to analyze and the Borrow icon opens the Borrow Licenses dialog, if users have the corresponding access rights.

– Setting: Under *Organization* > *Access* > *Select role* > *Tab: Function Access* > *Dialog: Project* > *Can see licenses* / *Can borrow licenses.*

GENIUS TOOLS Starter App borrows its license and then starts the borrowing process from PTC. Thereafter, Creo and, if configured in the project, GENIUS TOOLS for Creo each borrow their licenses, see License borrowing process.

– The default and maximum borrowing period can be predefined in *Projects* > *Creo Parametric* > *Select Project* > *Tab: Start* > *Borrow Licenses.*

Backup

The creo_parametric_customization.ui (short: customization.ui) file contains the user-specific settings for the Creo graphical user interface and can be backed up and managed by the user. (See Backup tab.)

Project report

The project report – created by clicking on the button (5) – is a separate PDF file containing all information about the selected project and the current user.

– Setting: The button can be deactivated with *Can create project report* under *Function access* > *Project*

The information is grouped as follow:

© 2025 INNEO Solutions GmbH

– General project details
– GENIUS TOOLS STARTER Network-settings
– GENIUS TOOLS Starter App
– Additional Environment Settings
– Synchronization
– Licensing
– Creo Settings
– Delete Creo configuration locally
– Write Creo configuration locally
– Windchill Settings
– Used Files
– Batch-files
– Config.sup
– Config.pro
– Customization.ui
– Dynamic Customization.ui
– Config.val
– Assigned rights
– Appendix
– All environment variables
– Generated config.sup
– Generated config.pro
– Generated config.val

5.20.7.1 Defining project options

Administrators can give users the option to select from the following project options.

– Creo language (1)

– Creo startkey (2)

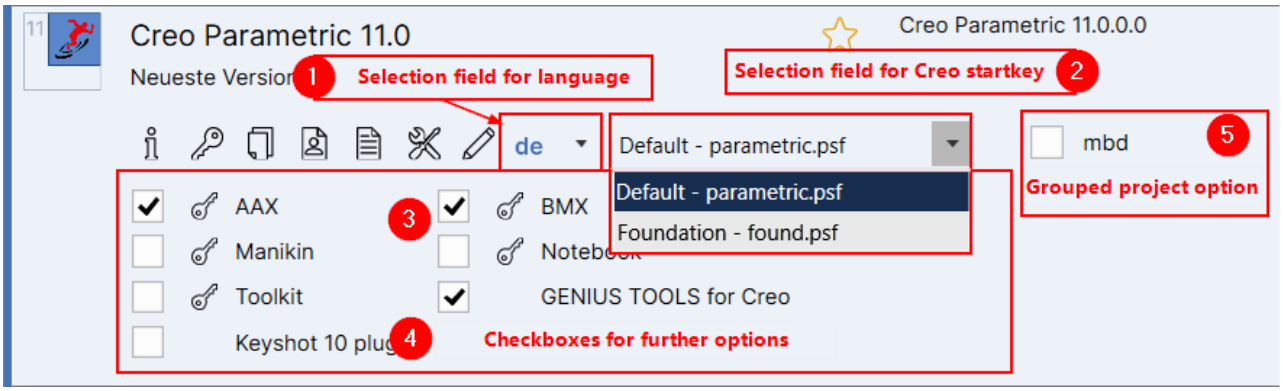
– project options for license extensions, add-on programs and configuration settings:

  · single project options (3)

  · switch options (4)

  · grouped project options (5)

© 2025 INNEO Solutions GmbH



Selectable project options in GENIUS TOOLS Starter App

Like all Creo Parametric project settings project options can be defined for a specific project as well as for units, subunits or system-wide.

Language selection field

You can set whether users can select the language of the projects they have access to. The right *Creo language selectable* is granted in *Configuration* > *GENIUS TOOLS Starter App* > *Select unit* > *Projects* and applies to all projects. (See Language selection.)

Selection field for Creo startkey

A startkey is a configured start command that opens Creo with one or more specified licenses or license extensions. Startkeys are PSF files in the bin directory. You can assign multiple startkeys to a project. The procedure is described in chapter Assigning Creo licenses to projects If users have multiple startkeys to choose from, a selection field appears in the selected project in GENIUS TOOLS Starter App.

Users can be given start keys to select from:

- per project: select the startkeys in *Projects* > *Creo Parametric* > *(select) Project* > *Tab: Start* > *Segment: Creo Startkey Configuration*. For more information, see the chapter Assigning Creo licenses to projects.
- for several projects that can be accessed by a unit: Select the startkeys in *Configuration* > *Settings: Creo Parametric* > *Select project* > *Tab: Start* > *Segment: Creo Startkey Configuration*

The administrator can set in GENIUS TOOLS Project Configurator whether a project should have a default start command or whether the start command last selected by the user should be used again. (See chapter Assigning Creo licenses to projects, 2.1. and 2.2..)

If the right to select is not assigned, neither selection field nor information about the used start key appears. If you want to give users an information about the start key, you can insert this in the name of the project or in the subtitle, e.g. Creo Parametric 7.0. AAX.

© 2025 INNEO Solutions GmbH

Checkboxes for project options

Administrators can define further project options that are tailor-made to a company's requirements, e. g. for starting Creo with:

– additional license extensions, such as Simulation Live or Manikin,

– additional programs such as Keyshot,

– any other configuration setting.

These types of project options are not created in GENIUS TOOLS Project Configurator, but with configuration blocks. The chapter Making use of project options explains the procedure.

For presenting the checkboxes in GENIUS TOOLS Starter App you can define the number of columns, see Arranging checkboxes.

5.20.8 Linking Creo projects with SAP

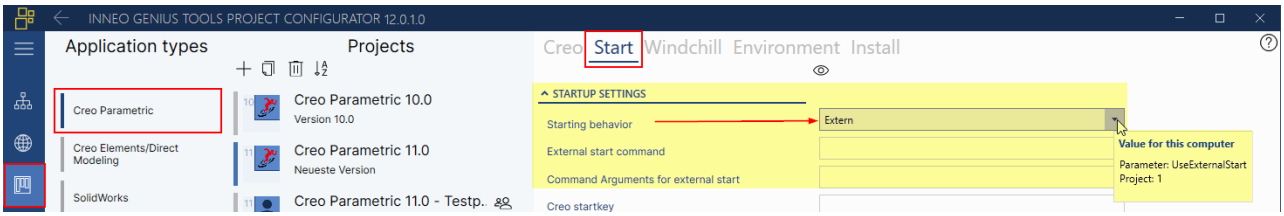
With GENIUS TOOLS Starter you have the possibility to open a Creo Parametric project with a user-defined command. You can use this option, for example, to link a project with SAP-ECTR (SAP Engineering Control Center interface to PTC Creo).

To use other applications that start a Creo Parametric project, proceed as follows.

1. Check Creo versions and information for licenses and license servers (Creo startkey)
Check that the Creo version defined in the Creo project in GENIUS TOOLS Starter matches the Creo version that is to be started by the external application. The correct *parametric.exe* is available by the environment variable *PROE_START*.

Check that licenses and license servers defined in the Creo project in GENIUS TOOLS Starter match the entries in the external application. We recommend using the *gts.psf* file as Creo startkey for the external application. This ensures that the correct licenses and license servers are used.

2. Change startup behavior of the project
In GENIUS TOOLS Project Configurator in the *Projects* page, go to the corresponding project and in the *Start* tab, go to the *Startup settings* section. Change the startup behavior of the project from *Creo* to *External*. Two further input fields open.



© 2025 INNEO Solutions GmbH

3. Enter information about the external start behavior
In the field *External start command*, enter the path to the application (executable file) with which the project is to be opened.

In the field *Command line arguments for external start* field, enter the commands with which the executable file should be opened.

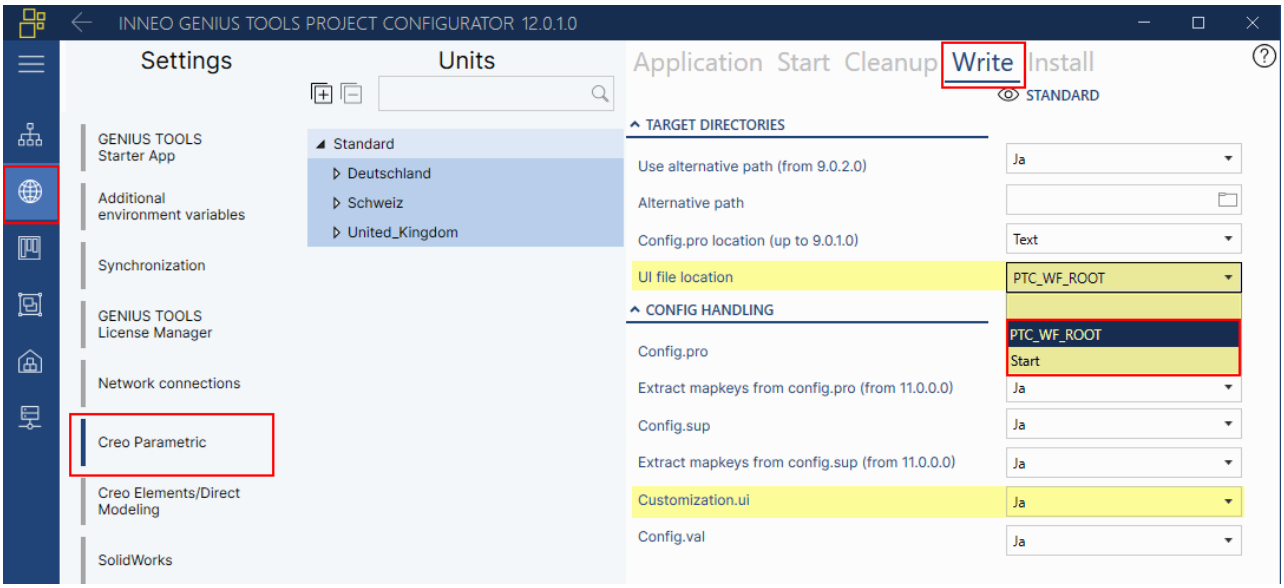
All other information about a project does not change. (See chapter Settings for Creo projects.)

5.20.9 Customizing Creo user interface

If you want to customize the user interface of Creo, go in Creo to *File* > *Options* > *Configuration editor*.

Changes made in Creo will by default be saved in the file *creo_parametric_customization.ui* in the directory %PTC_WF_ROOT%\.Settings, e. g. %APPDATA% \PTC\ProEngineer\creo4\.Settings.

Alternatively, you can have this file stored in the startup directory. To do so, select a group in GENIUS TOOLS Project Configurator and in *Creo Settings* > *Write* > *Target Directories* > *Ui file location* select *Start*.



5.20.9.1 creo_parametric_customization.ui

The file *creo_parametric_customization.ui* (short: customization.ui) contains the settings for the graphical user interface (UI) of Creo.

To customize the user interface specific to a user or a group of users, do as follows:

1. Modify the settings for the user interface in Creo in *File* > *Options* > *Configuration editor*.

© 2025 INNEO Solutions GmbH

2. Copy the file *creo_parametric_customization.ui* that is saved in %PTC_WF_ROOT% \.Settings by default. (The use of the startup directory as alternative storage location is described in the previous chapter.)
3. Save the copied ui-file to one of these directories: *userdata, users, projects, units* or *standard*. (See also Directory structure.) In a subdirectory of *unit,* the UI file would, for example, determine the Creo user interface for the named unit.

The Customization.ui file is a configuration file of Creo and not a configuration block (config_*.pro file) of GENIUS TOOLS STARTER. This changes the procedure to read the settings. A single customization.ui file is read out, meaning that one customization.ui file cannot add configuration settings to an existing file, it can only substitute another customization.ui.

The customization.ui file that is found first determines the Creo user interface. The call hierarchy is as follows:

1. userdata > 2. users > 3. projects > 4. units > 5. standard

Company-wide configuration with creo_parametric_admin_customization.ui

The administrator can set up a configuration that is valid for the whole company or for specific users, projects or units. To do so, change the name of the ui-file that is automatically saved by Creo from *creo_parametric_customization.ui* to *creo_parametric_admin_customization* and save it to one of these directories: *userdata, user, project, unit* oder *standard*.

The settings in the admin file *creo_parametric_admin_customization* are overwritten or complemented by those in the individual *creo_parametric_customization.ui*.

Executing the file *creo_parametric_admin_customization.ui* follows a hierarchical search in these directories:

1. users > 2. projects > 3. units > 4. standard

The administrator can thus set up a standardized graphical user interface for specific users, projects and units, as well as a company-wide UI configuration.

Please note: A company standard, i. e. a UI file in the *standard* directory, can only be implemented if there are no admin_customization.ui files in the directories *users, projects a*nd *units*.

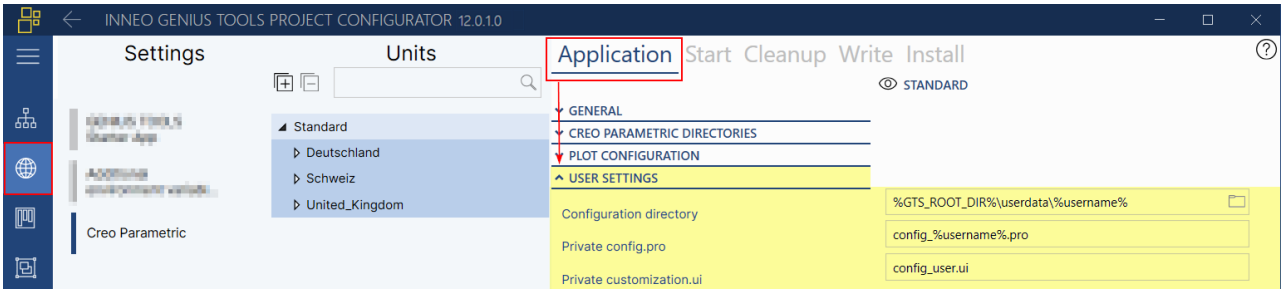
Individual customization.ui file

A user can manage his or her own customization.ui file by saving it to a directory *userdata* to which the user needs write access. There are two possibilities. One, the user can access the *userdata* directory in the caddepot directory of the administration computer – from

© 2025 INNEO Solutions GmbH

where it will be synchronized to the client computer. Two, a directory can be created in any location on the client computer. There, it does not undergo data synchronization. (See also the chapter on User-driven configuration.)

The administrator can determine the storage location of the *userdata* directory in *Configuration* > *(select) group* > *Creo Settings* > *Application* > *User Settings* > *Configuration folder*.



Backup mechanism with GENIUS TOOLS Starter App

You can create a backup file from *creo_parametric_customization.ui* in GENIUS TOOLS Starter App. This can be useful for users who manage their own UI configuration files, as well as for administrators who modify Creo UI settings for test purposes. A description of the procedure can be found in the chapter GENIUS TOOLS Starter App > Creating backup copies.

5.21 Creo Elements/Direct Modeling

A Creo Elements/Direct Modeling project consists of configuration files, an operating environment and data packages for standard parts.

> **Please note:** The work with projects for Creo Elements/Direct Modeling is a feature that requires a subscription license.

A Starter project configuration is generated from settings of the Power Extension environment and is not from individual configuration blocks.

For Creo Elements/Direct Modeling, batch files can be used that are opened before the application is started, i.e. starter batch files. See also chapter Batch files.

5.21.1 Project display in GENIUS TOOLS Starter App

For the Creo Elements/Direct Modeling application, project details are displayed in the tabs *Info*, *Licenses* and *Backup*.

Language selection can be provided as a project option. Project options that appear as checkboxes cannot be created.

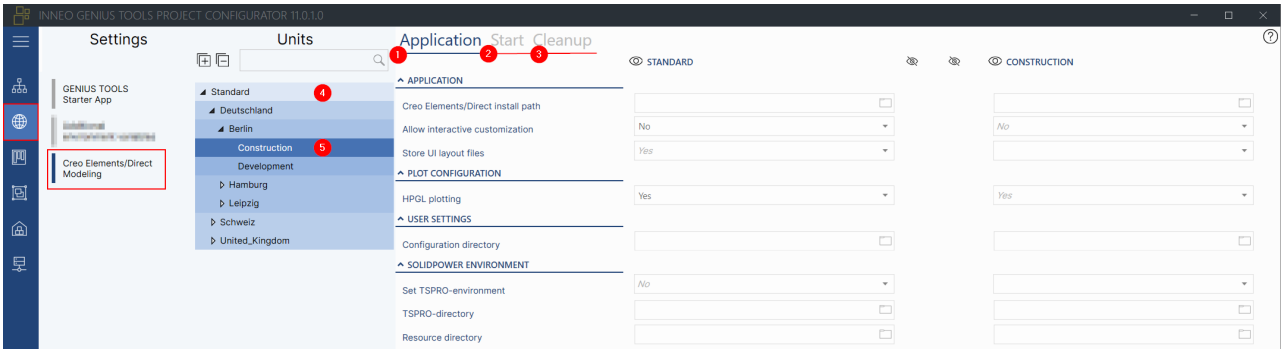
© 2025 INNEO Solutions GmbH

Also note the general settings for presenting projects to users in GENIUS TOOLS Starter App.

5.21.2 Unit settings

In the main page Configuration you can define the behavior of this program for the selected unit (5) or for the system-wide standard (4).

Click Application (1), Start (2) and Cleanup (3) to switch between tabs.



Settings for unit and groups for the application Creo Elements/Direct Modeling

> **Please note:** If an input field inherits values from the higher-level configuration levels, you will still only see the global default value displayed in gray.

Settings that are made directly to for CED-project overwrite the unit settings entered here and are made under *Projects* > *Creo Elements/Direct Modeling* > *Select Project* > *Modeling tab*, see project settings.

For general information on units, see the chapter Configuring heterogeneous environments: and for the inheritance of settings go to the chapter Call sequence for settings.

5.21.2.1 Application

▶ Application

Creo Elements/Direct install path
Enter a directory on the user computer which has Creo Elements/Direct Modeling installed.

Allow interactive customization
Defines whether interactive customization are allowed.

Yes: Interactive customization are allowed.

No: Interactive customization are not allowed. The variable SDDISALLOWINTERACTIVECUSTOMIZATION is set.

© 2025 INNEO Solutions GmbH

Store UI layout files
Defines whether user specific files (*_*fluentui_layout.def*) are saved.
Yes: Files are saved.
No: Files are not saved. The variable SDDONTSTOREUILAYOUTFILES is set.

▶ Plot Configuration

HPGL plotting
Specify whether the plot settings from Power Extensions *(PowerX_Styles\plotdefs)* are used.

▶ User Settings

Configuration directory
You can store customized configuration files of users in the *userdata* directory.

▶ Solidpower Environment

Set TSPRO environment
If you have a data package for Creo Elements/Direct Modeling, select *Yes*.

TSPRO directory
Enter the path to the directory that contains the data for Creo Elements/Direct Modeling.

Standard parts directory / Solidpower directory
Enter the path to the directory that contains the data for standard parts.

5.21.2.2 Start

In the Start tab you define the startup behavior of the application.

▶ Startup Settings

Startup directory
Enter the working directory of Creo Elements/Direct Modeling.

Language
The language in which Creo Elements/Direct Modeling starts can be specified. If no setting is selected, the application will select the operating system language automatically.
<not specified / empty>: GENIUS TOOLS Starter does not create a language variable (`LANG`) on the application computer (recommended).
System: The country-specific settings of the operating system are adopted.
<language>: This language is used, and the language variable `LANG`, if defined on the application computer

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.
No (default): No data is synchronized before opening a project.
Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the

© 2025 INNEO Solutions GmbH

<*application*>*configuration* directory.

▶ Creo Elements/Direct License Server

Creo Elements/Direct license server
Enter the license server that should be used for the selected unit, e. g. *localhost, mels*
No input (default): The license server that was entered in the setup is used.

▶ Licenses

The license server is determined automatically from the registry and cannot be specified here.

Show licenses
Specifies whether the licenses specified in a project are displayed in the licenses tab of GENIUS TOOLS Starter App.
Yes: Licenses are listed. The license status is not obtained; validation is possible by using the See Licenses function.
No: Licenses are not displayed. The settings *Get extensions*, *Calculate licenses by extension* and *Identify license users* can not be utilized.

Identify license users
Specify whether users of a license can be determined.

Yes: In the GENIUS TOOLS Starter App, the users currently using a license feature are displayed as a tooltip in the license display. The Windows user is replaced by the GENIUS TOOLS Starter user alias from the workspace *Users*.

No: No user names are obtained or displayed.

Please note: To display names, the user names must be configured via *Resources* > *Users*. Otherwise, the Windows user name is displayed.

Timeout for FlexNET server
Enter a maximum duration for the license query in seconds. The servers are checked for availability with a ping before a license evaluation. If it is not possible to ping the server, the query will be performed anyway.
In addition, the value set here is used as the maximum time to query the licenses.
Default: 0 = No maximum query time is set.

5.21.2.3 Cleanup

Here, you can manage the cleanup settings of GENIUS TOOLS Starter App for projects.

▶ User Directory

SolidPower directory
Determines whether the SolidPower settings directory in the user directory is deleted

© 2025 INNEO Solutions GmbH

before project start.
Yes: Delete
No: Retain

Default settings (LSP files)
Determines whether all LSP-files are deleted from the Default_Settings directory.
Yes: Delete
No: Retain

Further files or directories
Specify additional files or directories with user settings shall be deleted. The specification is relative to the user directory, e. g. *ANNOTATION\am_fluentui_layout.def*

5.21.3 Project settings

Project settings are the specifications you make in the main page *Projects* under *Applications* > *Creo Elements/Direct Modeling* in the tabs *Modeling, Start* and *Environment*.

After having created a new project with the general project specifications, fill in the following input fields. These entries overwrite both the group-specific entries and the standard settings for the startup behavior of the application, which are made under *Configuration* > *Creo Elements/Direct Modeling* > *Tabs: Application / Start*. For more information, see the chapter Configuration concept.

5.21.3.1 Essential specifications

In the tab *Modeling* you specify essential details for a *Creo Elements/Direct Modeling* project.

Input fields without settings inherit the settings from unit specifications.

▶ Modeling

Release
Defines the Creo Direct/Elements Modeling version to be used. A path can be defined or determined automatically from the registry of the application computer.
Fixed path: Select the directory from the drop-down menu. This can differ from the Creo directory for the standard unit as defined on the *Configuration* page. If you do not specify a Creo directory, the settings for the standard unit will be used.
Direct Modeling versions: Select a version, e. g.<Direct Modeling 20.4>. The installation directory will be determined from the registry.

Please note: Creo Direct/Elements Modeling has to be installed locally on the application computer in order to have registry entries available. The user must have read permission in HKLM.

© 2025 INNEO Solutions GmbH

Project directory (optional)
Directory under *elements_direct\configuration\projects*.

Corp directory
Specify the path to the directory that contains company-specific configuration settings.

Site directory
Specify the path to the directory that contains site-specific configuration settings.

User directory
Specify the path to the user directory.

▶ Solidpower Environment

Set TSPRO environment
If you have a data package for Creo Elements/Direct Modeling, select *Yes*.

TSPRO directory
Enter the path to the directory that contains the data for Creo Elements/Direct Modeling.

Standard parts directory / Solidpower directory
Enter the path to the directory that contains the data for standard parts.

5.21.3.2 Startup behavior

In the *Start* tab you define the startup behavior for a *Creo Elements/Direct Modeling* project. The specifications set here overwrite the settings for units.

Consult the chapter Creo Elements/Direct Modeling > Unit settings > Start for a description of the input fields.

5.21.3.3 Environment variables

In the tab *Environment* you can set environment variables for a CED project.

The variables set here are added to the variables defined for units. Values set here for an existing environment variable will overwrite the values for units.

Outdated environment variables will continue to be created for compatibility reasons. A list of created and affected environment variables can be found in the appendix.

5.22 Inventor

A Starter project for the application Inventor requires:

– essential specifications

- a defined Inventor release
- Inventor-related data packages

© 2025 INNEO Solutions GmbH

– configuration blocks
  · for settings of functions and behavior of Inventor (XML files)
  · for embedding additional applications (ADDIN files),
– settings for additional applications / linkages (batch files)
– Project file (IPJ-Datei)
  · for managing Inventor data

Please note: Creating starter projects for Inventor is a feature that requires a subscription license.

For general information consult the chapter Starter projects.

5.22.1 Configuration principles

The behavior of Inventor is determined by two configuration files. These are:

UserApplicationOptions.xml
Configuration file for general configuration settings, e. g. for template paths, import and export settings, settings for colors and materials.

InventorCustomization.xml
Configuration file for user interface settings.

The XML configuration files are created for each version and are located at:

%APPDATA%/Autodesk/Inventor <version>

Embedding additional applications

By default, most additional applications (AddIns) that are installed with Inventor are started automatically. If the default behavior for an add-on application is to be changed, a file with the extension *.addin* must be created for that application. This is a text file that can have any name, e. g. *AdditiveMFG.inventor.addin*.

The default settings can be found under *%ALLUSERSPROFILE%\Autodesk\Inventor <version>\Addins*.

ADDIN files, version dependent
If the default behavior of the add-on module is to be changed for a specific version, the ADDIN configuration file is placed here:

%APPDATA%/Autodesk/Inventor <Version>/Addins

ADDIN files, version independent
If the default behavior of the add-on module is to be changed for all versions, the ADDIN configuration file is stored here:

© 2025 INNEO Solutions GmbH

%APPDATA%/Autodesk/ApplicationPlugins

5.22.1.1 Project configuration with GENIUS TOOLS Starter

Configuration settings
By using GENIUS TOOLS Starter, configuration options are not written to Inventor configuration files, but to different configuration subfiles of GENIUS TOOLS Starter, the configuration blocks.

Configuration blocks that contain configuration settings can be stored in four different configuration levels. When selecting a project in GENIUS TOOLS Starter App, the blocks are loaded from the corresponding configuration levels and their contents are written to the two required Inventor configuration files, *UserApplicationOptions.xml* and *InventorCustomization.xml*, see next chapter.

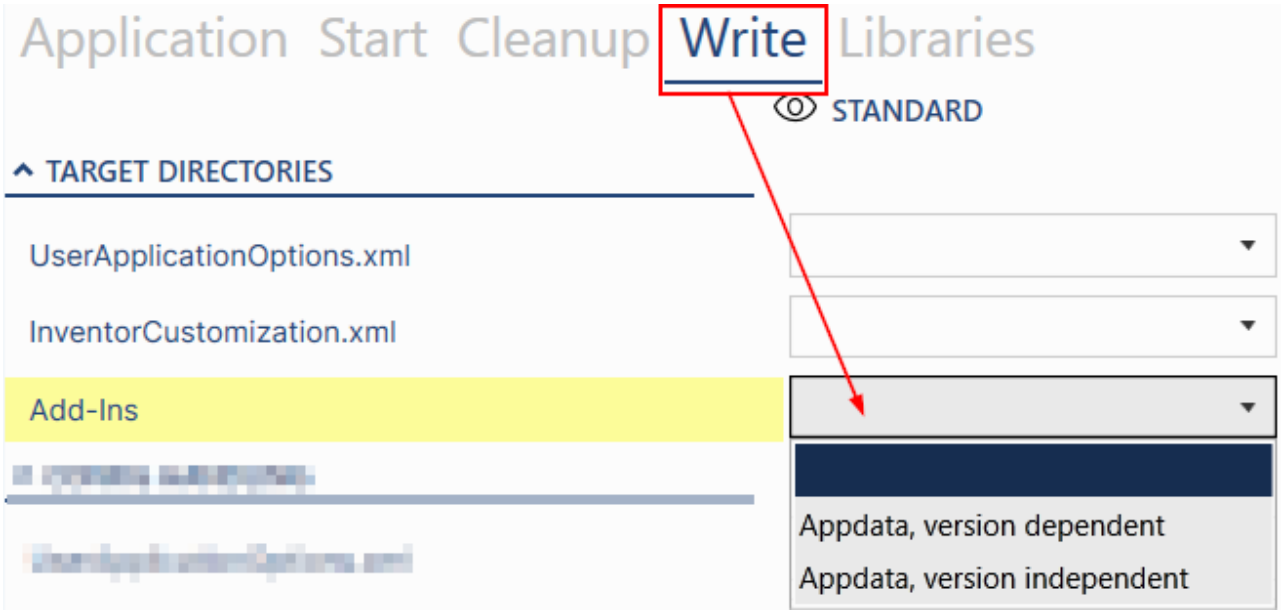
The XML configuration files must be deleted from the Inventor directory before they can be rewritten. This is set by default in GENIUS TOOLS Starter. Changes to this write behavior can be made in the Delete and Write tabs of the unit settings.

By default, the XML configuration files are saved to the Inventor version directory (% APPDATA%/Autodesk/Inventor <version>). However, you can specify a different directory, in the unit settings in the Write tab > Target Directories.

Additional applications (AddIns)
The inclusion of additional applications can also be defined in the four different configuration levels, by placing ADDIN files. The next chapter explains how to create ADDIN files.

Decide whether AddIn applications should be started for a specific version or for all versions. Specify this in the unit settings in the Write tab under *Target Directories* > *Add-Ins*. The possible locations are in the Appdata directory, see previous chapter Configuration principles.

© 2025 INNEO Solutions GmbH



Write tab in the group settings

Project options
For Inventor projects, options can be created so that users can select directly at the project which AddIns, for example, should be started.

A special feature is that for Inventor project options can be created to start the read-only mode, see Read-only-Mode.

Batch files
For Inventor projects all batch files can be used, which are opened before, during or after the start of the application, see chapter Batch files.

Inventor project files
For a Starter project you can use Inventor project files (IPJ files) which determine the location of the work data, templates, styles and libraries.

Libraries are defined in the Libraries tab of GENIUS TOOLS Project Configurator and are thereby written to the Inventor project file (IPJ file). If no IPJ file exists in an operating environment, GENIUS TOOLS Starter uses the default project file at *C:\Users\Public\Documents\Autodesk\Inventor <version>*.

You can store one or more IPJ files in the configuration layers *standard, units, projects, users* of an operating environment. The search sequence is as follows:

1. users > 2. projects > 3. units > 4. standard

© 2025 INNEO Solutions GmbH

The first IPJ file found is read, i. e. no settings are added to an existing file. See Call sequence for files.

5.22.1.2 Configuration blocks for Inventor

Configuration blocks must be created manually and stored in the configuration levels Standard, Unit, Project, User, see chapter Configuration concept.

A configuration block for Inventor:

– is a text file with the extension *.xml* or *.addin*.

Type	Notation	Content	Behavior
1	config_*.xml z. B. *config_dir_file.xml*	general configuration settings, e. g. for template paths, import and export settings, settings for colors and materials	specifications are transferred to the configuration file *UserApplicationOptions.xml* before startup
2	ui_*.xml z. B. *ui_customization.xml*	user interface settings	Details are transferred to the *InventorCustomization.xml* configuration file before startup
3	*.addin *AdditiveMFG.inventor.addin*	Includes or exlcudes additional applications	file is saved version-dependent or independent, starting an additional application possible as a project option

– can contain conditions (see chapter Conditional configuration blocks and batch files),

– can contain one or more configuration option(s).

If a configuration option is set multiple times, the last entry is – according to the call hierarchy of configuration blocks – is the valid option value. If a configuration option is not set, the default value of the software is active.

© 2025 INNEO Solutions GmbH

Creating configuration blocks for Inventor

1. Create a text file with the file ending *.xml* or *.addin* in the required configuration directory.
2. Write in the first line: `<?xml version="1.0" encoding="utf-16" standalone="no" ?>`

Please note: For the correct display of German umlauts in GENIUS TOOLS Starter App, configuration blocks must be written in UTF8.

You can conveniently create and modify configuration blocks and Config.pro files using the add-on program GENIUS TOOLS Config Editor, which features color highlighting, auto-completion as well as error messages and which allows you to compare entries of two configuration blocks.

XML file (type 1)

Example: Setting template paths

Create a text file named *config_templates.xml* with the following content.

```
<?xml version="1.0" encoding="utf-16" standalone="no" ?>
<ApplicationOptions Platform="Vista" Version="27.1 Production Candidate">
  <File TemplatesPath="%GTS_DATA%\Templates\%LANGUAGE%\" />
  <Save SaveReminder="0"/>
</ApplicationOptions>
```

ADDIN file (type 3)

Example: Execute add-in module “Additive Manufacturing” at startup

Create a text file named AdditiveMFG.inventor.addin and specify the ClassID and ClientID of the add-on application, and the LoadOnStartUp command:

```
<Addin>
  <!--Created for Autodesk Inventor Version 20.0-->
  <ClassId>{4e2d52fb-8288-4427-b912-20ef97f073c9}</ClassId>
  <ClientId>{4e2d52fb-8288-4427-b912-20ef97f073c9}</ClientId>
  <LoadOnStartUp>1</LoadOnStartUp>
</Addin>
```

ADDIN file (type 3) as project option

Example: Make add-in module “Additive Manufacturing” available as a single project option

Create the text file from the previous example. Insert the following between the first line and the ClassID and ClientID:

```
<!-- gts_is_selectable=true -->
<!-- gts_selection_default=true -->
<!-- gts_display_name= Additive Manufacturing -->
```


© 2025 INNEO Solutions GmbH

Other variables can be used, see table in chapter Single project options. Note the application-specific notation of the GTS variables.

5.22.1.3 User-driven configuration for Inventor

Users can manage Inventor configuration blocks themselves, overriding the settings made by the administrator, if they have the appropriate access right.

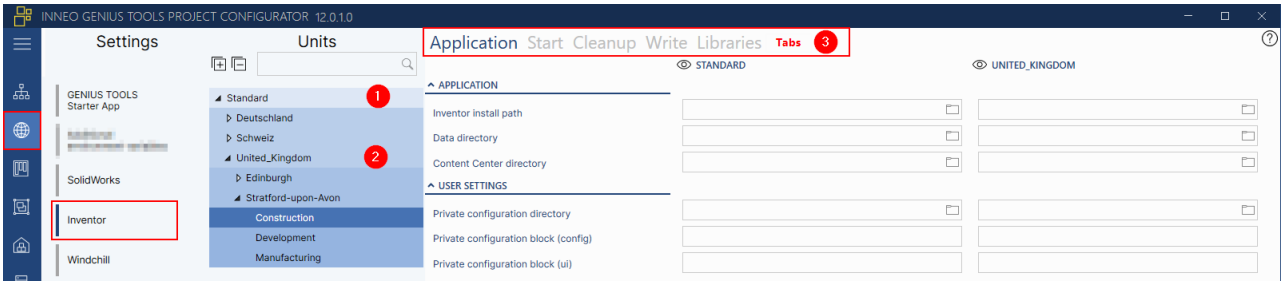
This type of user-defined settings are created by storing a private configuration block in the userdata directory. Set the path to the userdata directory in GENIUS TOOLS Project Configurator in *Configuration* > *Settings: Inventor* > *Select Group* > *Tab: Application* > *User Settings* > *Private configuration folder*, as well as the notation of the private configuration blocks.

Consult the chapter User-driven configuration for detailed instructions.

5.22.2 Unit settings

In the menu item *Configuration* you can define the program behavior of Inventor that should apply to the selected group. You can make settings globally for the Standard unit (1), as well as for units (2).

To fill in all fields, switch between the tabs Application, Start, Cleanup and Write (3).



Unit settings for the application Inventor in GENIUS TOOLS Project Configurator

Settings for a single project are also possible. They overwrite the unit settings made here, see Project settings.

Please note: If an input field inherits values from the higher-level configuration levels, you will still only see the global default value displayed in gray.

For general information on units, see the chapter Configuring heterogeneous environments: chapter and on inheritance of settings, see the chapter Call sequence for settings.

© 2025 INNEO Solutions GmbH

5.22.2.1 Application

▶ Application

Inventor install path
You can specify a directory on the user computer where Inventor is installed or leave this field empty, which means the installation directory is searched for automatically from the local Windows registry and the version is used as specified in the project settings. For more information consult the chapter CAD-specific project settings.

> **Please note:** It is generally recommended to have the installation path be determined from the local Windows registry.

Data directory
Enter the data directory to be used. The data directory is the main directory of an operating environment containing Inventor-related data, e. g. *%GTS_ROOT_DIR%\inventors\data\inv_22*.

Content Center directory
Target directory for Content Center libraries. Default: *C:\ProgramData\Autodesk\Inventor <Version>\Content Center\Libraries*

▶ User settings

Private configuration directory
Customized configuration files of users can be stored in the *userdata* directory.

Private configuration block (Config)
Enter the name of a user-defined *config_*.xml* file for general settings, e. g. *config_%username%.xml*. It is appended to the *config_*.xml* files in the *users, projects, units* and/or *standard* directories and copied to the file *UserApplicationOptions.xml*.

Private configuration block (UI)
Enter the name of a user-defined *ui_*.xml* file for user interface settings, e. g. *ui_%username%.xml*. It is appended to the *ui_*.xml* files in the *users, projects, units* and/or *standard* directories and copied to the file *InventorCustomization.xml*.

> **Please note:** For storing their private configuration blocks, users must have write access to the userdata directory, as well as the access right *Can save personal Configuration file* [to userdata directory] *on server*. See also Config tab in GENIUS TOOLS Starter App.

5.22.2.2 Start

In the Start tab you define the startup behavior of the application.

© 2025 INNEO Solutions GmbH

▶ Startup

Read-only mode selectable in GENIUS TOOLS Starter App
In GENIUS TOOLS Starter App a project options appears for selecting the read-only mode, e. g. models cannot be edited. (See Project options.)

Yes: Users can select the reading mode.

No: There is no checkbox for selecting the read mode.

Startup directory
Enter the working directory of Inventor.

Language
The language in which the application starts can be specified. If no setting is selected, the application will select the operating system language automatically.

<not specified / empty>: GENIUS TOOLS Starter does not create a language variable (`LANG`) on the application computer (recommended).

System: The country-specific settings of the operating system are adopted.

<language>: This language is used, and the language variable `LANG`, if defined on the application computer.

Show only installed languages
By default only languages of installed versions are displayed in the drop-down menu (see above setting).

Yes: Menu contains only installed languages.

No (default): Menu contains all languages supported by the application.

Enable stop batches

Yes: Additional batch files can be executed after the application has been stopped.

No: No stop batch files can be executed.

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.

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

Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

5.22.2.3 Cleanup

By using GENIUS TOOLS Starter, you can store configuration subfiles ("blocks") in four configuration levels. When a project is selected by a user, the corresponding blocks are read from the configuration levels and the XML configuration files are created afresh. To do this, any existing XML configuration files must be deleted first. This is set in the default settings of GENIUS TOOLS Starter, but can be changed here.

▶ User directory

Define whether the following configuration files are deleted or retained in the target directory (as defined in the Write tab).

© 2025 INNEO Solutions GmbH

Yes: Delete
No: Retain

UserApplicationOptions.xml
Configuration file for general configuration settings, e. g. for template paths, import and export settings or settings for colors and materials.

InventorCustomization.xml
Configuration file for user interface settings.

Add-Ins, version dependent
Configuration file(s) for embedding additional applications (.addin).

Add-Ins, version independent
Configuration file(s) for embedding additional applications (.addin).

▶ Startup directory

Project file (*ipj)
Define whether the Inventor project file (as defined in the Write tab) is deleted or retained in the target directory.

▶ Content Center libraries

Content Center libraries
Define whether the Content Center libraries (as defined in the Libraries tab) are deleted or retained in the target directory.

5.22.2.4 Write

Here, you can define target directories for Inventor configuration files and change the write settings of GENIUS TOOLS Starter.

▶ Target Directories

UserApplicationOptions.xml
Select the directory in which the configuration file will be written. If no directory is selected, the file will be written to the Appdata directory.
Appdata (default): %APPDATA%/Autodesk/Inventor <version>
Custom: The file is written to the directory specified in the upcoming field.

InventorCustomizations.xml
Select the directory in which the configuration file will be written. If no directory is selected, the file will be written to the Appdata directory.
Appdata (default): %APPDATA%/Autodesk/Inventor <version>
Custom: The file is written to the directory specified in the upcoming field.

Add-Ins
Select the directory to which the configuration files (ADDIN files) will be written. If no directory is selected, the file will be written to the version dependent directory.
Appdata, version dependent *(default)*: %APPDATA%/Autodesk/Inventor

© 2025 INNEO Solutions GmbH

<version>/Addins
Appdata, version independent: %APPDATA%/Autodesk/ApplicationPlugins

▶ Config Handling

GENIUS TOOLS Starter reads configuration subfiles ("blocks") and writes their contents to Inventor configuration files. Specify whether the follwing Inventor configuration files are created (default) or not: UserApplicationOptions.xml, InventorCustomizations.xml, Add-Ins, Inventor project file (IPJ file), Content Center Libraries.

Yes (default): Write
No: Do not write

Warning: A new configuration file is only created if there is no configuration file with the same name in the target directory. Make sure that the default setting *Delete* is set in the Delete tab.

5.22.2.5 Libraries

Specify the libraries that should be available for the selected group or unit in the Inventor projects they have access to. Unlike other settings in GENIUS TOOLS Project Configurator, multiple entries are possible here. The inheritance behavior is therefore different.

Please note: The library information of a unit overwrites all library information of the higher order unit(s).

If you want to add a library path to a subordinate unit, do not forget to copy the paths of the unit above into this unit. Use the copy function for this purpose, because copied library entries (grayed out) adopt changes made in the original path.

The libraries defined here are written to the self-created Inventor project file (IPJ file) or to the default IPJ file.

Appearance libraries
Enter one or more ADSKLIB files.
Active: Check the box to activate the library in Inventor.
Path: Library. The folder icon opens the Windows Explorer.
Delete: Deletes the path.
Copy: Copies the path.

Material libraries
Enter one or more ADSKLIB files.

Workspace
Enter the directory of the workspace.
Path name: You can assign a name for the path.

Workgroup search paths
Enter one or more directories for workgroups.

© 2025 INNEO Solutions GmbH

Libraries
Enter one or more directories for further libraries.

Frequently used subfolders
Enter one or more subdirectories located in one of the above defined paths.

Content Center libraries
Enter one or more IDCL files.
ReadOnly: Activates the read-only mode for this library.
AttachName: You can specify a name for the library. Default: file name
Servername: You can specify a server name. Default: localhost.

Content Center libraries

By default, Inventor installs Content Center libraries (IDCL files) at *C:\ProgramData\Autodesk\Inventor <version>\Content Center\Libraries*. Additionally, you can create your own Content Center libraries. You can use GENIUS TOOLS Starter to distribute these to the user computers. To do so, store the IDCL files in the data directory in the Caddepot, i. e. under *%GTS_DATA%\Inventor <Version>\Content Center\Libraries*. GENIUS TOOLS Starter then copies these libraries to the target directory at project start, since all Content Center libraries must be located in the same directory.

The target directory is preset to *C:\ProgramData\Autodesk\Inventor <Version>\Content Center\Libraries*. If you want to change the target directory, you have to set two entries:

– In the UserApplicationOptions.xml file, set the following entry:

```
<ContentCenter DesktopContentDir="%GTS_DATA%\Inventor <Version>\Content Center\Libraries"/>
```

– In the Application tab change the target directory under *Content Center directory*.

In the Write tab you can activate or deactivate the copying of Content Center libraries. IDCL files are never overwritten, i. e. they are only copied if they do not yet exist in the target directory. Hence, standard Inventor Content Center libraries will not be overwritten.

In the Delete tab the cleanup behavior for Content Center libraries can be defined. Standard Inventor libraries are not deleted,. Only IDCL files are deleted whose file name does not begin with *AI<4-digit version number>_Inventor*.

5.22.3 Project settings

Project settings are the specifications you make in the main page *Projects* under *Applications > Inventor*.

After having created a new project with the general project specifications, fill in the following input fields in the tabs *Inventor*, *Start* and *Environment*. These entries overwrite both the group-specific entries ans well as the standard settings for the startup behavior of the application, which are made under *Configuration > Inventor > Tabs: Application / Start*.

© 2025 INNEO Solutions GmbH

For more information, see the chapter Configuration concept.

5.22.3.1 Essential specifications

In the tab *Inventor* you specify essential details for an Inventor project.

▶ Inventor

Release
Define the Inventor version to be used. The path can be fixed or determined automatically from the registry of the application computer.

Fixed path: Select the directory from the newly appearing drop-down menu. If you do not specify a directory, the settings for the unit Standard will be used. (*Configuration* > *Inventor* > *Standard* > *Tab: Application* > *Inventor install path*)

Inventor versions: Specify a certain version. For example, the selection <Inventor_22> will determine the path to the latest Inventor 22 version from the registry.

Please note: Inventor has to be installed locally on the application computer in order to have registry entries available. The user must have read permission in HKLM.

Project folder
Directory in <*application*>*configuration**projects*. From this directory configuration blocks are copied to the application computer.

Please note: Configuration blocks should be stored separately from the data structure due to their potential multiple use. They should be managed in the specific subdirectories of the configuration directories *units*, *projects* or *users*, or in the *standard* directory for global settings. See Configuration concept.

Data folder
Main directory of an operating environment in which application-related data is located.

5.22.3.2 Start behavior

In the *Start* tab you define the startup behavior for a single project. The specifications set here overwrite the settings for units.

Starting behaviour
Select the application that will open the project.

Inventor (default): The project is started with Inventor.

External: The project is started with another application (e. g. SAP).

If *External* is selected two additional fields open:

External start command
Enter the path to the executable file that is to start the project.

© 2025 INNEO Solutions GmbH

Command arguments for external start
Enter commands that specify how the executable file is started. Set the commands in quotation marks.

Use read-only mode
Specify whether the project is to start in read-only mode.

Yes: The project starts in read-only mode. The environment variable GTS_USE_INVENTOR_READONLY is set to 1. This allows the selected mode to be used as information in, for example, a batch script to start Inventor externally.

No (Default): The project starts in professional mode. The environment variable GTS_USE_INVENTOR_READONLY is set to 0.

Please note: The setting *Use read-only mode* can be overridden if the user is given the option to select the mode, in

Startup directory
Enter the working directory of Inventor.

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.

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

Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

5.22.3.3 Libraries

In the Libraries tab, specify the paths to the libraries that should be available at project level. The entries made here overwrite the settings for units. They are described in the Unit settings > Libraries chapter.

5.22.3.4 Environment variables

In the tab *Environment* you can set environment variables for an Inventor project.

The variables set here are added to the variables defined for units. Values set here for an existing environment variable will overwrite the values for units.

Outdated environment variables will continue to be created for compatibility reasons. A list of created and affected environment variables can be found in the appendix.

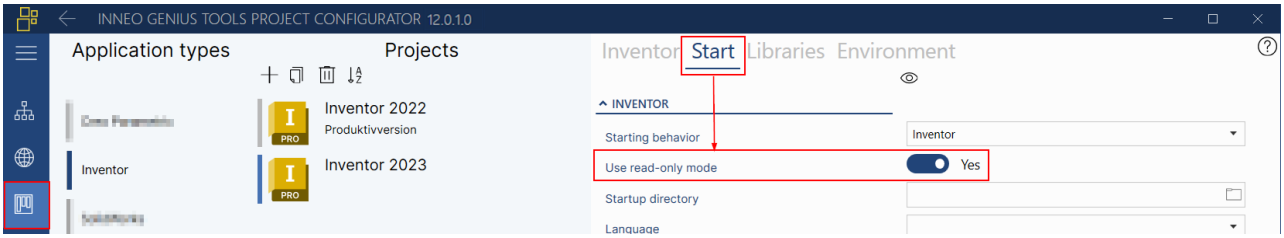
5.22.4 Read-only mode

Inventor can be started in read-only mode. There are two options are available.

© 2025 INNEO Solutions GmbH

1. Start project in read-only mode

Go to the Project Settings in the Start tab and turn on the swith *Use read-only mode*.



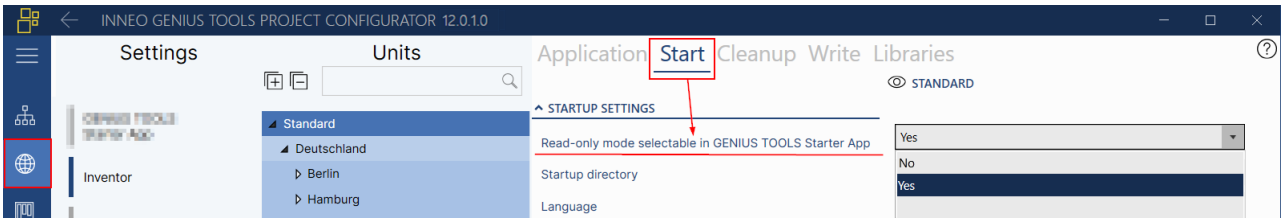
Using read-only mode as project setting

The project starts in read-only mode. The environment variable GTS_USE_INVENTOR_READONLY is set to 1. This allows the selected mode to be used as information in, for example, a batch script to start Inventor externally.

This setting can be overridden by the user if his unit or group is given the permission to select the mode, i.e. a project option is created.

2. Project option for read-only mode

You can grant users the option to select the read-only mode directly on the project in GENIUS TOOLS Starter App. To do this, set the Read-only mode selectable in GENIUS TOOLS Starter App to *Yes* in the Start tab of the unit settings.



Read-only mode as project option in the group settings

If in the project settings the switch *Use read-only mode* is set to *Yes*, as in the example above, the checkbox is by default already checked.

Checked project option in GENIUS TOOLS Starter App

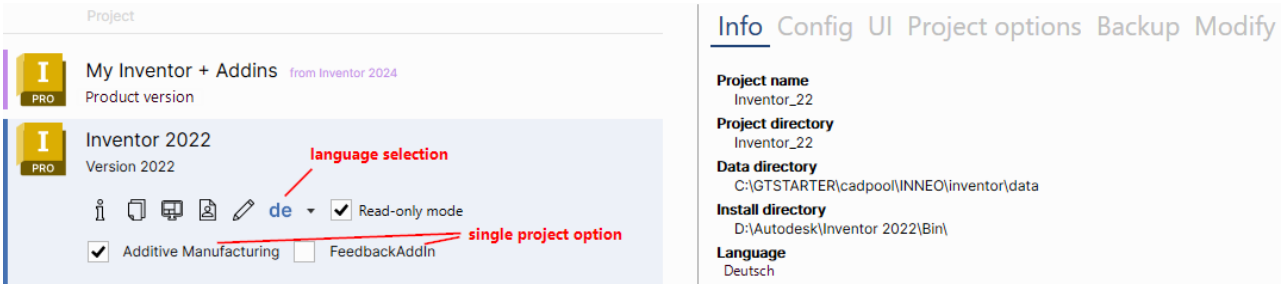
5.22.5 Project display in GENIUS TOOLS Starter App

To present projects in GENIUS TOOLS Starter App, you can specify the general settings that apply to all applications. There are also the following application-specific options.

© 2025 INNEO Solutions GmbH

Project information

For the Inventor application, project details are displayed in the tabs *Info, Config, UI, Project Options* and *Backup*. For a description of the information and functions contained therein, see the GENIUS TOOLS Starter App chapter under Inventor.



Inventor project display in GENIUS TOOLS Starter App

Project options

The following project options can be made available:

– Language: in the menu item Configuration under Settings > GENIUS TOOLS Starter App > Projects, see Selection field for language.

– Project options (checkboxes):

- to start in read-only mode (previous chapter)
- for embedding add-in applications (single project option)
- for one or more configuration settings (single project option)
- for combining configuration settings (combined project options)
- for switching between defined configuration settings (switch option)

For creating project options, consult the chapter Configuration blocks for Inventor as well as the instructions for creating the different types of project options.

5.23 Solidworks

A Starter project for the application SolidWorks requires:

– essential specifications

- a defined SolidWorks release
- SolidWorks-related data packages

– unit and project settings

– configuration blocks (SLDREG files)

- for functions and behavior of SolidWorks

© 2025 INNEO Solutions GmbH

  - for embedding additional applications (AddIns)

– settings for additional applications / linkages (batch files)

Please note: Creating starter projects with SolidWorks is a feature that requires a subscription license.

For general information consult the chapter Starter projects.

For SolidWorks projects, project options can be created so that users can select directly at the project which AddIns should, for example, be also started.

For SolidWorks all batch files can be used, which are opened before, during or after the start of the application, see chapter Batch files.

5.23.1 Configuration blocks für Solidworks

The behavior of SolidWorks is determined by entries in the registry. GENIUS TOOLS Starter copies all project relevant configuration blocks (configuration component files) into a configuration file (*config.sldreg*) and writes the settings that it contains into the registry before starting SolidWorks .

The configuration blocks must be created manually and stored in the configuration layers Standard, Unit, Project, User, see chapter Configuration concept.

A configuration block for the application SolidWorks:

– is a text file that must start with "config_" and end with ".sldreg", e. g. *config_addin_3dexp.sldreg,*

– is one of many configuration sub files which are read by GENIUS TOOLS Starter and which create the configuration of a SolidWorks Starter project,

– can be defined with conditions (see chapter Conditional configuration blocks and batch files),

– can contain one or more configuration options, e. g. for

  - user interface and model appearance settings
  - template settings
  - settings for colors and materials
  - import and export settings

If a configuration option is set multiple times, the last entry – according to the call hierarchy of the configuration blocks – is the valid option value. If a configuration option is not set, the default value of the software is active.

© 2025 INNEO Solutions GmbH

Default settings

You can also write fallback options to an extra file named *default.sldreg*. This file can, for example, contain specifications for the user interfaces. The default file will be processed automatically if there is no user configuration in the registry (under Current User) for SolidWorks. Afterwards, the configuration file *config_*.sldreg* will be loaded if it is available.

Creating configuration blocks for SolidWorks

1. Create a text file that starts with config and ends with *.sldreg*, e.g. *config_addin_3D.sldreg*.
2. Write in the first line: `Windows Registry Editor Version 5.00`

Please note: For the correct display of German umlauts in GENIUS TOOLS Starter App, configuration blocks must be written in UTF8.

You can conveniently create and modify configuration blocks and Config.pro files using the add-on program GENIUS TOOLS Config Editor, which features color highlighting, auto-completion as well as error messages and which allows you to compare entries of two configuration blocks.

Example: Set drawing frame of company ABC

```
Windows Registry Editor Version 5.00
[HKEY_CURRENT_USER\SOFTWARE\SolidWorks\SolidWorks 2021\Document Templates]
"Default Part template"="%GTS_DATA%\Document templates\\ABC\Part.prtdot"
"Default Assy template"="%GTS_DATA%\Document templates\ABC\Assembly.asmdot"
"Default Draw Template"="%GTS_DATA%\Document templates\ABC\Drawing.drwdot"
```

Example: Create a single project option for loading drawing frames of company ABC.

When creating single project options, note that a semicolon (;) must be used as comment character, e.g. `; gts_is_selectable = true`. See chapter Single project options.

```
Windows Registry Editor Version 5.00
; gts_display_name = ABC drawing frame
; gts_description = ABC drawing frame
; gts_selection_name = ABC drawing frame
; gts_selection_default = false
; gts_is_selectable = true
[HKEY_CURRENT_USER\SOFTWARE\SolidWorks\SolidWorks 2021\Document Templates]
"Default Part template"="%GTS_DATA%\Document templates\inneo\Part.prtdot"
"Default Assy template"="%GTS_DATA%\Document templates\inneo\assembly.asmdot"
"Default Draw Template"="%GTS_DATA%\Document template\inneo\drawing.drwdot"
```


© 2025 INNEO Solutions GmbH

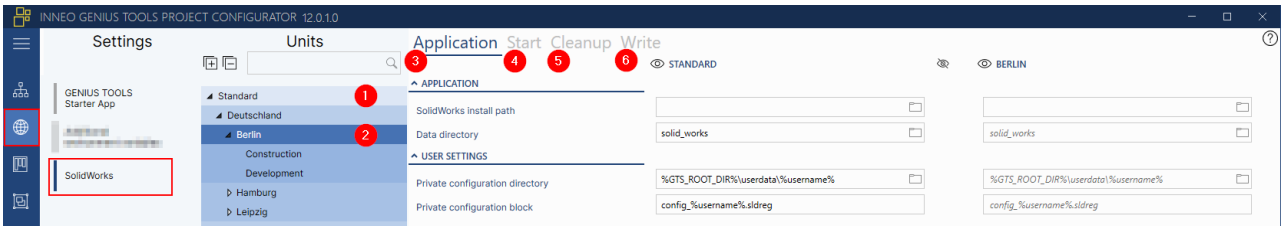
Example: Create switch options for AddIns
To provide additional programs (AddIns) as options for SolidWorks projects, use the `gts_choose` expression and write `00000001` for true value (ON) and `00000000` for false value (OFF), see Switch options.

```
Windows Registry Editor Version 5.00
[HKEY_CURRENT_USER\SOFTWARE\SolidWorks\AddInsStartup\{1A49690A-CC1F-4C81-9B96-303C52F14AC3}]
@=dword:gts_choose{SolidWorks Composer||00000001||00000000}
```

5.23.2 Unit settings

In the main page Configuration you can define the behavior of SolidWorks that will apply to the system-wide standard (1) as well as for units and subunits (2).

Click Application (3), Start (4), Delete (5), and Write (6) to switch between tabs.



Please note: If an input field inherits values from the higher-level configuration levels, you will still only see the global default value displayed in gray.

Settings made directly on a SolidWorks project overwrite the settings made here, see Project Settings.

For general information on units, see the chapter Configuring heterogeneous environments: and for the inheritance of settings go to the chapter Call sequence for settings.

5.23.2.1 Application

▶ Application

SolidWorks install path
You can specify a directory on the user computer where SolidWorks is installed or leave this field empty, which means the installation directory is searched for automatically from the local Windows registry and the version is used as specified in the project settings. For more information consult the chapter CAD-specific project settings.

Please note: It is generally recommended to have the installation path be determined from the local Windows registry.

© 2025 INNEO Solutions GmbH

Data directory
Enter the data directory to be used. The data directory is the main directory of an operating environment containing SolidWorks-related data, e. g. *%GTS_ROOT_DIR%\solid_works\data\swx_22*.

▶ User Settings

Configuration folder
Customized configuration blocks from users (Config files) can be stored in the *userdata* directory.

Private configuration block
Enter the name of user-defined *config_*.xml* files, e. g. *config_%username%.sldreg*. It is appended to the Config files in the *users, projects, units* and/or *standard* directories.

Please note: For storing their private *config_*.sldreg* files, users must have write access to the userdata directory, as well as the access right *Can save personal Configuration file* [to userdata directory] *on server*.
See also Config tab in GENIUS TOOLS Starter App.

5.23.2.2 Start

In the Start tab you define the startup behavior of the application.

▶ Startup behavior

Startup directory
Enter the working directory of SolidWorks.

Language
The language in which the application starts can be specified. If no setting is selected, the application will select the operating system language automatically.

<not specified / empty>: GENIUS TOOLS Starter does not create a language variable (`LANG`) on the application computer (recommended).
System: The country-specific settings of the operating system are adopted.
<language>: This language is used, and the language variable `LANG`, if defined on the application computer.

Show only installed languages
By default only languages of installed versions are displayed in the drop-down menu (see above setting).

Yes: Menu contains only installed languages.
No (default): Menu contains all languages supported by the application.

Enable stop batches

Yes: Additional batch files can be executed after the application has been stopped.
No: No stop batch files can be executed.

© 2025 INNEO Solutions GmbH

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.

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

Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

▶ Licenses

The license server is determined automatically from the registry and cannot be specified here.

Show licenses
Specifies whether the licenses specified in a project are displayed in the licenses tab of GENIUS TOOLS Starter App.

Yes: Licenses are listed. The license status is not obtained; validation is possible by using the See Licenses function.

No: Licenses are not displayed. The settings *Get extensions*, *Calculate licenses by extension* and *Identify license users* can not be utilized.

Identify license users
Specify whether users of a license can be determined.

Yes: In the GENIUS TOOLS Starter App, the users currently using a license feature are displayed as a tooltip in the license display. The Windows user is replaced by the GENIUS TOOLS Starter user alias from the workspace *Users*.

No: No user names are obtained or displayed.

Please note: To display names, the user names must be configured via *Resources* > *Users*. Otherwise, the Windows user name is displayed.

Timeout for FlexNET server
Enter a maximum duration for the license query in seconds. The servers are checked for availability with a ping before a license evaluation. If it is not possible to ping the server, the query will be performed anyway.
In addition, the value set here is used as the maximum time to query the licenses.

Default: 0 = No maximum query time is set.

5.23.2.3 Cleanup

Here, you can manage the cleanup settings of GENIUS TOOLS Starter App for projects.

▶ HKEYCURRENT_USER

Registry branch
Defines, whether the configuration settings for SolidWworks are deleted in the registry

© 2025 INNEO Solutions GmbH

before project start.
Yes: Delete
No: Retain

5.23.2.4 Write

▶ Registry Settings

Specify whether the file config.sldreg, generated by GENIUS TOOLS Starter, is executed. This writes the entries to the registry.

Write registry entries
Yes (default): GENIUS TOOLS Starter writes into the registry.
No: No entries are written into the registry.

5.23.3 Project settings

Project settings are the specifications you make in the main page *Projects* under *Applications* > *SolidWorks* in the tabs *SolidWorks*, *Start* and *Environment*.

After having created a new project with the general project specifications, fill in the following input fields. These entries overwrite both the unit-specific entries and the standard settings for the startup behavior of the application, which are made under *Configuration* > *SolidWorks* > *Tabs: Application / Start*.

For more information, see the chapter Configuration concept.

5.23.3.1 Essential specifications

In the tab *SolidWorks* you specify essential details for a SolidWorks project.

▶ SolidWorks

Release
Define the SolidWorks version to be used. The path can be fixed or determined automatically from the registry of the application computer.
Fixed path: Select the directory from the newly appearing drop-down menu. If you do not specify a directory, the settings for the unit Standard will be used. (*Configuration* > *SolidWorks* > *Standard* > *Tab: Application* > *SolidWorks install path*)
SolidWorks versions: Specify a certain version. For example, the selection <SolidWorks25> will determined the path to the lastest SolidWorks 25 version from the registry.

Please note: SolidWorks has to be installed locally on the application computer in order to have registry entries available. The user must have read permission in HKLM.

© 2025 INNEO Solutions GmbH

Project folder
Directory in *<application>\configuration\projects*. From this directory configuration blocks are copied to the application computer.

Please note: Configuration blocks should be stored separately from the data structure due to their potential multiple use. They should be managed in the specific subdirectories of the configuration directories *units*, *projects* or *users*, or in the *standard* directory for global settings. See Configuration concept.

Data folder
Main directory of an operating environment in which application-related data is located.

5.23.3.2 Start behavior

In the *Start* tab you define the startup behavior for a single project. The specifications set here overwrite the settings for units.

Starting behaviour
Select the application that will open the project.
AutoCAD application (default): The project is started with the selected AutoCAD application.
External: The project is started with another application (e. g. SAP).

If *External* is selected two additional fields open:

External start command
Enter the path to the executable file that is to start the project.

Command arguments for external start
Enter commands that specify how the executable file is started. Set the commands in quotation marks.

Startup directory
Enter the working directory of SolidWorks.

Language
The language in which the application starts can be specified. If no setting is selected, the application will select the operating system language automatically.
<not specified / empty>: GENIUS TOOLS Starter does not create a language variable (`LANG`) on the application computer (recommended).
System: The country-specific settings of the operating system are adopted.
<language>: This language is used, and the language variable `LANG`, if defined on the application computer.

Show only installed languages
By default only languages of installed versions are displayed in the drop-down menu (see above setting).
Yes: Menu contains only installed languages.
No (default): Menu contains all languages supported by the application.

© 2025 INNEO Solutions GmbH

Synchronize with project start
Defines whether project data is to be synchronized before a project opens. This guarantees that all configuration and batch files are up to date when starting a project.

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

Yes: Data is synchronized, i. e. the directories *standard, units, projects* and *users* in the *<application>\configuration* directory.

5.23.3.3 Environment variables

In the tab *Environment* you can set environment variables for a SolidWorks project.

The variables set here are added to the variables defined for units. Values set here for an existing environment variable will overwrite the values for units.

Outdated environment variables will continue to be created for compatibility reasons. A list of created and affected environment variables can be found in the appendix.

5.23.4 Project display in GENIUS TOOLS Starter App

General settings for projects are made in GENIUS TOOLS Project Configurator, see present projects in GENIUS TOOLS Starter App.

Project information

For the SolidWorks application, project details are displayed in the tabs *Info, Licenses, Config, Project Options* and *Backup*. For a description of the information and functions in the tabs, see the GENIUS TOOLS Starter App chapter under SolidWorks.

SolidWorks project display in GENIUS TOOLS Starter App

Project options

Administrators can set up a SolidWorks project with the following options:

– language: in the menu item *Configuration* under *Settings* > *GENIUS TOOLS Starter App* > *Projectste*, see also Selection field for language.

– project options (checkboxes)

· for embedding addin applications (switch option, in italic font)

© 2025 INNEO Solutions GmbH

- for one or more configuration settings (single project option)
- for combining configuration settings (combined project option)

Consult the chapterMaking use of project options for instructions of how to create the needed options as well as the Configuration blocks chapter for examples.

5.24 Working with satellites

A **satellite** (also: synchronization or mirror server) is a computer or a sector of a computer onto which the state of one or more operating environments of a central main server is mirrored by data synchronization.

Operating satellites is beneficial at locations that have a slow connection to the main server. User computers can significantly reduce the time required for data synchronization by accessing a satellite that is easier to reach.

You can operate active and passive satellites.

An active satellite is a server that request data to be synchronized from the main server at a defined time interval. This requires GENIUS TOOLS Starter Service.

A passive satellite is a shared directory on a computer, to which data from the main server is copied. It does not require a service.

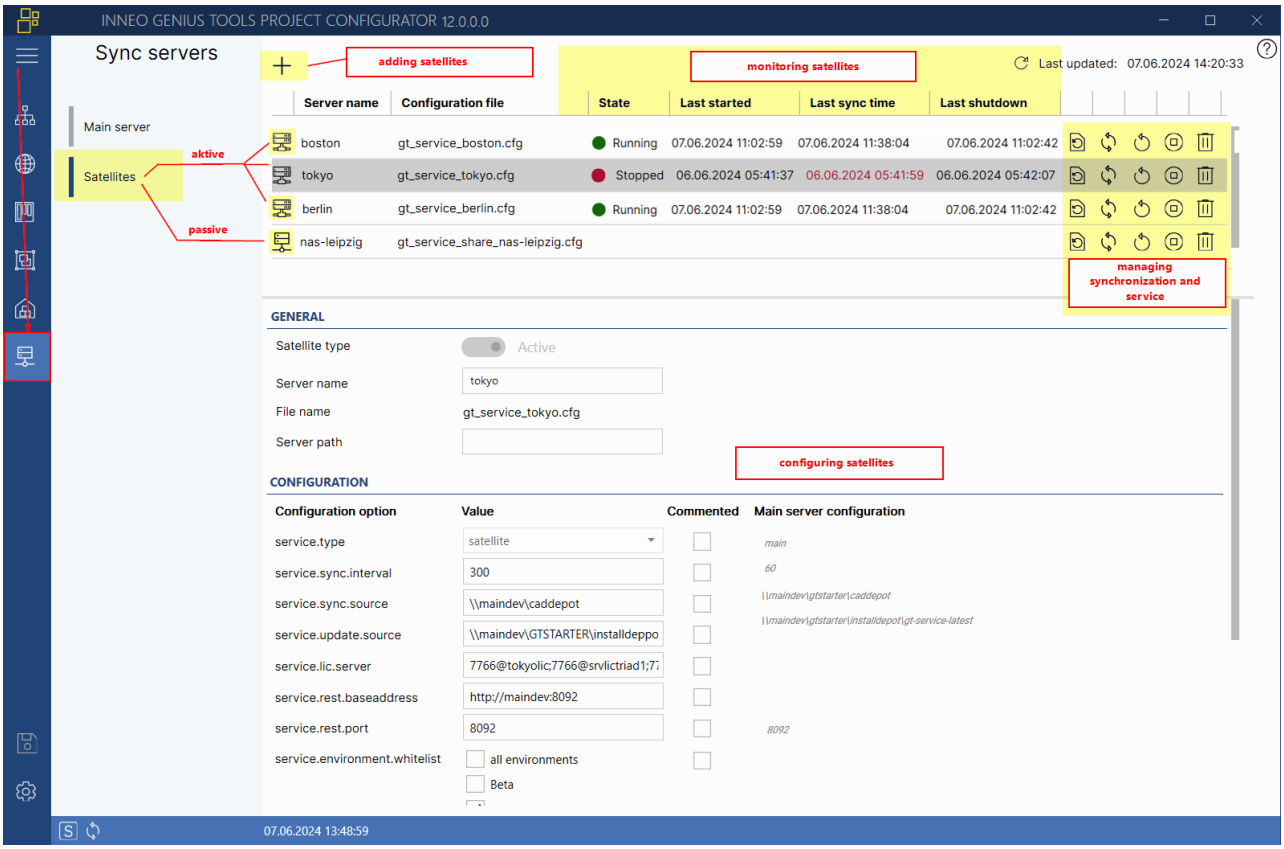
Active satellit	Passive satellite
Server	Shared folder on a computer
Requires GENIUS TOOLS Starter Service	No service required
Changes in files on the main server will be synchronized to the target with the next synchronization according to the defined time interval	Changes in files on the main server will be synchronized immediately. The defined synchronization interval serves as a back up, meaning that after this period all files will be synchronized at the latest.

5.24.1 Creating satellites

In the Satellites page you can create and manage satellites and monitor synchronization.

A computer is installed as a satellite if you specify this in a configuration file of the GENIUS TOOLS Starter Service. The configuration files (CFG files) must be located in the configuration directory in the installation depot.
Path: \\<*mainserver*>*GTSTARTER**installdepot**gts-service-latest**conf*

© 2025 INNEO Solutions GmbH



Menu item Satellites in GENIUS TOOLS Project Configurator

Procedure: Adding new satellites

In order to operate satellites GENIUS TOOLS Starter Service must be running on the main synchronization server ("main server"). Active satellites also require this service, passive satellites do not. The procedure is described in detail in the document *GENIUS TOOLS Starter Installation.pdf* in the chapter *GENIUS TOOLS Starter Service*.

1. Create a new configuration file (CFG file) with the plus symbol. A new dialog opens.
2. Select the type of satellite.
3. Fill in the input fields as described in the program help.
4. Save the settings.

Result: The configuration file is saved in the configuration directory.

Warning: If access to the configuration directory is not possible, you can select a different storage location in the save dialog. The file must then be moved to the configuration directory manually.

---

5. Go to the Main server page.
6. Enter the web URL in the notation `http://<mainservername>:<portnumber>`. The port name must correspond to the value for the entry `service.rest.port=` in the configuration file *gt_service_<mainservername>.cfg*. The standard port is 8092.

© 2025 INNEO Solutions GmbH

7. Switch on the Use satellite radio button.
8. Restart the main server.

Result: GENIUS TOOLS Starter App automatically determines which synchronization server (satellite or main server) responds fastest based on the ping runtime. This is then used for synchronization to the user computer.

5.24.2 Monitoring satellite status

The satellite page contains an overview of all satellites known to the main server. The following information show whether the satellites are available.

Status
If GENIUS TOOLS Starter Service is not running, a red circle is displayed for active satellite. As the service is not running on passive satellites, their status cannot be displayed.

Last started
Displays time when the GENIUS TOOLS Starter Service was last started.

Last sync time
Displays time when synchronization was last started. As soon as the time of the last synchronization is longer than the time specified in the synchronization interval, the time will be displayed in red. For example, if the synchronization interval is set to 60 minutes, but the last synchronization was more than an hour ago, the time is displayed in red. See Setting the synchronization interval.

Last shutdown
Shows when the GENIUS TOOLS Starter Service was last stopped.

5.24.3 Managing satellites

Use the following non-automated actions to control the synchronization of satellites and GENIUS TOOLS Starter Service.

Restore satellite configuration file
Restores the state of the file before the last change.

Trigger synchronization
The satellite is synchronized immediately regardless of the configured interval.

Restart
GENIUS TOOLS Starter Service is terminated on the active satellite and restarted.

Stop GENIUS TOOLS Starter Service
GENIUS TOOLS Starter Service is terminated on the active satellite.

Warning: After this action, the service must be restarted on the active satellite.

© 2025 INNEO Solutions GmbH

Delete
This function includes the following actions:

– Uninstalls the GENIUS TOOLS Starter Service on the satellite.

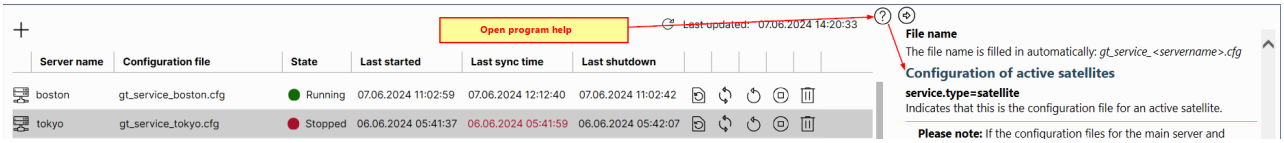
– Removes the results file on the main server.
\\<*mainserver*>*gtstarter**installdepot**gts-service-latest**results**gts_satellite_info_*<*satellite_name*>*.json*

– Removes the configuration file in the configuration directory.
\\<*mainserver*>*gtstarter**installdepot**gts-service-latest**conf**gt_service_*<*satellite_name*>*.cfg*.

– Deletes the satellite entry in GENIUS TOOLS Project Configurator.

5.24.4 Editing satellite configuration

You can edit the configuration of existing satellites by clicking on the corresponding line and changing the option values in the Configuration section. They are described in the inline help.



> **Please note:** If the configuration files for the main server and satellites contain different information, the setting of the satellite applies.

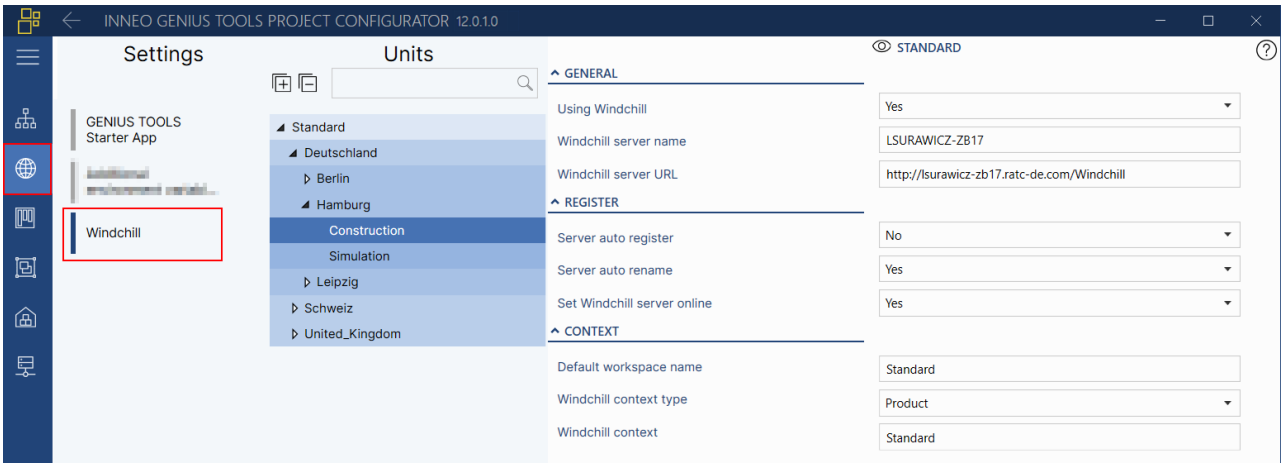
An overview of all options can be found in the GENIUS TOOLS Starter installation manual in the chapter *GENIUS TOOLS Starter Service* > *Working with satellites* > *Configuration options for satellite operation*.

5.25 Working with Windchill

GENIUS TOOLS Starter can be used in conjunction with Windchill. The following section describes requirements and considerations for working with Windchill.

If you want GENIUS TOOLS Starter to look for Creo data in Windchill first, and in the project directories in the second place, you should set your system settings to *Using Windchill*. To do so, go to *Configuration* > *Standard* > *Windchill settings* > *General* > *Using Windchill* > *Yes*.

© 2025 INNEO Solutions GmbH



Main menu item Configuration > Settings

5.25.1 Object search hierarchy in Creo

Creo looks for objects in the following order:

1. Creo session
2. Search or call directory in which the parent object has been found, or directory which is specified in the *Open* dialog.
3. Active Windchill workspace.
4. Active Windchill commonspace
5. Local working directory
6. Search paths

(See http://www.ptc.com/appserver/cs/view/solution.jsp?n=131190.)

5.25.2 Using a Windchill library

You can define dedicated directories for libraries, drawing frames, start objects and UDF in Creo. When you are using Windchill, these directories can point to products or libraries in the Windchill environment. The required syntax of the *config.pro* entry is as follows, using the library directory of Windchill PDMLink as an example.

```
Pro_library_dir wtpub://<Windchill_server>/<Context>/<Directory>
```

– wtpub: refers to the Windchill commonspace

– <Windchill server>: name of the Windchill server as registered in Creo

– <Context>: context you want to refer to, e.g., SUT libraries

– <Directory>: directory within the context

© 2025 INNEO Solutions GmbH

Each user can define their own name for the Windchill server. This means that the general *config.pro* entry cannot point unequivocally to a storage location, as maybe not all users have used the same name when first registering the server. The following section describes how GENIUS TOOLS Starter can be used to influence Windchill server naming.

5.25.3 Automatic Windchill server rename

In the general Windchill settings in GENIUS TOOLS Project Configurator, you can define a Windchill server name that should be used system-wide (*Configuration* > *Standard* > *Windchill settings* > *General* > *Windchill server name*). To link this name with an existing, manually configured Windchill server, you also have to make two other settings:

1. Windchill server URL: address of the Windchill server
2. Server auto rename: Yes (under *Register*)

If a server is found under the URL you have specified for the Windchill server, this server will be renamed to the specified name on the next Creo start.

5.25.4 Automatic Windchill server registration

The Windchill server registration enables the automatic registration of a Windchill server under a given name in PTC Creo.

The concept of automatic server registration is that previously registered servers are retained without changing the entire registration and that a newly registered server is set to *active*. It is also part of the concept that server registration does not result in the registered server reverting to *active* as soon as a project with the corresponding configuration is selected. Usually the user wants Windchill settings of the previous Creo session to be set again after restarting Creo.

Users who are to get access to a Windchill server via automatic server registration need to have a valid Windchill account and have access to the defined workspace in the defined Windchill context. It can be useful to create a context (product, library or project) that is not otherwise used and that these users have access to.

Please note: In order to use automatic server registration, the following requirements must be met:
– *Using Windchill* must be activated. (*Configuration* > *Select unit* > *Windchill Settings* > *Section: General)*
– The *Windchill Context* must be set and must exist.
– The default workspace must be located in the *Windchill Context* that is given.
– The Windchill cache directory must be a subdirectory of the Windchill user root folder.

Users who are to be granted access to a Windchill server using automatic server

© 2025 INNEO Solutions GmbH

registration must have a valid Windchill account and access to the specified workspace in the registered Windchill context. It may be advisable to create an otherwise unused product, library or project to which these requirements apply and to which users have access.
Automatic server registration is configured under *configuration* > *(Select unit)* > *Windchill settings*. The Windchill settings are expanded once you set *Use Windchill* to *Yes*.

▶ General

Use Windchill
Activate/deactivate the Windchill server. To use Windchill automatic server registration, this function must be set to Yes.
Yes: Activates Windchill-relevant settings such as automatic server registration.
No: Windchill settings will be disregarded.
No, don't register: The Creo session is started without an active Windchill server. However, the Windchill server remains in the server registry without being selected.

Windchill server name
Specify the name with which the server will be registered in Creo.

Windchill server URL
Specify the URL under which the server can be reached.

▶ Register

Server auto register
Select whether the server should be registered automatically.
Yes: The above mentioned Windchill server is automatically registered and is then available within Creo.
No: The server is not entered automatically.

Server auto rename
If a server already exists at *Windchill server URL* and has a different name than *Windchill server name*, the server will be renamed when starting Creo next.

Set Windchill server online
Select whether the server should be put online.
Yes: A new server that was added by auto-registration will automatically be put online.
No: The server is registered offline.

▶ Windchill context

Default workspace name
Name of the workspace that is active during registration. The default workspace has to be present under the context given.

Windchill context type
Type of context: Product, Library, Project.

© 2025 INNEO Solutions GmbH

Windchill context
Context of the workspace.

Changing server path from HTTP to HTTPS

When changing the Windchill server path from HTTP to HTTPS, Creo Parametric may encounter errors that interfere with the correct execution of Windchill auto-registration. To avoid this, it is recommended to create a new cache directory and delete the old server path – after a transition period, if necessary.

The entry for the Windchill cache directory is located in the main menu item *Configuration* under *Creo settings* > *Section: Startup settings*.

5.25.5 Project-specific Windchill settings

You can also define a Windchill server to be used for a specific project. To do so, go to the *Projects* page, select the desired Creo Parametric project and make the project-specific Windchill settings in the *Windchill* tab.

See also Workspace for Windchill.

5.25.6 Integration in Windchill Worker

If you want to open Creo with Windchill, you can use GENIUS TOOLS Starter to apply the project settings and environment variables. In this case, you will neither get the GENIUS TOOLS Starter user interface nor will Creo be opened. For this option, you must create an extra project for access by the Windchill Worker. Proceed as follows.

Steps for integrating GENIUS TOOLS Starter into an existing Windchill Worker
Creating a project in GENIUS TOOLS Project Configurator

1. In the main page *Projects* click the *Create* button. A new project is created with the name "New Project".
2. Rename the project. The default name is *publish*.
3. If you want the project to be invisible to users, hide it in the *Creo* tab in the section *General* with *Hide Project*. Alternatively, you can create a role which you grant access to the project.
4. If necessary, assign a separate license to the project in a Creo startkey (PSF file).

Including the call to the GENIUS TOOLS Starter App in the Worker batch file

5. Open the batch file *proeworker.bat* in the Windchill Worker directory.
6. Enter the following line below the line set `PVIEW_HOME=D:\ptc\object` adapter:

© 2025 INNEO Solutions GmbH

```
call <cadpoolpath>\<nameofoperatingenvironment>\software\worker.bat <project
name>
```

The project name corresponds to the name selected in step 2.

Install Cadpool on user computer

7. Make sure that GENIUS TOOLS Starter is installed on the user computers that are to access the project. To do so, perform an initial synchronization by opening the file *gts.exe* from the operating environment of the Caddepot directory which is located on the administration computer: *<caddepotpath\<working environment name>\software\gts.exe*

This will install the Cadpool directory and synchronize it with the Caddepot directory.

5.25.7 Freely configurable debug mode

GENIUS TOOLS Starter provides a freely configurable debug mode that allows you to use the Windchill Workgroup Manager to interact with Windchill in debug mode.

The files logger.cfg.debug and logger.cfg.bat are used for this purpose according to the call hierarchy for configuration files. Place both files in the standard directory *<working environment name>\configuration\standard*.

Hint: Information on how to use client log files for debugging with Windchill Workgroup Manager can be found at PTC in article CS140107.

logger.cfg.debug
If the logger.cfg.debug file exists multiple times within the directory, it is copied together like a config.pro file. File names are used in the following notation: *logger.cfg*.debug*

After merging *logger.cfg.debug* the log output folder is always set to HOME\ANALYSEWF by adding the line *log_dir_path*.

logger.cfg.bat
The batch file is used to define environment variables which should be additionally defined in the Creo session if the debug mode is used. If more than one batch file exists, all batch files matching the *logger.cfg*.bat* notation will be executed.

The debug mode is switched on in the user menu of GENIUS TOOLS Starter App with *Debug Creo/Windchill*.

© 2025 INNEO Solutions GmbH

6 GENIUS TOOLS Starter App

The projects defined in GENIUS TOOLS Project Configurator are provided to users in GENIUS TOOLS Starter App. By selecting the unit and project options (language, Creo start key) further configuration settings are added. This turns the project as configured by the administrator into a Starter project.

Changes in the central configuration are adopted during synchronization in the GENIUS TOOLS Starter App.

Information on the configuration of the interface and the selection options can be found in the chapter Settings for GENIUS TOOLS Starter App.

6.1 Starting GENIUS TOOLS Starter App

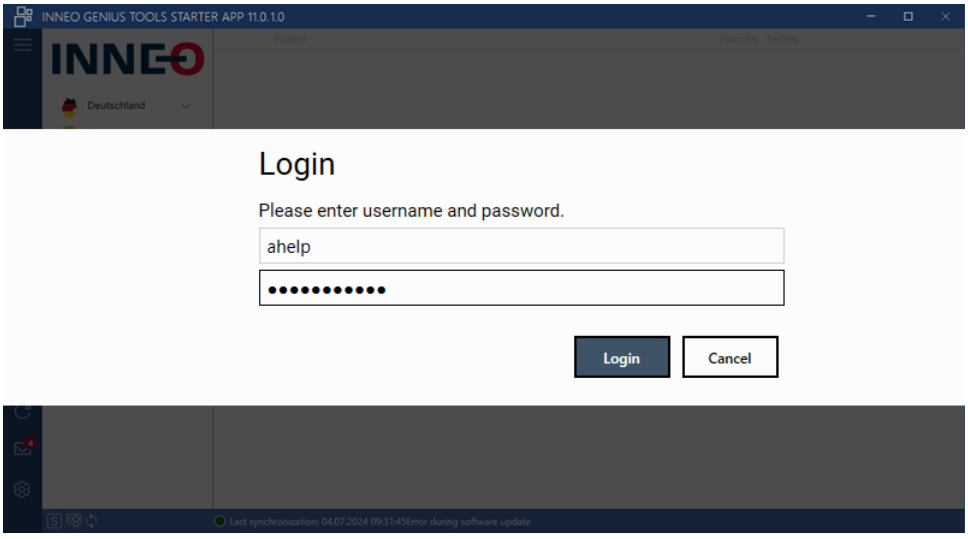
By default, GENIUS TOOLS Starter App is configured to start automatically with the operating system. GENIUS TOOLS Starter App is displayed in the Windows task bar and can be called up from there.

If GENIUS TOOLS Starter App is not started automatically, the app can be started via a centrally configurable desktop link.

Please note: To close GENIUS TOOLS Starter App, select *Exit* in the user menu . When you click *Close*, the window is minimized.

6.2 Login

An input window for login credentials appears if a system other than Windows is required for authentication, e. g. Windchill.

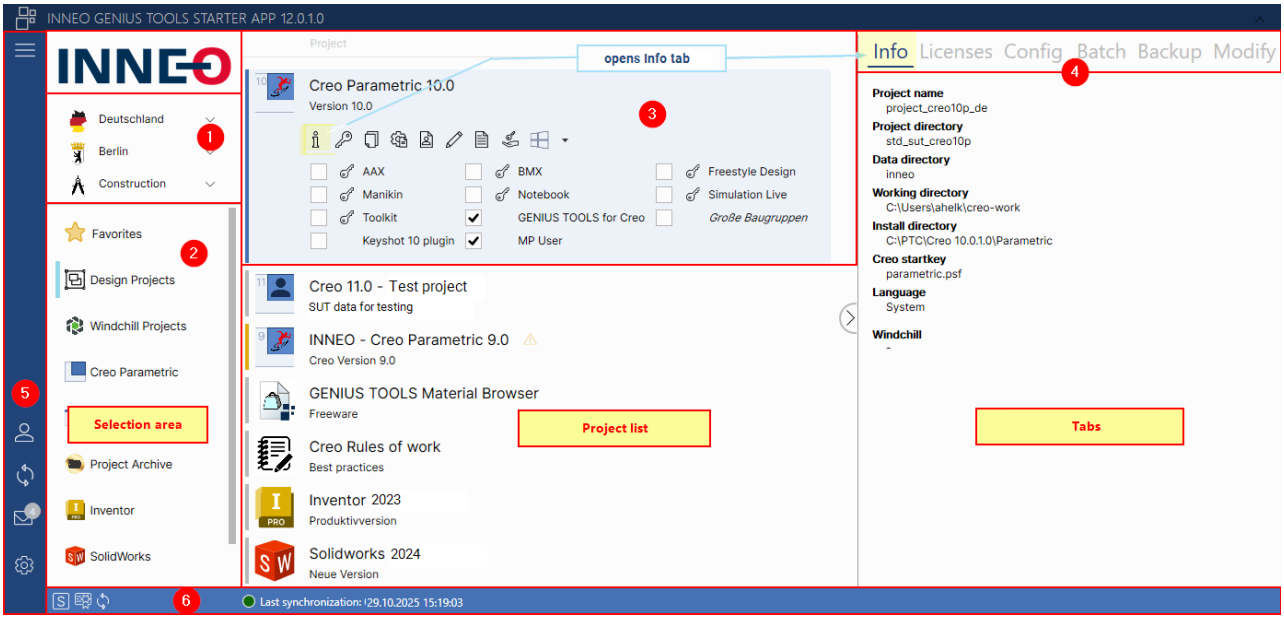


© 2025 INNEO Solutions GmbH

For more information, consult the chapter Authentication.

6.3 User interface

GENIUS TOOLS Starter App comes with a clearly structured user interface. Select your unit on the left. In the project list that appears thereafter, single-click the desired project to expand information and project options such as language, Creo start keys and license extensions. Double-click to start the application with the configuration defined for the project.



User interface of GENIUS TOOLS Starter App

The user interface of GENIUS TOOLS Starter App is divided into three areas.

Left **area for selection** of a

1. unit and
2. project collections:
   – company-specific (e. g. My Projects, Project Archive) and
   – application-specific (e.g. Creo Parametric, Creo Elements/Direct Modeling), as well as

   auto projects:
   – applications which cannot be configured and which are automatically listed by GENIUS TOOLS Starter (e. g. MathCad, KeyShot). .

Central area with **project list**

3. Configurated Starter project, maybe with project options

The area on the right side opens when clicking on an info icon in a selected project. These are the corresponding

© 2025 INNEO Solutions GmbH

4. **tabs:**

   Info: Shows the most important project (name, directories, Creo startkey, language of the project).

   Licences: Displays all license servers and gives access to analyzing and borrowing licenses if user has access rights.

   Config: Shows configuration blocks and their location for the selected project, as well as additional applications (toolkit applications).

   Project options: Shows all selectable configuration settings for license extensions, additional programs etc. (Single project options).

   Backup: Allows users to save user-specific settings, UI settings for Creo.

   Modify: Saves the project with the project options selected by the user as custom projects.

   Warning / Error These tabs are only displayed if a project cannot be started or causes a warning.

There are two bars for **operating the Starter App**

5. Sidebar with user menu
6. Footer with information on licenses and synchronization

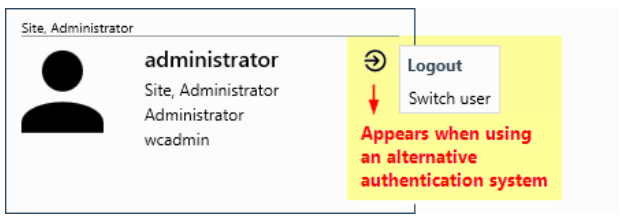
6.4 Sidebar

The sidebar contains the following functions.

User

A picture can be displayed here. Store it in JPEG, PNG, SVG or GIF format (100*130 px) under the name of the user, in the userdata directory, e. g. *<caddepot>\<environment>\userdata\%USERNAME%\%USERNAME%.png*. See Action: Create user entry with image.

Click on the icon or image to display the user card. Once the user has been saved as a dynamic entry (LDAP query), this information is used for the user card. Otherwise, the details of the static user entries are used.



© 2025 INNEO Solutions GmbH

Synchronize now (F6)

GENIUS TOOLS Starter immediately starts synchronization – regardless of the specified synchronization interval – and loads any updated files to user computer (Cadpool).

Message from Administrator (F4)

There are new messages from your administrator when a red number is displayed on the letter symbol. Messages that have been opened are displayed in gray color and can be reread. Messages are saved as text files in the *_Information* directory, see also Sending messages to the users.

User menu

6.5 User menu

To access the user menu, click on the gear symbol in the sidebar.

Language: user interface language

You can switch the user interface language between English, German and French at any time. The language setting is saved and will be used the next time you start the software.

The software first starts with a German user interface if the operating system locale is set to German. For all other locale settings, the software first starts with an English user interface.

Theme: user interface color settings

The software comes with the color themes *Blue*, *Light* and *Dark*. You can switch themes at any time. The theme setting is saved and will be used the next time you start the software.

Synchronize now (F8)

GENIUS TOOLS Starter immediately synchronizes – regardless of the specified synchronization interval – and loads any updated files to user computer (Cadpool).

Pause synchronization (F7)

GENIUS TOOLS Starter stops synchronization – depending on the setting for 1 hour, 9 hours or permanently. Pause synchronization if you want to prevent local changes from being overwritten. The setting *Pause synchronization* is saved for the next start and marked by a yellow bar below the header. When the user resumes synchronization, they are asked whether they want to resume and overwrite local changes.

© 2025 INNEO Solutions GmbH

Please note: Your administrator defines whether you can pause the synchronization. If user have not been granted to appropriate access right, the item *Pause synchronization* is not displayed in the menu.

Debug Creo/Windchill

Switches Creo debug mode on. This mode processes the files *logger.cfg.debug* and *logger.cfg.bat*. Settings for this are made by the administrator, see chapter Freely configurable debug mode.

Help

– Help (F1): Software manual for GENIUS TOOLS Starter, which corresponds to this document.

– Support: Contact details for the technical support of INNEO or a company-specific link which can be set up in GENIUS TOOLS Project Configurator. Inneo's support can be reached by email, telephone and with Teamviewer.

– Info (F12): Current GENIUS TOOLS Starter version.

Open home

Opens the user directory in the file manager.

Open log file (F2)

Opens the log file that is written on each project start. The log file *gts-starter-INNEO.log* is saved in the user directory of the client.

Please note: Please always find and check your log file before opening a call with the support hotline. The log file is required for troubleshooting any issues.

Open sync log file (F3)

Opens the log file that is written by GENIUS TOOLS Starter App and GENIUS TOOLS Project Configurator at each synchronization. The log file *gts-starter-INNEO-sync.log* is saved in the user directory of the client.

Reset window size

Restores the default size of the dialog window of GENIUS TOOLS Starter. The window can be adjusted to all sizes.

Switch user *– only visible with an alternative authentication system*

Switches to another user of the applied authentication system, e. g. Windchill.

© 2025 INNEO Solutions GmbH

Exit

Closes the software. Clicking on the *Close* button (X) in the header will minimize the program window.

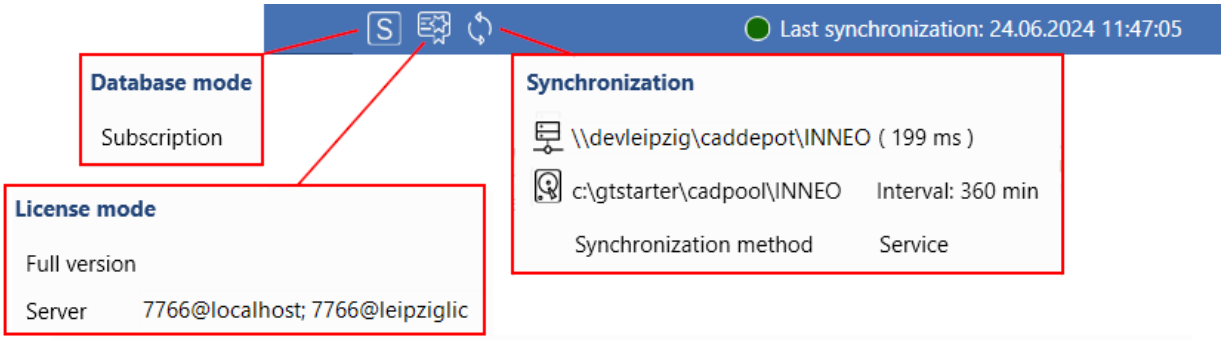
Project Configurator (F8)

Opens GENIUS TOOLS Project Configurator.

> **Please note:** Your administrator defines whether you can access GENIUS TOOLS Project Configurator via access rights. If you are denied access, the item *GENIUS TOOLS Project Configurator* is not displayed in the menu.

6.6 Footer

The footer contains the following information.



Data base mode

The state of the database is displayed in the footer:

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.

License mode

The GENIUS TOOLS Starter App footer shows the current license mode by displaying an icon.

Full version

Full version. No free subscription license available, i. e. projects cannot be started.

Borrowed license

Educational or home use

© 2025 INNEO Solutions GmbH

Fail-safe mode for GENIUS TOOLS Starter: If the license server is not available, the fallback license is used.

A fail-safe license is available only after GENIUS TOOLS Starter has found valid licenses on a license server during project validation. Projects are validated by the command *Refresh Projects* in the sidebar.

Warning: The fail-safe mode works for GENIUS TOOLS Starter only, not for GENIUS TOOLS for Creo or other products.

Synchronization mode and synchronization status

To the right of the icon for the license mode, information on the synchronization mode is displayed. For more information, please refer to Procedures and synchronization.

Synchronization is active
Hover the mouse on the synchronization symbol to see the paths to the Caddepot and to the local operating environment as a tooltip.

Synchronization inactive
The synchronization of toolkit applications is paused as long as Creo is running

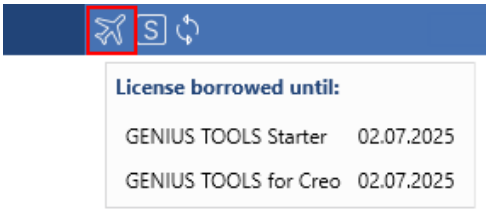
Local operating environment
There is no synchronization; you work on a local directory

Network mode
There is no synchronization; you are working directly on a network directory.

Network not connected
The network directory cannot be accessed.

License borrowed until:

This icon appears when licenses have been borrowed.



The synchronization status with the date and time of the last synchronization is displayed in the middle area of the footer.

Running applications

If a supported desktop application is running, the application icon will be displayed in the footer, e. g.

Creo Parametric

© 2025 INNEO Solutions GmbH

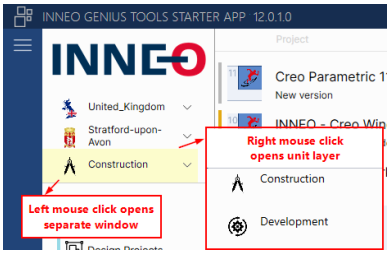
Creo Elements/Direct Modeling

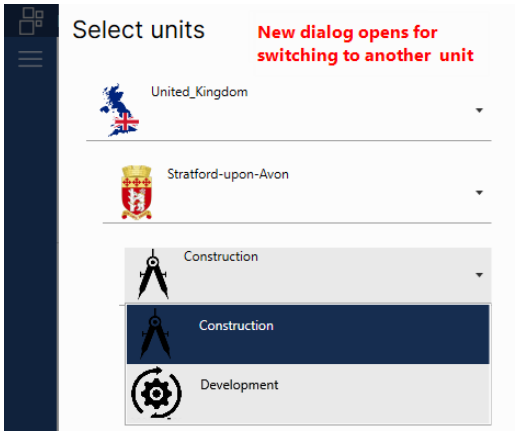
6.7 Selecting a unit

When using a subscription license, *units* can be defined as an additional configuration layer to reflect different company branches or divisions. A user can be assigned to multiple units. (See chapter Configuring heterogeneous environments.)

If units are used in the working environment and the user can choose from at least two units, a separate dialog opens to select a unit or subunit.

Units are displayed in alphabetical order, unless a unit is defined to be the first on the list. This can be specified in GENIUS TOOLS Project Configurator by inserting a space character in front of the unit name. (See Displaying units in GENIUS TOOLS Starter App.)





In this dialog box you can select a unit. Note that units can be selected from several levels. If no selection is made, the first unit in the drop-down menu will be used.

Confirm the selection with the Change button at the bottom right.

6.8 Display of projects

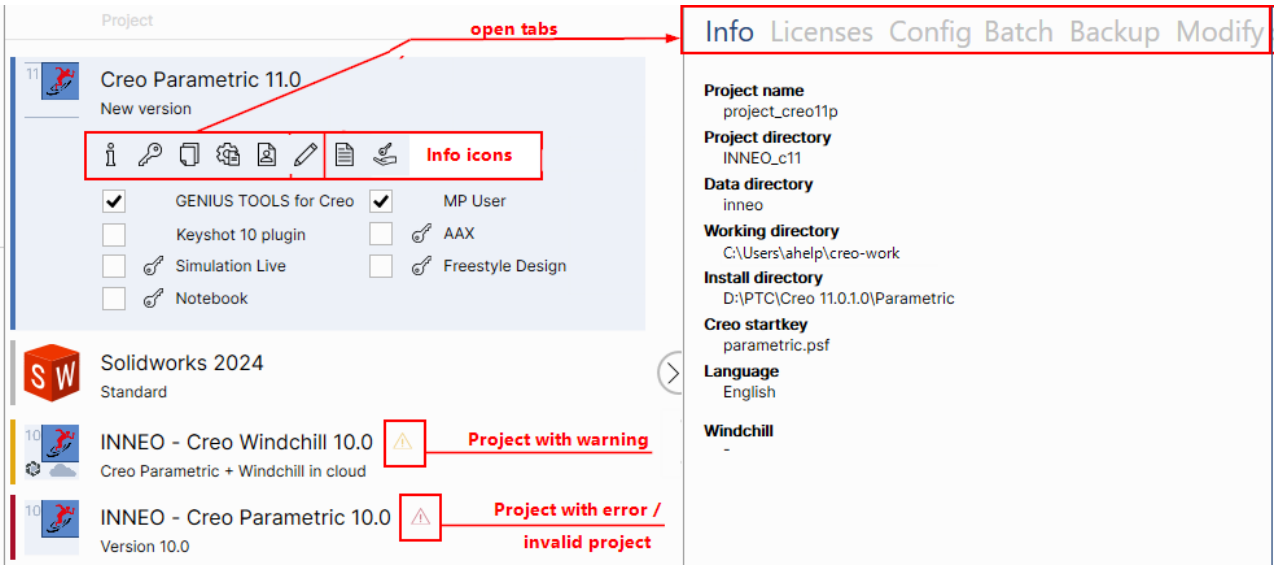
Information about a project is available

– by the color of the bar to the left of the project name,

– in the area below the selected project,

– in the tabs on the right side.

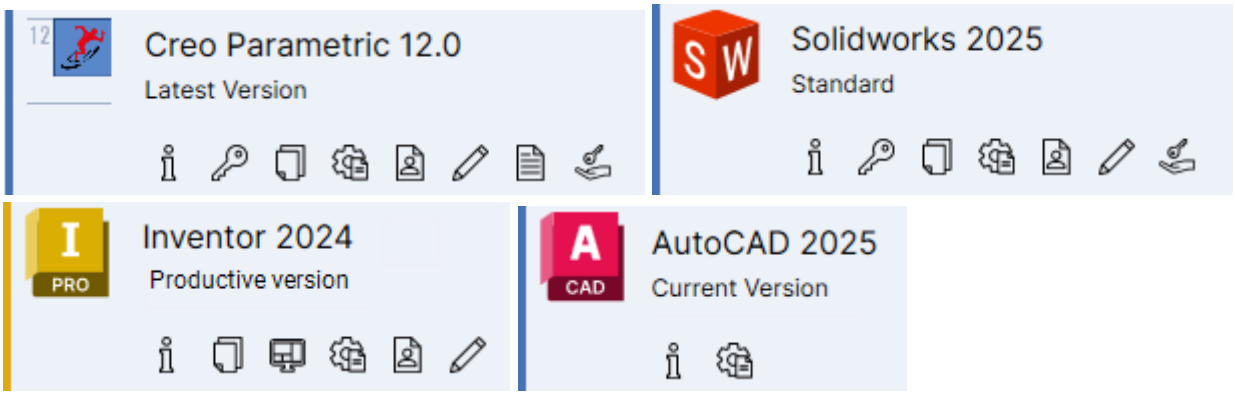
© 2025 INNEO Solutions GmbH



Project list and tabs in GENIUS TOOLS Starter App

6.8.1 Info symbols

When selecting a project the following icons will appear in the area below the project name. Some icons can be disabled by the administrator. An overview of how to configure the info icons and tabs can be found in the GENIUS TOOLS Project Configurator chapter under Customizing information panes.



Clicking on an info icons opens tabs or functions.

Symbol / Function		Available for projects of					Can be dis-abled?
		Creo	CED	Solid-Works	Inventor	Auto-CAD, Apps	
ℹ	Opens the tab Info	X	X	X	X	X	yes

© 2025 INNEO Solutions GmbH

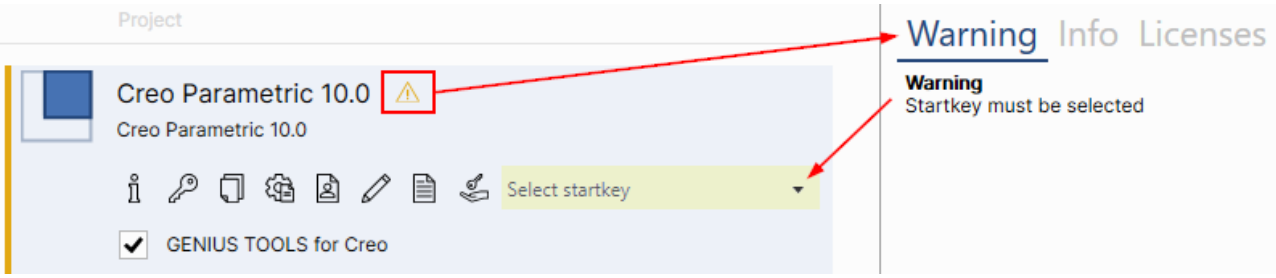
Symbol / Function		Available for projects of					Can be dis-abled?
		Creo	CED	Solid-Works	Inventor	Auto-CAD, Apps	
	Opens the tab Licenses	X	X	X			yes
	Opens the tab Konfig	X		X	X		yes
	Opens the tab Batch	X	X	X	X	X	yes
	Opens the tab UI				X		no
	Opens the tab Backup	X		X	X		yes
	Opens the tab Modify	X	X	X	X	X	no
	Opens Project report (PDF file)	X					yes
	Opens Borrow license dialog	X		X			yes
	Occurs if a project triggers a warning. Opens the tab Warning	X	X	X	X	X	no

© 2025 INNEO Solutions GmbH

Symbol / Function		Available for projects of					Can be dis-abled?
		Creo	CED	Solid-Works	Inventor	Auto-CAD, Apps	
⚠	Occurs at invalid projects Opens the tab Error	X	X	X	X	X	yes
→	Occurs if some checkboxes cannot be displayed in the dialog window. Opens the tab Project options	X		X	X		no

6.8.2 Warnings

Projects with warnings are displayed with an orange project bar. A flag symbol ⚠ appears, which opens the Warning tab.



Projects with warnings can be started since warnings are not related to the availability of licenses.

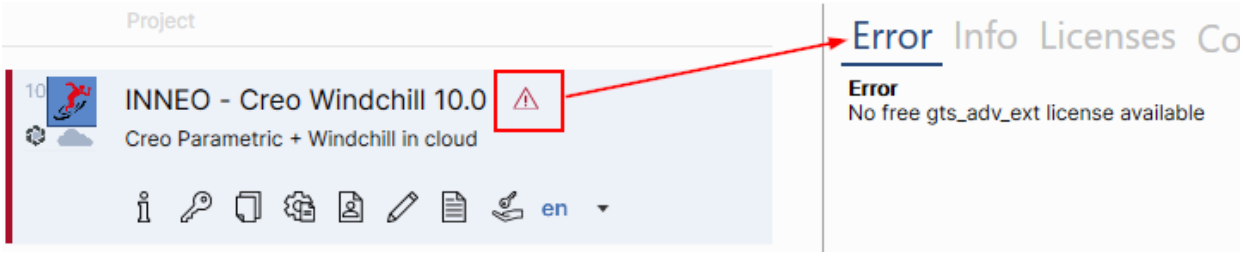
© 2025 INNEO Solutions GmbH

6.8.3 Invalid projects

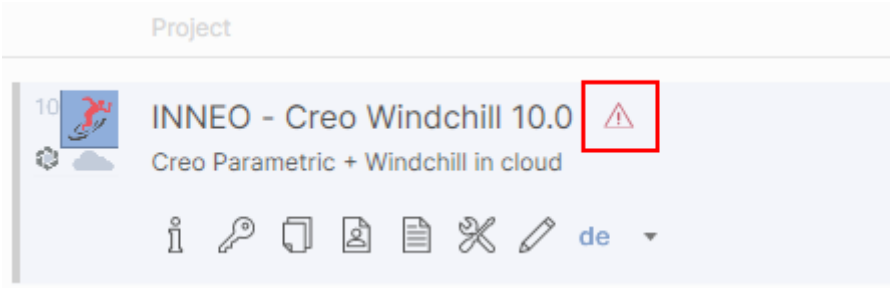
For Creo Parametric and Solidworks projects, it is possible to check available licenses. Projects without a valid license or license extension cannot be started.

Invalid projects can be hidden for users or displayed as follows:

– with a red bar and a warning triangle that opens the Error tab,



– greyed out, with warning triangle, cannot be clicked at.



The display setting are made in GENIUS TOOLS Project Configurator, see Marking faulty projects.

Please note: Error messages are only displayed once existing warnings have been resolved, e. g. by selecting a start key

6.9 Project options

Project options can be made available for CAD applications. They are displayed either in the form of

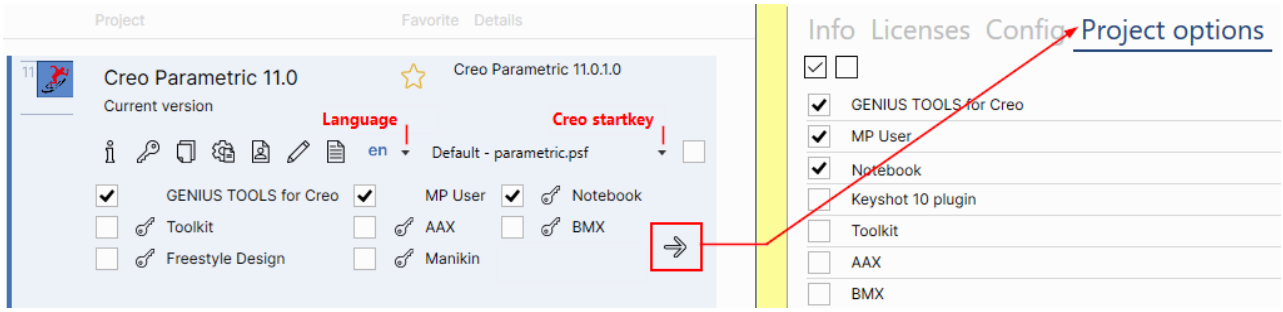
– drop-down menus: for the choice of language and Creo startkey, or

– checkboxes: for the choice of license extensions, additional applications and configuration settings.

The drop-down menus are created in GENIUS TOOLS Project Configurator, while checkboxes are created using configuration blocks. Consult the instructions for Making use of project options.

If some checkboxes cannot be displayed below the project, an arrow symbol appears which opens the Project options tab listing all available options.

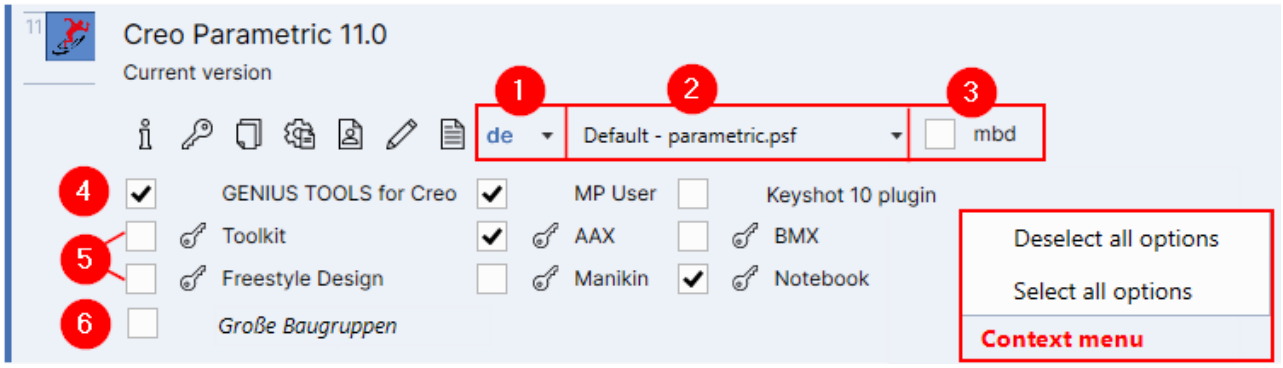
© 2025 INNEO Solutions GmbH



Creo-Parametric-Projekt mit Projektoptionen in GENIUS TOOLS Starter App

The selected project options are not saved and are reset after starting the project. You can, however, customize a project with the selected project options, see custom projects.

The context menu for selecting or deselecting all options opens with a right mouse click.



The following table explains the different types of project options:

Type	Function	Description
1	Language en	selects the language in which the application starts the project
2	Creo startkey Foundation - found.psf	selects the license package (PSF key) to start a Creo Parametric project with
3	Combined project option	activates combined configuration settings, i. e. settings located in different directories and levels, after selection further single project options (4-6) may become available
4	Single project option GTFC	activates license extensions for Creo Parametric projects, activates additional programs for Inventor projects

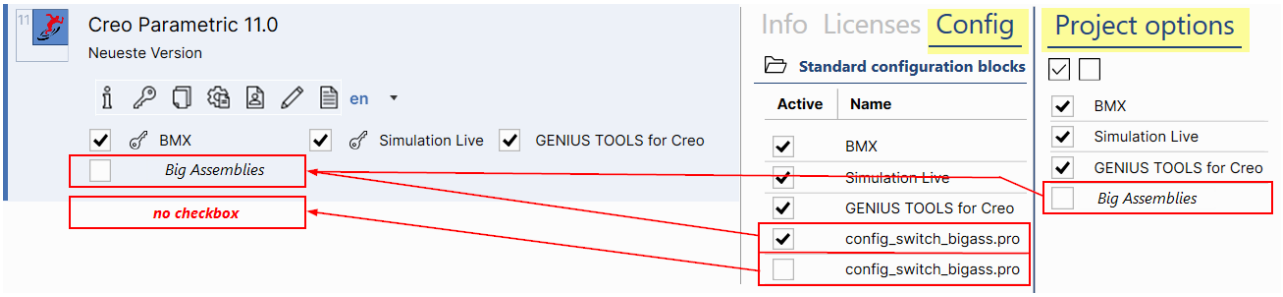
© 2025 INNEO Solutions GmbH

Type	Function	Description
4	Single project option with key symbol Simulation Live	activates license extensions for Creo Parametric projects, activates additional programs for Inventor projects
5	Switch option (italic) *SolidWorks Composer*	switches between two values of one or more configuration settings, activates add-ins for SolidWorks

Behavior of switch options

In contrast to single project options, a value will be read from a switch option even if the option is not checked (disabled state), see Switch options. For users who have the right to deactivate configuration blocks in the Config tab of GENIUS TOOLS Starter App, this means:

1. Deactivating the configuration block will ignore the content of the configuration block, i. e. as with all configuration blocks, it will not be included into the configuration.
2. In contrast to single project options, the checkbox of the switch options then disappears, because neither the checked (`true value`) nor the unchecked setting (`false value`) is to be used for configuration.

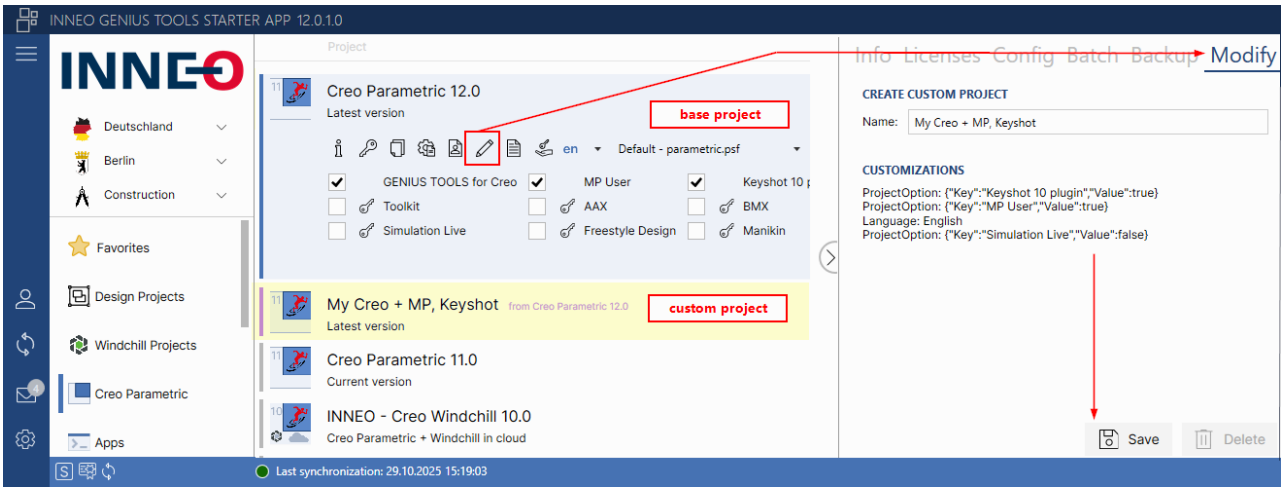


Only checked configuration blocks (in the Config tab) generate checkboxes for switch options

6.10 Custom projects

Users can save a project with all selected project options as a custom project in the Modify tab.

© 2025 INNEO Solutions GmbH



Modify tab for saving a custom project

Procedure: Creating a custom project (user-defined project)

1. Select the desired project options (language, Creo start key, checkboxes with configuration settings).
2. Click the Save icon to open the Modify tab.
3. Enter a name for the custom project.
4. You can check the selected project options in the Customizations area.
5. Click on Save.

Result:

– The custom project appears in the project list with the specified name and a purple label indicating the original project from which it has been created.

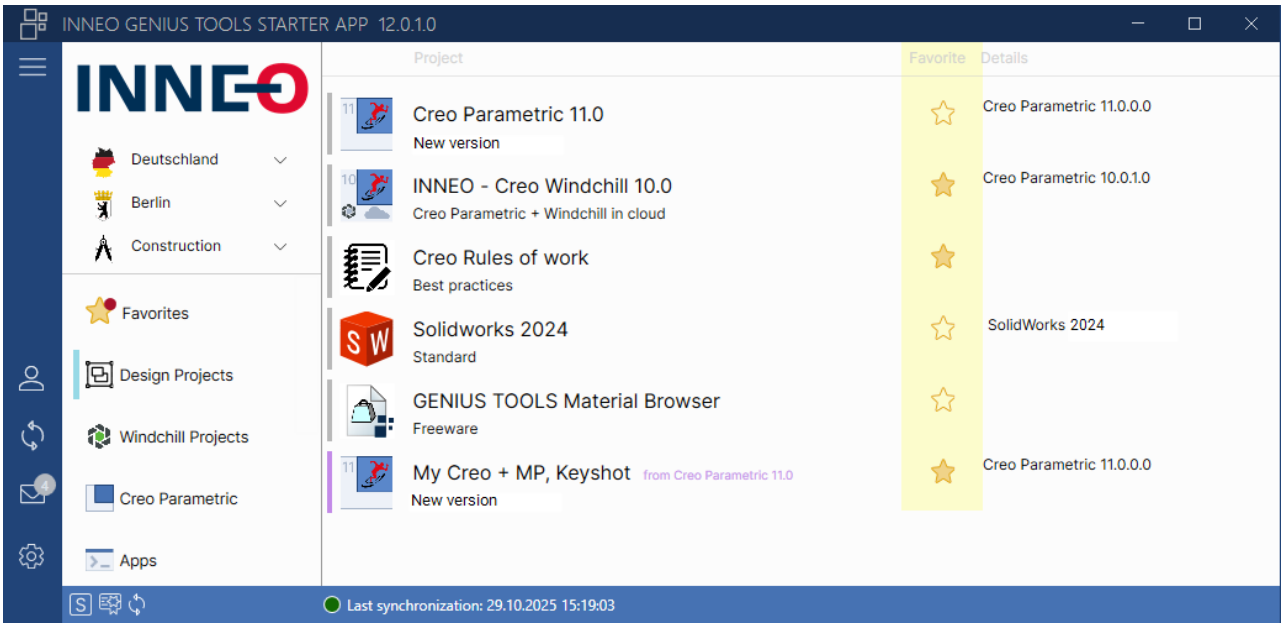
– The original project can be reset to its original state using the Reload project function in the sidebar.

6.11 Favorites

Favorites are projects that users mark as by clicking on the star symbol. This creates a user-defined project collection listed under *Favorites*.

If the first project is marked as a favorite, the Favorites button appears on the left of GENIUS TOOLS Starter App. A red balloon appears in the button after a project has been marked as a favorite.

© 2025 INNEO Solutions GmbH



6.12 Creating backup copies

In GENIUS TOOLS Starter App, a backup file can be created of the configuration files of CAD applications. This is useful for users who manage their own configuration files, but also for administrators who want to make test changes, for example to the Creo user interface.

In the project details area of GENIUS TOOLS Starter App, click the button . The Backup tab of the project opens. The files for a backup differ depending on the application and are described below in the chapter Backup of an application.

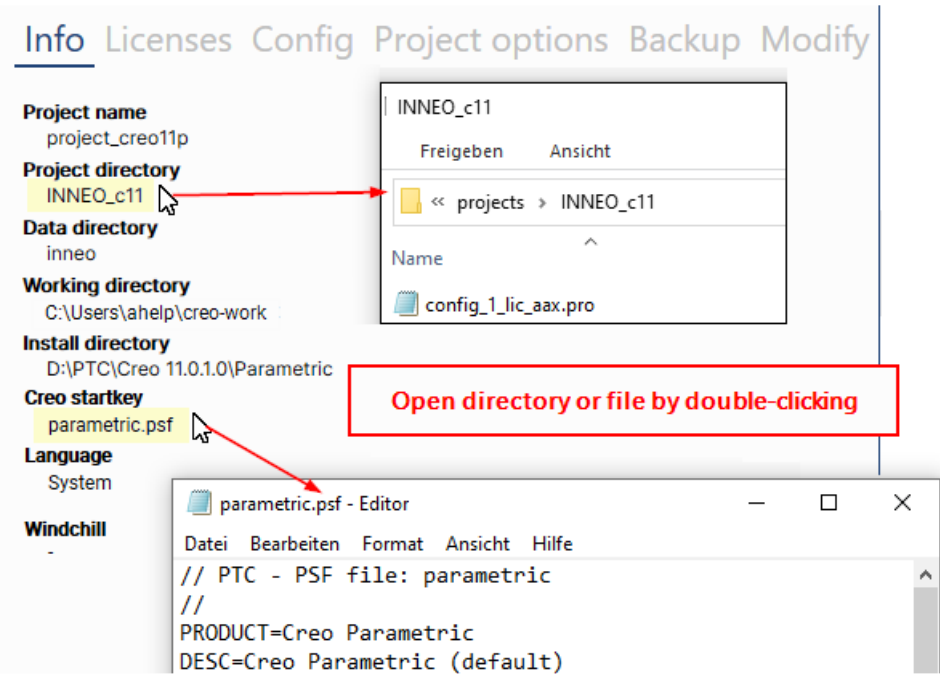
6.13 Tabs for all applications

Different tabs are available for the various applications. The *Info*, *Warning*, *Error* and *Modify* tabs are available for all applications. There are additional tabs for various CAD applications, see the following chapters.

© 2025 INNEO Solutions GmbH

Info

The *Info* tab contains information on the selected project. It is opened with the Info icon ℹ on the project area.



Users may be able to open all directories and files – such as the PSF file (Creo startkey) – in the Info tab of a project by double-clicking on a line. To access this function, users need to be given the access right *Can open configuration blocks*.

The information varies from application to application.

- Project name
- Project directory
- Data directory
- Working directory
- Installation directory
- Language of the application
- Creo startkey, Alternative path, Windchill (for Creo Parametric projects)
- Executable file, Commandline arguments (for Apps projects)

Warning

An orange warning triangle ⚠ next to the project name opens the Warning tab. The following events trigger warnings:

- Project folder not found: Check the project folder specification in GENIUS TOOLS Project Configurator in the Projects menu item.
- Startkey must be selected: Select a Creo startkey in the drop-down menu for the project option.

© 2025 INNEO Solutions GmbH

Error

A red warning triangle ⚠ next to the project name opens the Error tab for invalid projects. These cannot be started. Errors can be:

– Creo cannot be started.

– No licenses are available.

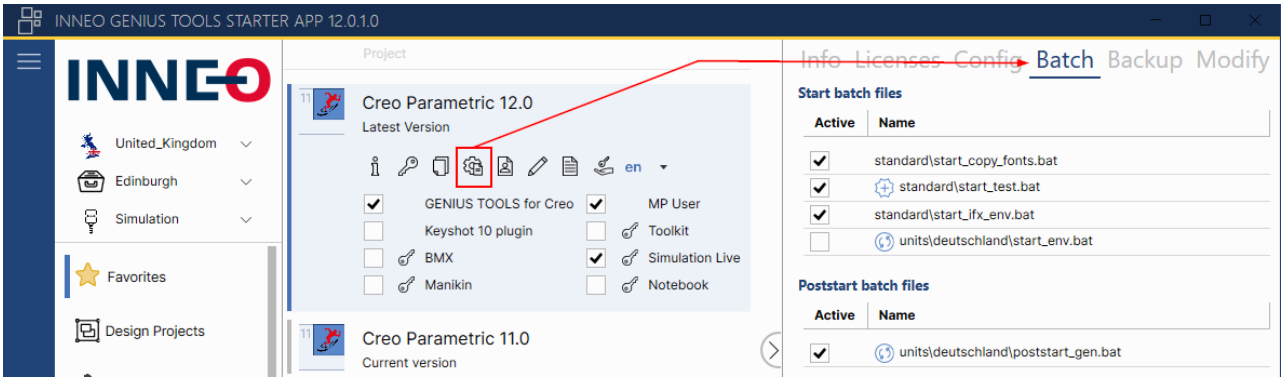
– Creo startkey is incorrect or does not exist.

Batch

The Batch tab is opened with the Batch icon in the project area. It can be hidden by the administrator.

The tab lists all batch files that apply to the selected project. Batch files can be prestart, start, poststart and stop files, see Batch files.

You can deactivate the batch files by checking the checkbox and edit them by double-clicking on the file name if you have the appropriate rights (function access). The icons next to the file name shows local changes, see Testing project configuration locally.



Display of batch files in GENIUS TOOLS Starter App

Options

The Options tab is opened using the arrow icon which appears on a project when the GENIUS TOOLS starter window is too small to display all the check boxes for project options, see chapter Project options.

Modify

The *Modify* tab opens when clicking the button *Customize project* . After entering a name, the project is saved with all the selected project options as a custom project. The selected project options are listed in the *Customizations* area.

© 2025 INNEO Solutions GmbH

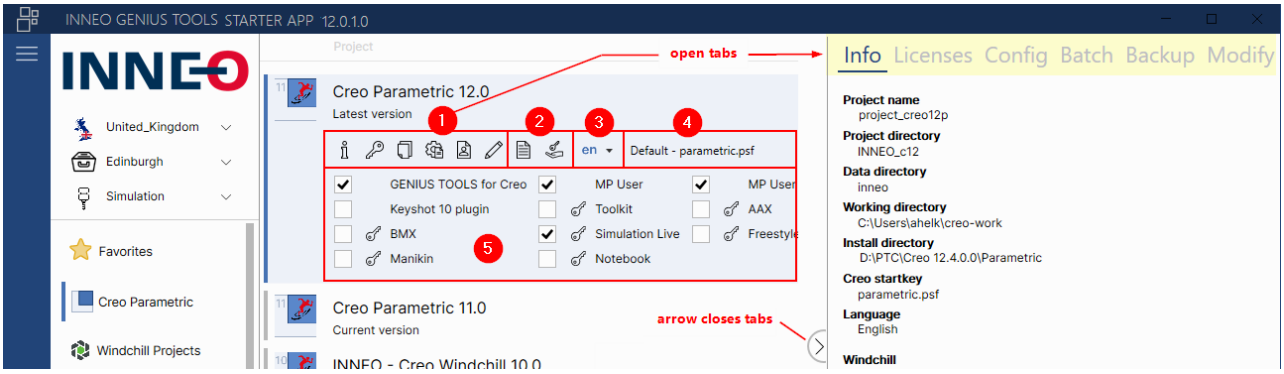
6.14 Tabs: Creo Parametric

For projects of the Creo Parametric application, the project icons open the tabs *Info*, *Licenses*, *Config*, *Batch*, *Backup* and *Modify* (1).

You can generate a project report and open the dialog for borrowing licenses (2)

You can select the language (3) and a Creo startkey (4), if you have been granted access rights. The settings required for this are described in the Defining project options chapter.

Creo Parametric projects can contain project options as checkboxes (5) which activate one or more configuration settings or license extensions.



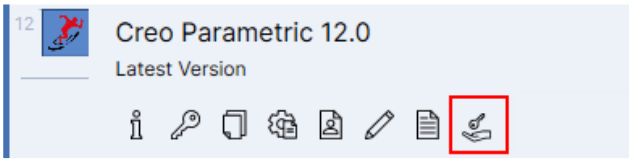
Project details and options of a Creo Parametric project

6.14.1 Borrow licenses

Users can borrow licenses for Creo Parametric and the add-on applications GENIUS TOOLS for Creo required for the project. If the info icon and the tab are not visible, the user has not been granted the appropriate right, see also chapter Access rights.

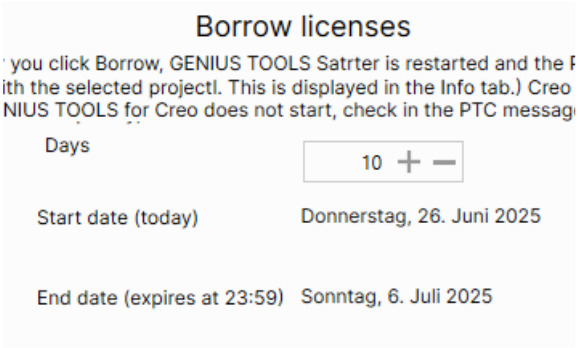
Borrow licenses

1. Click on the Borrow icon in the project area. This opens the Borrow license dialog.

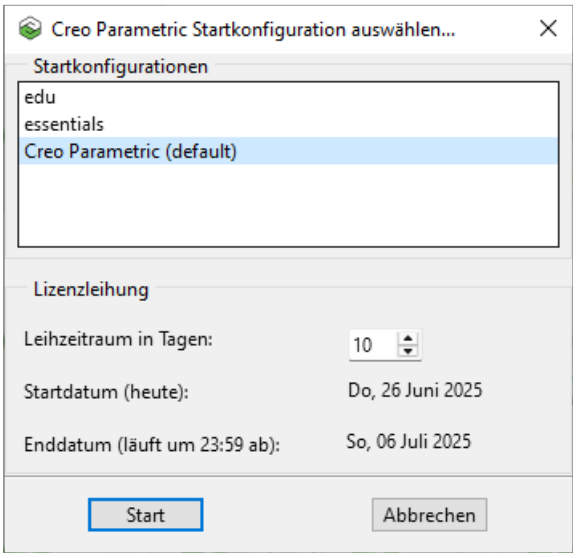


© 2025 INNEO Solutions GmbH

2. Select the number of days for which you want to borrow the licenses and click *Borrow*. GENIUS TOOLS Starter App borrows the licenses for GENIUS TOOLS Starter. The PTC license borrowing dialog for Creo opens.



3. In PTC Creo license borrowing dialog, select the correct startkey and the duration of borrowing in days. The correct startkey is the one that starts with the selected project (see Info tab in GENIUS TOOLS Starter App). Click *Start*. Creo is started with the borrowed licenses.



4. Once Creo has been started completely, GENIUS TOOLS for Creo will automatically borrow its licenses. If GENIUS TOOLS for Creo does not start, check in the PTC message window whether the full startup of Creo is displayed.

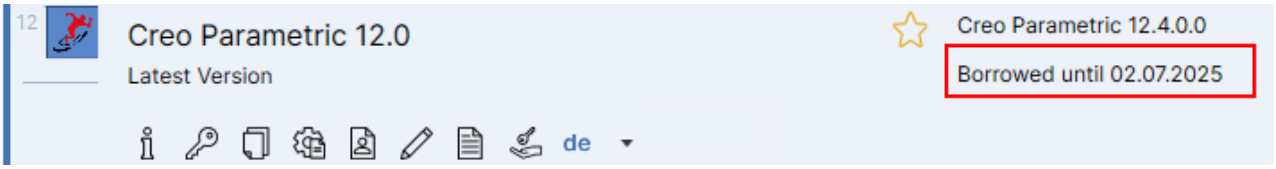
Please note: If you click on Borrow (step 2) and then cancel the PTC borrow dialog (step 3) you will have borrowed a GENIUS TOOLS license.

Return licenses

To return borrowed Startup TOOLS licenses, select *Return all borrowed GT licenses* in the user menu ⚙.

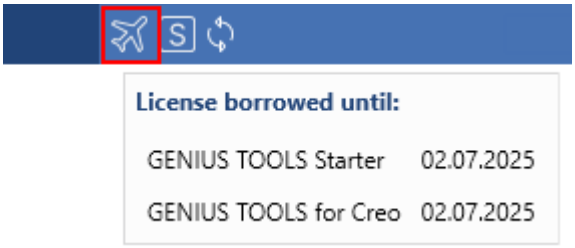
Display of borrowed licenses

Projects with borrowed a Creo license can be recognized quickly by the note on the right, which informs about the duration of the license borrowing.



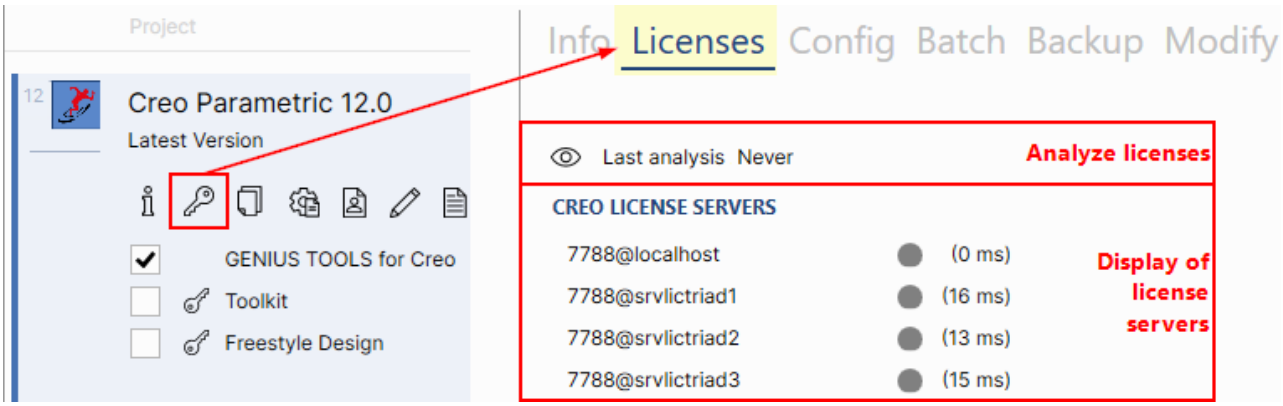
© 2025 INNEO Solutions GmbH

In the tooltip of the plane button in the footer you can see which GENIUS TOOLS licenses have been borrowed and until when.



6.14.2 Licenses tab

The Licenses tab contains information on the license servers assigned to a project of a CAD application as well as the possibility to analyze these server as well as to borrow licenses, if the users have the corresponding user rights. The administrator defines which license functions users can use, see chapter Displaying license information.



License tab of a Creo Parametric project

1. License server

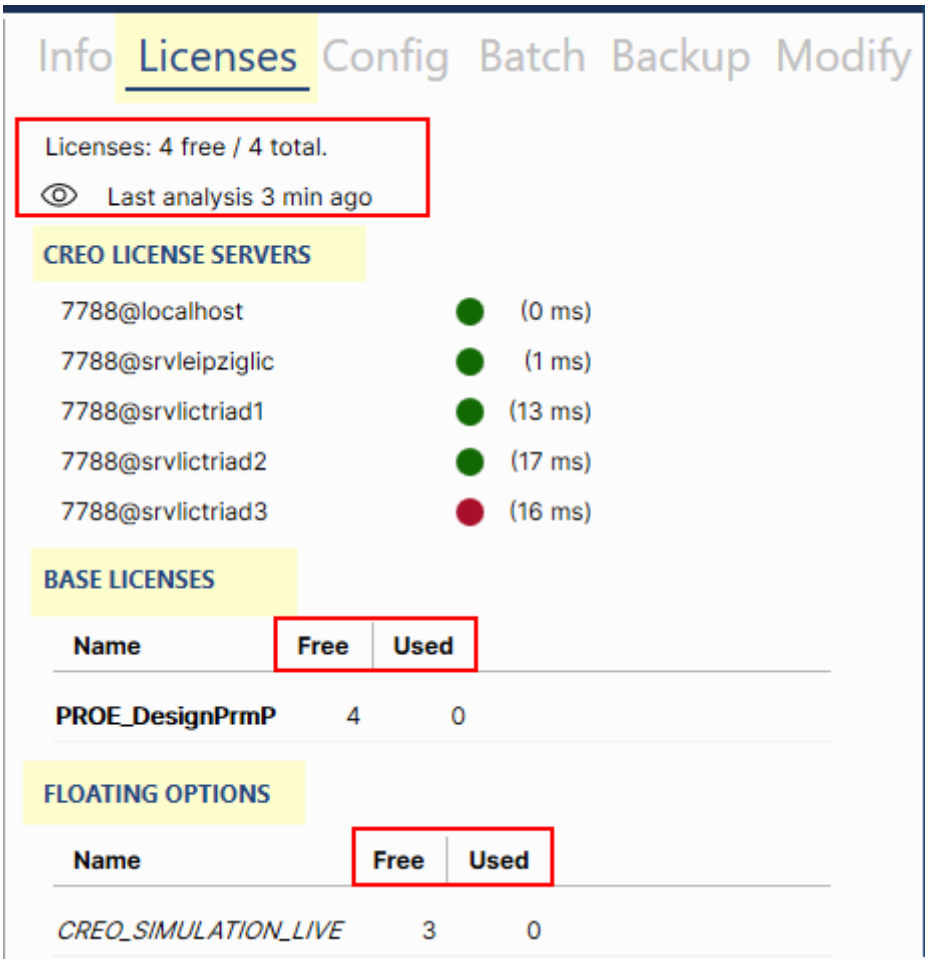
All license servers specified in the project are listed here without being checked for availability. The dots turn green or red only after a license analysis (2)

2. Analyze licenses

After clicking the symbol *Analyze licenses (2)* all licenses – and for Creo Parametric: all lilcense extensions – needed for the project are listed and their availability is displayed in the column *Free*.

If you are running a CAD programm on your local computer, using one license, and there are no other licenses available on the license server, the number of free licenses is given as *1*, not *0*. Also, the note *Multiple usage* is displayed. This is meant to show that you can start additional instances the CAD programm because no additional license is required.

© 2025 INNEO Solutions GmbH



Also, the time passed since the last analysis is shown.

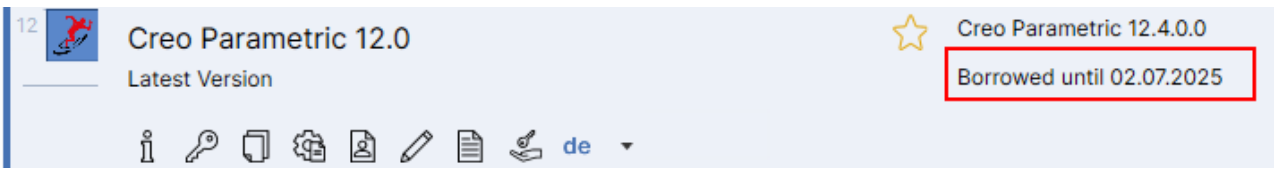
3. Borrow licenses

If a user is permitted to borrow licenses, the Borrow button (3) is displayed, which opens the license borrowing dialog.

> **Please note:** If you are working with borrowed licenses and without synchronization, the *Licenses* tab is hidden. If you are working with borrowed licenses, empty information tables are hidden.

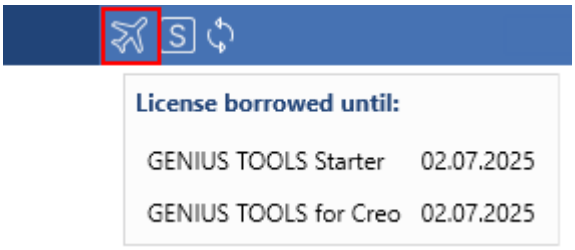
Display of borrowed licenses

Projects with borrowed a Creo license can be recognized quickly in the main window by the note on the right.



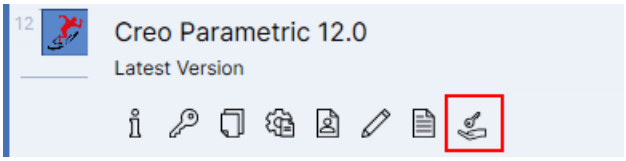
In the tooltip of the plane button in the footer you can see which GENIUS TOOLS licenses have been borrowed and until when.

© 2025 INNEO Solutions GmbH

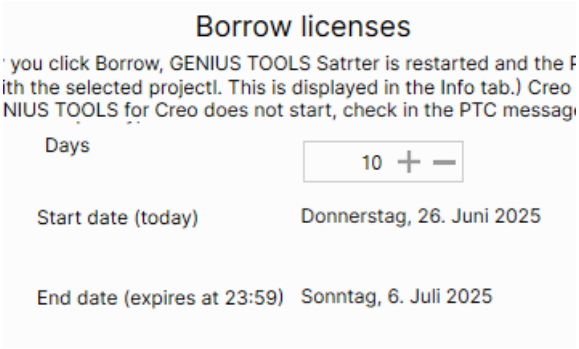


Borrow licenses

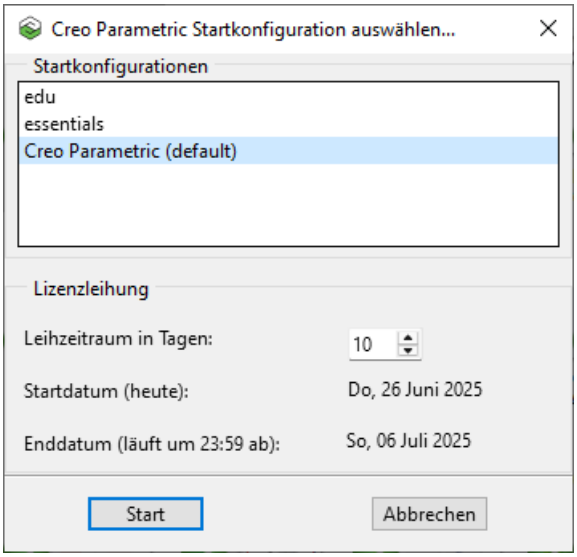
1. In the *Licenses* tab, click *Borrow (2)*. The *Borrow licenses* dialog is displayed.



2. Select the number of days for which you want to borrow the licenses and click *Borrow*. GENIUS TOOLS Starter App borrows the licenses for GENIUS TOOLS Starter. The PTC license borrowing dialog for Creo opens.



3. In PTC Creo license borrowing dialog, select the correct startkey and the duration of borrowing in days. The correct startkey is the one that starts with the selected project (see Info tab in GENIUS TOOLS Starter App). Click *Start*. Creo is started with the borrowed licenses.



4. Once Creo has been started completely, GENIUS TOOLS for Creo will automatically borrow its licenses. If GENIUS TOOLS for Creo does not start, check in the PTC message window whether the full startup of Creo is displayed.

Please note: If you click on Borrow (step 2) and then cancel the PTC borrow dialog (step 3) you will have borrowed a GENIUS TOOLS license.

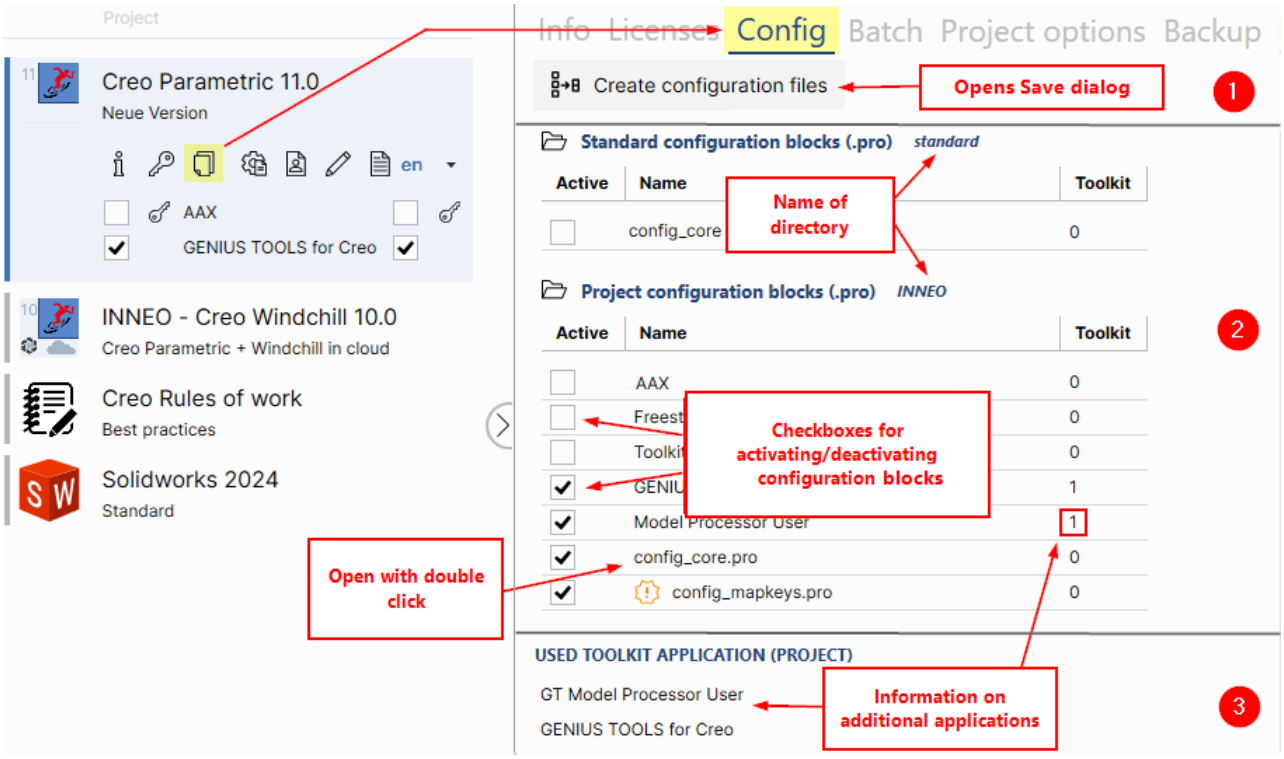
© 2025 INNEO Solutions GmbH

Return licenses
To return borrowed Startup TOOLS licenses, select *Return all borrowed GT licenses* in the user menu .

6.14.3 Config tab

In the *Config* tab you can save the Creo configuration files (1) and view all files (configuration blocks) that configure the selected project (2) as well as additional applications (3).

The tab opens by clicking on the button. The tab can be hidden by the administrator.



1. Create Creo configuration files for a Starter project

The button *Create configuration files* opens the dialog for saving the Creo configuration files that are valid for the selected unit and project to a location of your choice. These are:

– *config_ Projektname.pro*

– *config_ Projektname.sup*

– *mapkeys_ Projektname.pro* (from Creo 11.0.0.0)

– *mapkeys_admin_ Projektname.pro* (from Creo 11.0.0.0)

© 2025 INNEO Solutions GmbH

2. View configuration blocks

All files used for configuring the selected project (configuration blocks) are listed in the directories they are are stored in. For Creo Parametric, these are files with the syntax *config_*.pro*.

Configuration blocks can be

– opened and edited by double clicking on them and

– activated or deactivated for the selected project

if the user has been granted function access to do so. Your administrator defines this, see chapter Granting function access rights.

Private configuration block
The area *Private configuration block* is visible in the section that lists all configuration blocks (2), if a file is located in the userdata directory, e. g. *<username>_config.pro*. Path specifications and notation of the file are defined by administrators in the user settings.

Users have the option to edit their local, private configuration block (config file) and write it back to the administration computer using the upload button. The Upload button is visible if the user has been given the function access right *Can save private configuration block to server*.

Please note: Pause data synchronization when editing a private configuration block.

Toolkit applications used from alternative directory

Additional applications (toolkit applications), as specified in the files *protk.dat, prodev.dat* and *creotk.dat,* are listed, if they are located in an alternative directory, see Alternative path specification.

6.14.4 Backup tab

In the Backup tab users can secure and restore the user specific settings for the user interface of Creo. It opens with the button.

Please note: Backup tab and icon will be visible, if users are granted the access right *Can save user-specific settings / customization.ui file.*

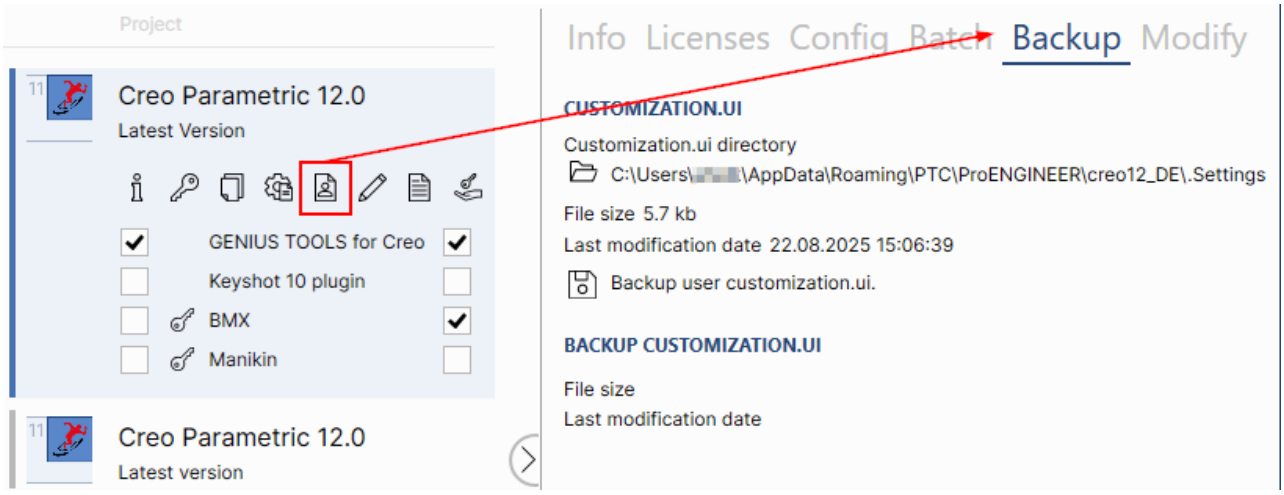
© 2025 INNEO Solutions GmbH

The file *creo_parametric_customization.ui* (short: customization.ui) is the Creo configuration file that contains user-specific settings for the graphical user interface of Creo Parametric. You can create a backup copy of this file if you have the necessary access rights.

A click on the folder icon opens the target directory.

Procedure: Create a backup copy for Customization.ui configuration file

1. In the Backup tab click the button *Backup user customization.ui*.



2. If a backup file already exists: Confirm in the following dialog box that the existing *creo_parametric_customization.ui* should be deleted.

Result: The file is saved as *creo_parametric_customization.ui.old* in the target directory.

To restore the user UI file:

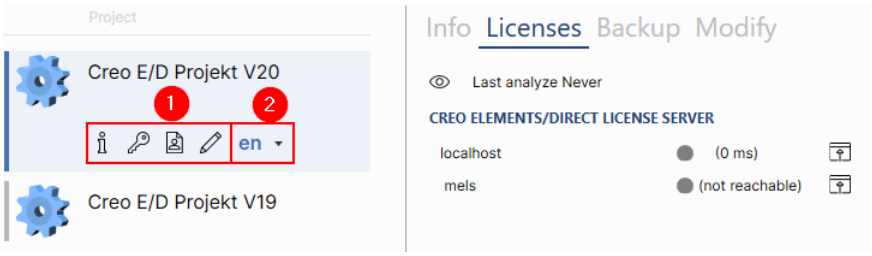
3. Click Restore user customization.ui.
4. In the following dialog box, select whether to delete the backup file.

Result: The *creo_parametric_customization.ui.old* file is changed to *creo_parametric_customization.ui* in the %PTC_WF_ROOT%\.Settings directory.

6.15 Tabs: Creo Elements/Direct Modeling

For projects in Creo Elements/Direct Modeling, you can open the tabs *Info*, *Licenses*, *Config*, *Backup* and *Modify* (1) and select the language (2), if you have the appropriate rights.

© 2025 INNEO Solutions GmbH



Project details and options of a CED project

The Info tab specifies the corp directory, the site directory and the user directory.

6.15.1 Licenses

The Licenses tab shows the license servers used in the project. The functions to analyze or borrow licenses analysis is not available.

6.15.2 Backup

In the Backup tab users can secure and restore the directory for user specific settings. It opens with the button.

Please note: Backup tab and icon will be visible, if users are granted the access right *Can save user-specific settings / customization.ui file.*

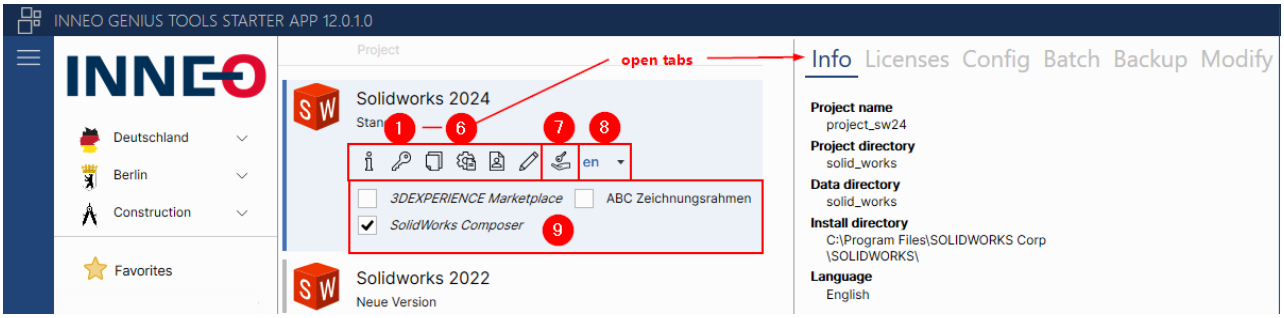
6.16 Tabs: Solidworks

For SolidWorks application projects, you can open the tabs *Info*, *Licenses*, *Config*, *Batch*, *Backup* and *Modify* (1-6), open the license borrow dialog (7) and select the language (8) if you have the appropriate rights.

SolidWorks projects can contain project options as checkboxes (9). Project options can:

– activate additional programs (AddIns): shown in italics

– activate additional configuration settings



Project details and options of a Solidworks project

© 2025 INNEO Solutions GmbH

6.16.1 Licenses

The functions in the Licenses tab correspond to those of Creo Parametric projects. (See Licenses.)

For SolidWorks projects, the borrowing process differs in that SolidWorks licenses are borrowed directly in the SolidNetWork License Manager client.

6.16.2 Config

The Config tab displays all configuration blocks for SolidWorks, i. e. files of the notation *config_*.sldreg*, sorted by their storage directories. The tab is opened with the button.

The functions for opening and deactivating the configuration blocks correspond to those in Creo Parametric projects. Likewise, user-defined settings can be saved in a personal configuration block if the right to do so has been granted.

6.16.3 Backup

In the Backup tab users can backup (1) and restore (2) user-specific settings from the registry. It opens with the button.

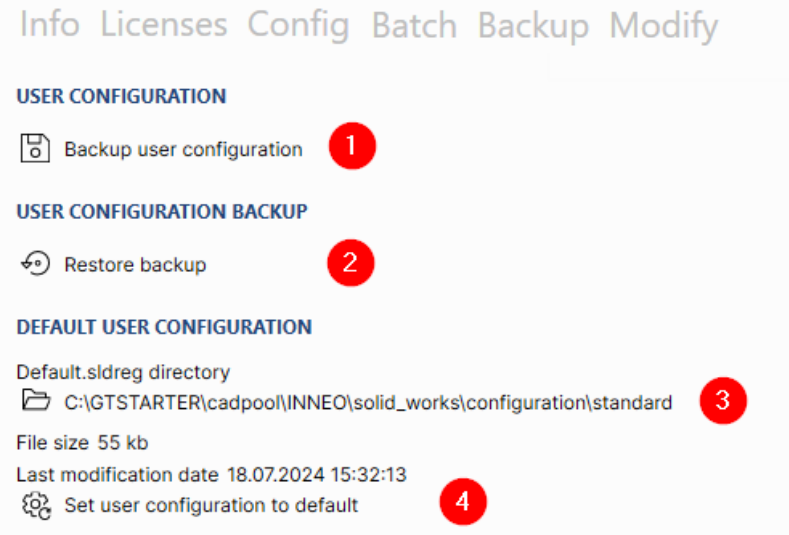
Please note: Backup tab and icon will be visible, if users are granted the access right *Can save user-specific settings / customization.ui file.*

User configuration
Users can back up (1) and restore (2) the entire SolidWorks user configuration from the registry.

The registry branch is backed up as:
HKEY_CURRENT_USER\SOFTWARE\SolidWorks\SolidWorks <version> Old.

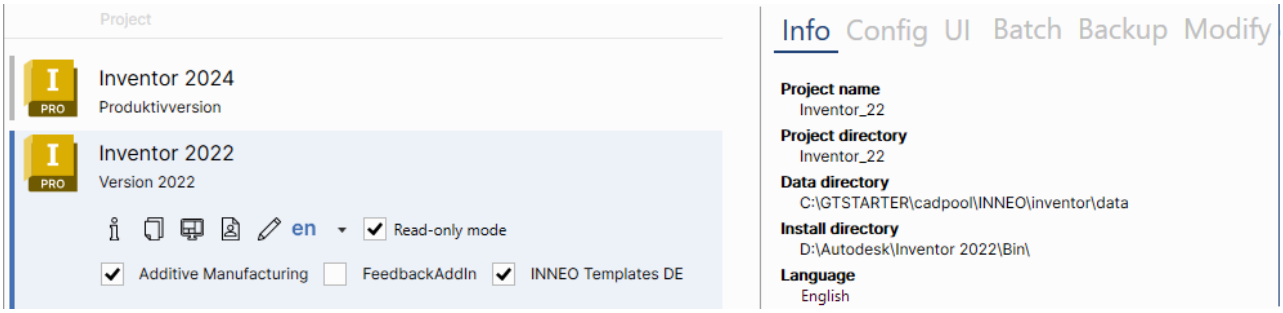
Default user configuration
Default user settings are settings from the configuration file *default.sldreg*. If GENIUS TOOLS Starter App finds a default file that applies to the select project, the path to the directory (3) as well as a button for taking over those settings (4) will be displayed.

© 2025 INNEO Solutions GmbH



6.17 Tabs: Inventor

For projects in the Inventor application, you can open the *Info*, *Licenses*, *Config*, *Batch*, *Backup* and *Modify* tabs and select the language if you have the corresponding access rights.



Display of an Inventor project with open Info tab

Inventor projects can contain project options

– to select Inventor's Read-only mode, see chapter Read-only mode.

– to activate one or more configuration settings

– start additional programs (AddIns)

To create them, consult the chapter Read-only mode as well as the instructions for creating company-specific project options.

6.17.1 Config

The Config tab displays all configuration blocks containing the general settings for the selected Inventor project. The tab is opened with the button .

© 2025 INNEO Solutions GmbH

The tab lists files of the notation *config_*.xml*, i. e. configuration blocks for configuration settings such as template paths, export settings or color effects. All configuration blocks are copied together into the Inventor configuration file *UserApplicationOptions.xml* before the project is started and stored in the target directory specified.

The functions for opening and deactivating the configuration blocks correspond to those of the Config tab in Creo Parametric projects. Likewise, user-defined settings can be saved in a private configuration block if the right to do so has been granted.

All additional applications (AddIns) that are available for the project are also listed. (Whether an AddIn is started or not depends on the LoadOnStartup value).

6.17.2 UI

The UI tab lists all configuration blocks containing the user interface settings for the selected Inventor project. The tab is opened with the icon .

The tab lists files with the notation *ui_*.xml* notation, grouped by their storage directory. These configuration blocks are copied together to the Inventor configuration file *InventorCustomizations.xml* before the project is started and stored in the specified target directory.

The functions for activating and opening the files correspond to those of the Config tab in Creo Parametric projects.

6.17.3 Backup

In the Backup tab, the user-specific settings of Inventor can be secured. The tab is opened with the icon .

A backup copy of the Inventor configuration files can be created if the access rights to do so are granted.

– *UserApplicationOptions.xml* is the configuration file for general configuration settings, e.g. template paths, import and export settings, settings for colors and materials.

– *InventorCustomization.xml* is the configuration file for user interface settings.

Please note: Backup tab and icon will be visible, if users are granted the access right *Can save user-specific settings / customization.ui file.*

Clicking the folder icon opens the target directory. The XML configuration files are created for each version and are located at:

%APPDATA%/Autodesk/Inventor <Version>

Clicking the disk icon saves the XML files as *UserApplicationOptions.xml.old* or *InventorCustomization.xml.old* in the destination directory.

© 2025 INNEO Solutions GmbH

If a backup copy exists, the file size and last modified date is displayed and the backup can be restored with the Restore icon .

6.18 Sending messages to the users

GENIUS TOOLS Starter includes a functionality for administrators to send messages in form of text files to users who can access them in the GENIUS TOOLS Starter App sidebar..

Creating a message

Step 1: Go to the operating environment's *_Information* directory in the caddepot directory.

Step 2: Create a TXT or a PDF file with your message. The name of the text file has to start with the prefix *alert_*, e. g., *alert_message.txt*.

After synchronization the existence of new messages is displayed to users by coloring the message symbol red . After reading the document can be opened again.

© 2025 INNEO Solutions GmbH

7 GENIUS TOOLS Config Editor

7.1 Introduction

GENIUS TOOLS Config Editor allows you to analyze and edit configuration files for various CAD applications.

The following functions are available:

– editing of configuration files an blocks for
  · Creo Parametric
  · SolidWorks
  · Inventor
– syntax highlighting
– for configuration options for Creo Parametric
  · auto-completion on inputting and display of the possible values
  · color coding for duplicate, hidden and unknown configuration options for each version
  · comparing configuration files of different Creo versions
  · comparing entries oin two configuration files and transfer of changes (removed, added, modified options)
– easy editing of GTS config variables for creating company-specific project options in GENIUS TOOLS Starter App
– batch mode for editing multiple files

GENIUS TOOLS Config Editor is delivered with GENIUS TOOLS Starter and is available with a subscription license.

GENIUS TOOLS Starter has been an independent module of GENIUS TOOLS Startup TOOLS since version 6.

7.2 Starting the program

You can open GENIUS TOOLS Config Editor from any user computer where GENIUS TOOLS Starter is installed. The program can be started as follows:

1. in the Windows context menu,
2. with the EXE file,

© 2025 INNEO Solutions GmbH

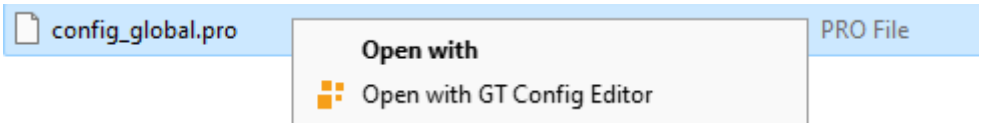
3. in the project display of GENIUS TOOLS Starter App.

GENIUS TOOLS Config Editor behaves like other editing programs in that all open files are opened the next time the program is started. A file can be dragged into the dialog window of the editor by clicking on it.

Please note: GENIUS TOOLS Config Analyzer requires a subscriptions license. Without a subscription license you can open a configuration file with other editing programs.

1. Starting with Windows context menu

The line *Open with GT Config Editor* is added to the context menu by default during setup and will be available after the first start via the EXE file or GENIUS TOOLS Starter App.



The entry *Register in Windows context menu* can be disabled in the Config Editor user menu.

2. Starting the EXE file

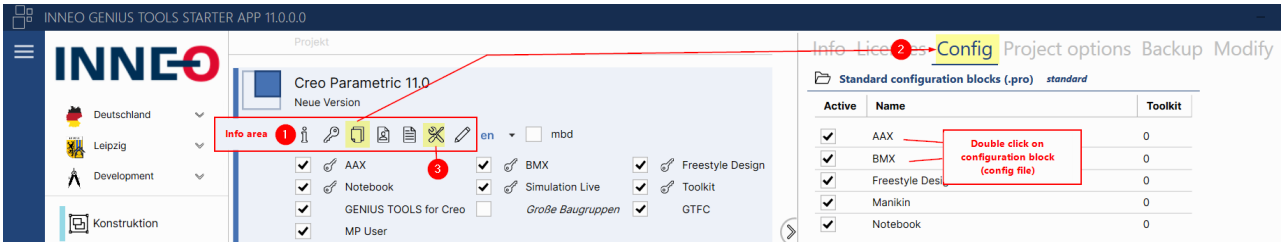
The file *GTConfigEditor.exe* is located in the *tools* folder, which is located in the caddepot of the installation computer as well as in the cadpool of the user computer. Path: *cadpool/<working environment name>/tools/config-editor*

3. Starting in GENIUS TOOLS Starter App

3.1. For projects of Creo Parametric, Inventor and SolidWorks

Open the Config Tab using the Config files button in the info area (1) of a project.

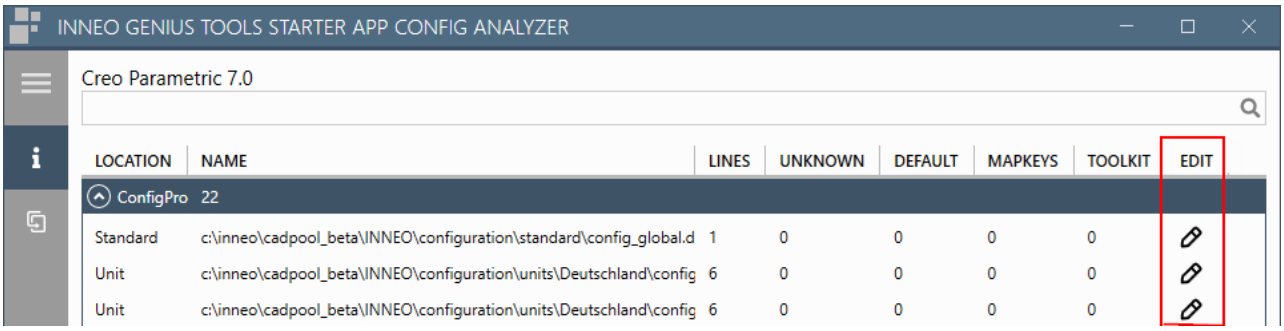
Double-clicking on a configuration file in the Config tab (2) opens the file in GENIUS TOOLS Config Editor.



3.2. For projects of Creo Parametric

Open the tool GENIUS TOOLS Config Analyzer via the Analysis button (3) in the Info area of a project. Note that the Analysis button can be hidden by the administrator in GENIUS TOOLS Project Configurator (*User Rights* > *Function Access* > *Can Analyze Project*).

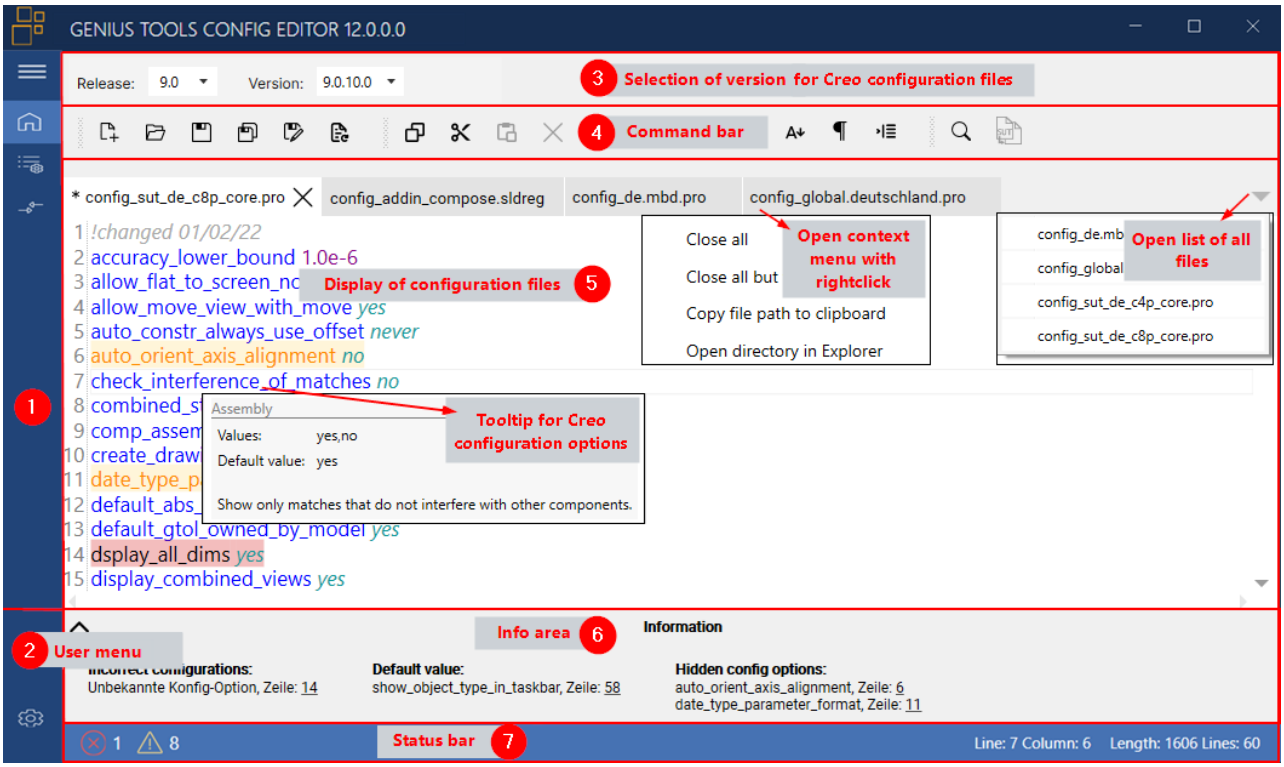
© 2025 INNEO Solutions GmbH



Clicking the Edit button in the last column of a config file opens GENIUS TOOLS Config Editor.

7.3 User interface

The user interface of GENIUS TOOLS Config Editor is divided into the following sections.



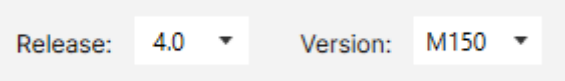
1. Sidebar with
   - Start dialog, Home
   - Batch mode and
   - Compare dialog for Creo Parametric versions and Config.pro files
2. User menu
3. Selection of version (for configuration files for Creo Parametric)
4. Command bar

© 2025 INNEO Solutions GmbH

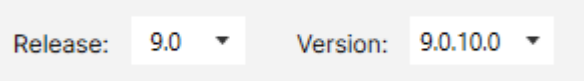
5. Display of Confi.pro files with context menu
6. Information area
7. Status bar

Select version for Creo Parametric files

Select the Creo Parametric version (3) and open the configuration file (*config_*.pro*) you want to edit. The **weekly versions** start with a letter up to Creo main version 4. After that, the weekly versions are digits of the main version.



versus



You can compare several files by arranging them side by side in the window. (See Display of files.)

Please note: This area is omitted for configuration files for Inventor and SolidWorks.

Command bar

The command bar (4) contains the following functions

- **New file:** Creates a new text file.
- **Open file:** Opens the Windows file manager with a dropdown menu for supported file types. A file can also be dragged into the dialog window.
- **Save:** Saves the current file (Strg + S).
- **Save all files:** Saves all files (Strg + Shift + S).
- **Save as:** Opens the Windows file manager.
- **Reload file and revert changes:** Deletes the unsaved changes.
- **Copy:** Copies the selected text.
- **Cut:** Deletes the selected text and keeps it on the clipboard.
- **Paste:** Pastes the text from the clipboard.
- **Delete:** Deletes the selected text.
- **Undo / Redo:** Deletes or restores the last action.
- **Increase / decrease font size:** Decreases or increases the font size.
- **Show / hide tabs**: Shows or hides spaces, tabs and line breaks.
- **Format file:** Formats the currently selected file.
- **Find and replace:** Opens a dialog box with two tabs for Search and for Find/Replace, see Editing config files. (Strg + F, Strg + H)

© 2025 INNEO Solutions GmbH

– **Replace SUT variables:** Replaces the GENIUS TOOLS Startup TOOLS (SUT) variables with the new GENIUS TOOLS Starter (GTS) variables that came into use as of version 6 of Startup TOOLS. (Since then GENIUS TOOLS Starter is an independent module of Startup TOOLS.)

Context menu

Open the context menu by right-clicking on the file name to get the following options: Close all – Close all but this file – Copy file path to the clipboard – Open directory in Explorer.

Information area

For Inventor configuration files (XML files), the first error is displayed with line specification.

For configuration files of Creo Parameter there is more information, see Info area for config files.

Status line

The status line (7) contains the following information:

– Line: Indicates the line in which the cursor is located.

– Column: Indicates the position in the line where the cursor is located.

– Length: Displays the number of all characters.

– Lines: Displays the number of all lines.

And for configuration blocks for Creo Parametric:

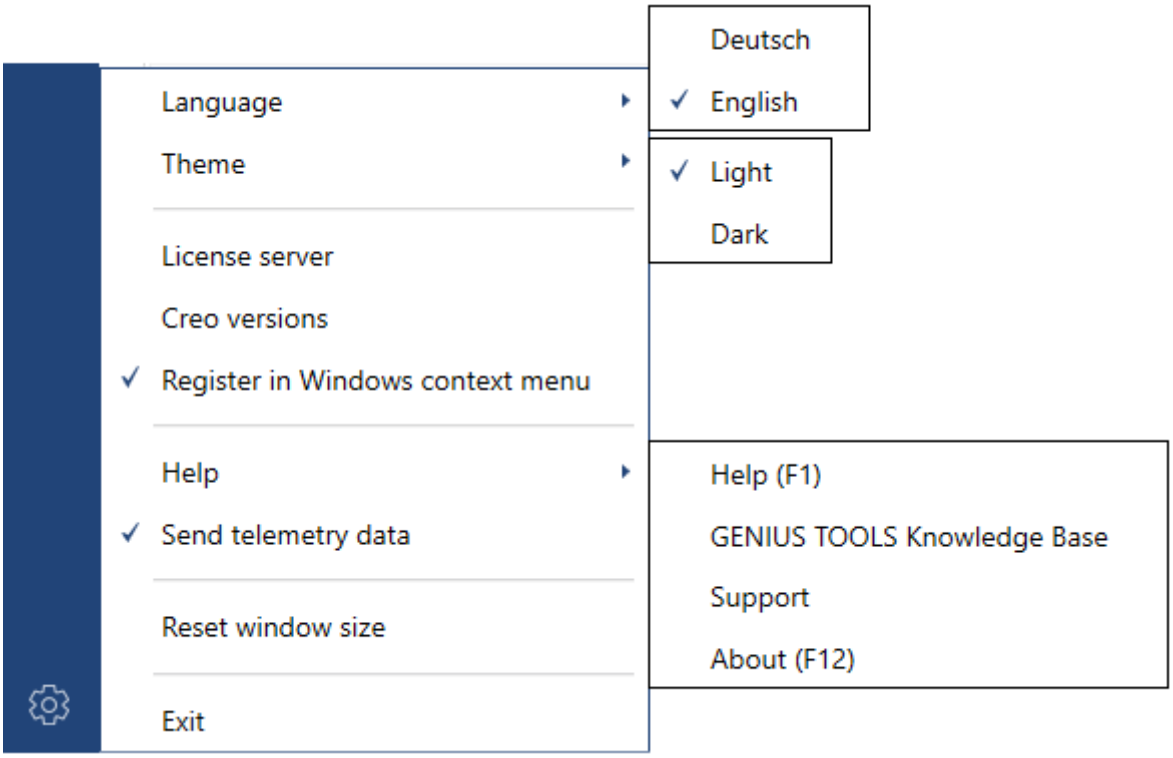
– Number of configuration options with a warning. (Click on the red symbol to jump to the next option.)

– Number of configuration options with a note. (Click on the orange symbol to jump to the next option.)

7.4 User menu

The user menu opens when clicking the gear button in the side bar.

© 2025 INNEO Solutions GmbH



Language
The language setting of the user interface can be changed between German and English while the program is running. The setting is saved for the next start.
If the country setting of the operating system is German, GENIUS TOOLS Config Editor will start in German. All other country settings will start in English.

Theme
The user interface of the software is offered in the color schemes light and dark. The setting is saved for the next start.

License server
The license server for GENIUS TOOLS Config Editor, as specified in GENIUS TOOLS Starter, is shown here. The license server can be changed by using the notation *7766@localhost* and additional license servers can be specified, separated by semicolons.

Creo versions
Opens the input window for selecting the Creo versions for which you want to view configuration files.
The databases for configuration options are available for all Creo versions, meaning you can edit configuration files regardless of whether the Creo version is installed on your computer.

© 2025 INNEO Solutions GmbH

Please note: The databases of the enabled versions are loaded into the user directory *AppData\Roaming\INNEO\GENIUS_TOOLS\GENIUS TOOLS Config Editor*.
During setup, the activated checkboxes show the Creo versions that are installed on your computer. If no Creo version is found on the computer, all checkboxes are activated.

Register in Windows context menu
Adds the command *Open with GT Config Editor* to the Windows context menu. This entry is activated by default.

Help
– Help (F1): Opens the help for GENIUS TOOLS Config Editor. The help corresponds to this document.
– Support: Opens the website of the technical support of Inneo Solutions GmbH.
– Info (F12): Displays the license agreement of the current version of GENIUS TOOLS Config Editor.

Send telemetry data
Sending telemetry data is defined when starting GENIUS TOOLS Config Editor and can be changed here.

Reset window size
Restores the default size for the GENIUS TOOLS Config Editor dialog window. The dialog window can be resized to any size.

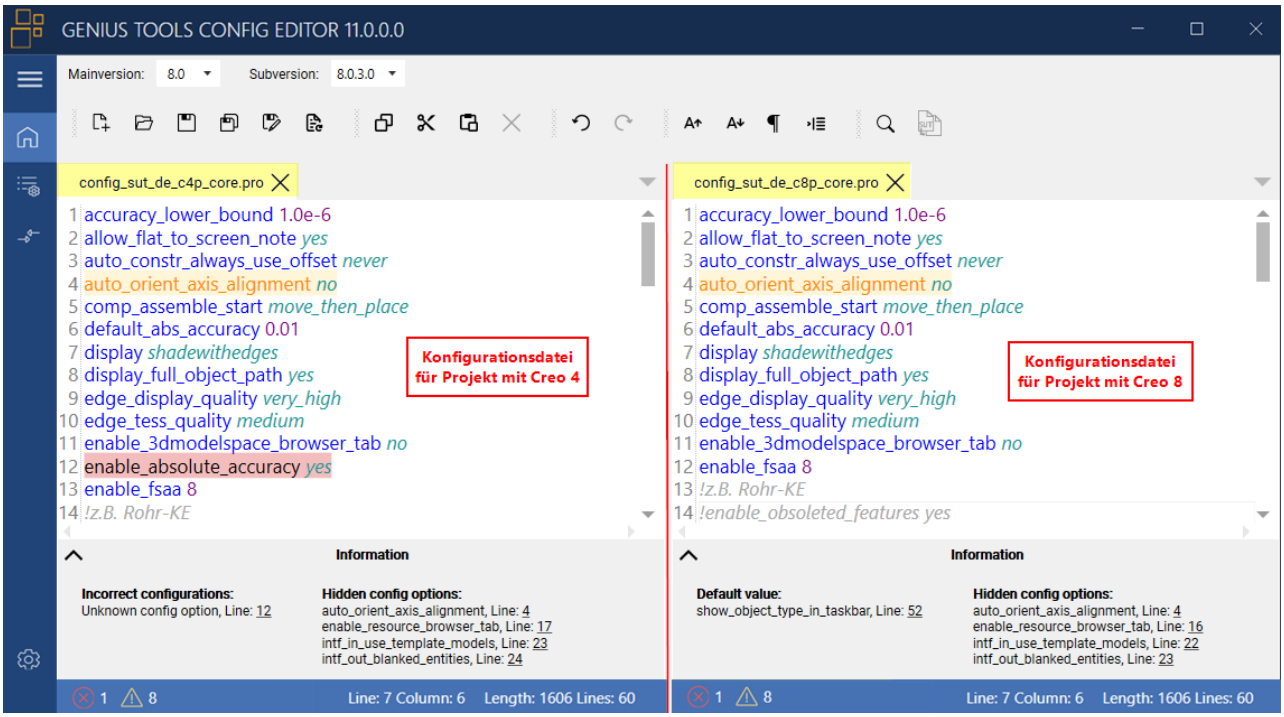
Exit

7.5 Display of files

You can display multiple files both one below the other and side by side, e. g. to compare two configuration files.

This is particularly useful for comparing Creo configuration blocks of different versions. See chapter Comparing versions.

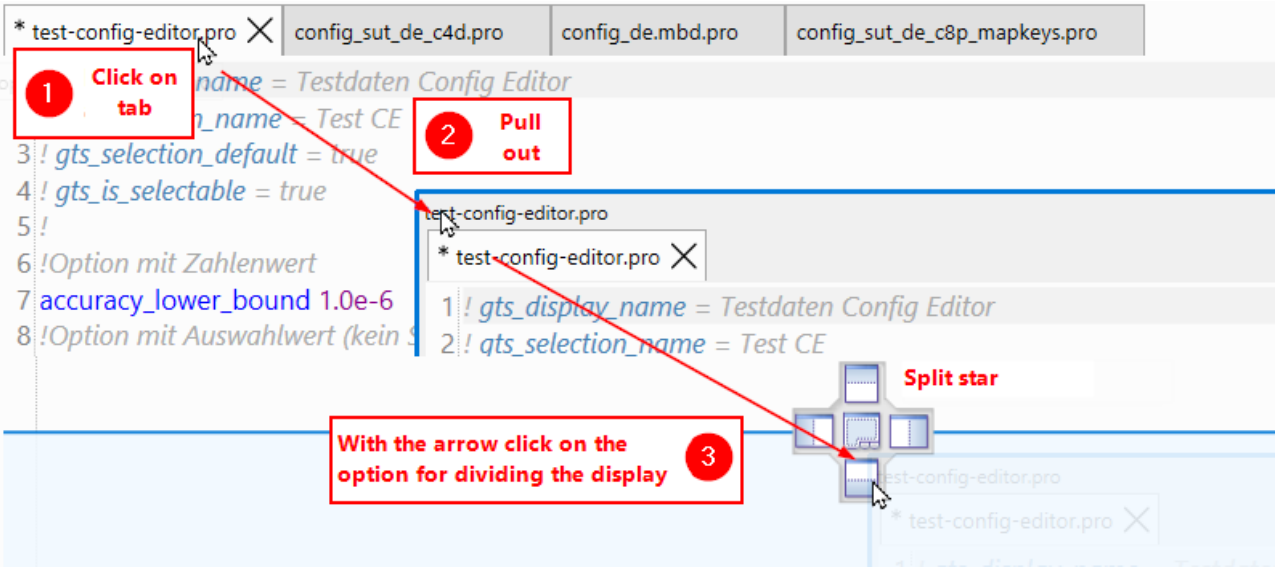
© 2025 INNEO Solutions GmbH



Display of two files next to each other

Procedure: Setting up the file display

Change the position of a single file by clicking and dragging the file to the desired location using the split star.



7.6 Supported files

With GENIUS TOOLS Config Editor you can edit configuration files and blocks for various CAD applications.

© 2025 INNEO Solutions GmbH

Configuration files
A configuration file contains all settings of an application without using GENIUS TOOLS Starter, e. g. the file *config.pro* for Creo Parametric.

Configuration blocks
A configuration block is one of many configuration files that are read by GENIUS TOOLS Starter to create the configuration of a Starter project.

The following configuration blocks can be created for the respective CAD applications.

Configuration-block		Content	Example
Creo Parametric			
1	config_*.pro (also: Config-Datei)	All settings (configuration options) for executing the application	*config_sut_de_c6p_dir_file.pro* *config_c5p_mapkeys.pro*
2	config_*.sup	Settings that cannot be modified by users	*config_design_en.sup*
SolidWorks			
3	config_*.sldreg	All settings, Embedding additional application (AddIns)	*config_addin_compose.sldreg*
Inventor			
4	config_*.xml	All settings	*config_dir_file.xml*
5	ui_*.xml	Settings for user interface	*ui_customization.xml*
6	*.addin	Embedding additional application	*AdditiveMFG.inventor.addin*

7.7 Configuration files for Creo Parametric

Information and color coding are more extensive for configuration files for Creo Parametric.

© 2025 INNEO Solutions GmbH

7.7.1 Display of configuration options

Creo configuration option define settings in Creo Parametric and are written into a configuration block. For better readability GENIUS TOOLS Config Editor displays configuration options as follows.

Configuration options that are highlighted in color contain notes (orange) or warnings (red) which are explained in the information area.

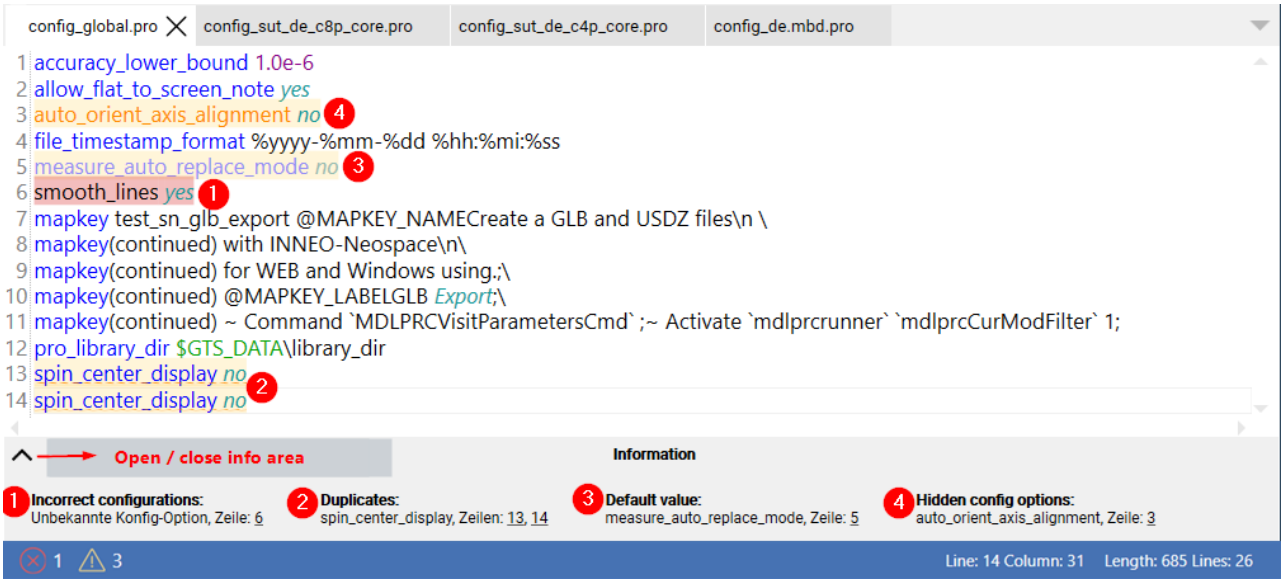
Color code	Description
accuracy_lower_bound	Configuration option
1.0e-6	Numerical value
yes	Nonnumerical value (e. g. yes, medium)
$GTS_DATA	Variable – e. g. variable of Startup TOOLS (SUT) and GENIUS TOOLS Starter (GTS)
! gts_display_name	GTS config variable – contains information to create a company-specific project option for GENIUS TOOLS Starter App
measure_auto_replace_mode	Configuration option with the default value – is listed in the info area
spin_center_display	Duplicates (multiple entries of a configuration option) – are listed in the information bar – Please note: Duplicate options that can regularly be entered several times in a config file – such as *mapkey* or *search_path* – are not marked in orange.
auto_orient_axis_alignment	Hidden configuration option – are not officially supported by the Creo manufacturer – is listed in the info area

© 2025 INNEO Solutions GmbH

Color code	Description
disable_all	Unknown configuration option – due to incorrect spelling or because it is not known in the selected Creo version – is listed in the info area
mapkey(continued)	Mapkey line is too long – up to Creo version 4: max. 81 characters allowed – from Creo version 4: max. 260 characters allowed
!changed 01/02/22	Comment

7.7.2 Info area

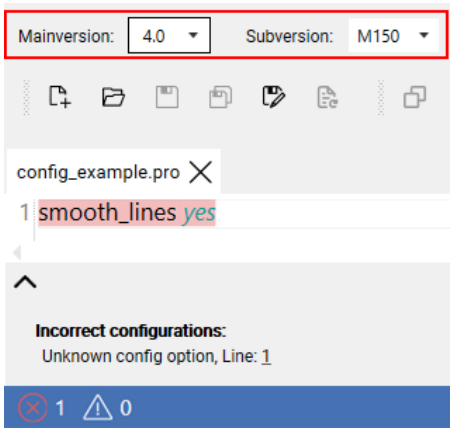
In the lower part of the main window configuration options with a note or a warning, i. e. those colored in orange or red, are listed. You can thus get a quick overview of the content of a Config.pro file for Creo Parametric.

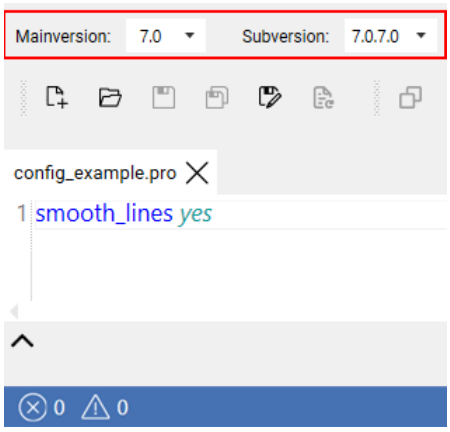


Info area of the Config Editor

1. **Unknown configuration options**
   Options will not be recognised as such
   – if they do not exist, e. g. in case of incorrect spelling notation, or
   – if they are not known in the selected Creo version, e. g. the smooth_lines option exists only since Creo version 5.

© 2025 INNEO Solutions GmbH





2. **Duplicates / duplicates**
   Configuration options that are set two or more times. Here: in line: 13 and 14.
3. **Default value**
   Configuration options in which the default value is set.
4. **Hidden configuration options**
   Options which are not officially supported by makers of Creo Parametric.

7.7.3 Comparing versions

In the menu item *Compare versions* you can view the configuration options and the default values that have changed from one Creo Parametric version to another.

In the first dropdown menu select *Version* (1) and select the version (Release and Version) on the left (2) as well as on the right (3).

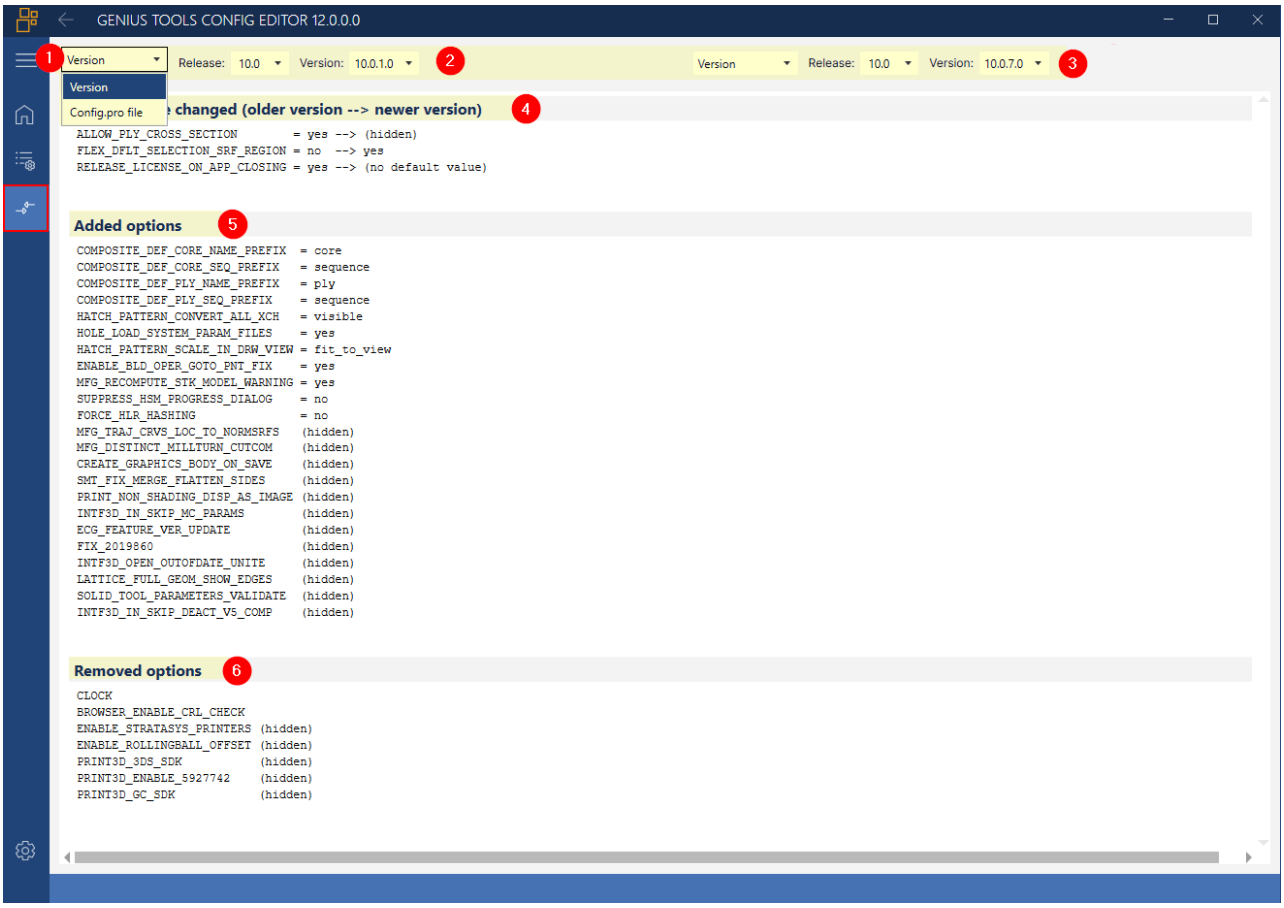
The following results are displayed:

– Configuration options whose default values have changed (4): The default values are listed first for the older version and then for the newer version, regardless of how the versions have been selected in the command bar.

– Added options with default values (5).

– Removed options (6).

© 2025 INNEO Solutions GmbH



The information *hidden* refers to hidden configuration options.

7.7.4 Comparing config.pro files

In the Compare menu item , select Config.pro file (1) to compare entries of two Creo configuration files or configuration blocks.

Select the files to be compared in the upper area. The following results are displayed:

– removed options

– added options

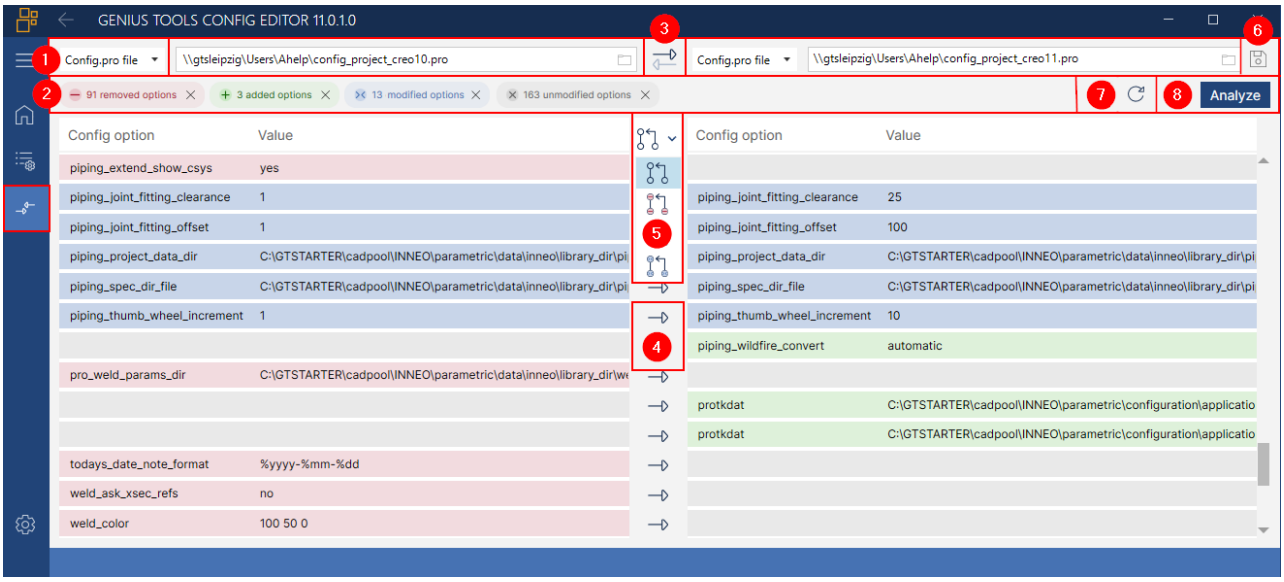
– modified options

– unmodified options

By double-clicking on one or more of the display options (2), you can hide these options.

The direction of the comparison can be reversed using the double arrow symbol (3).

© 2025 INNEO Solutions GmbH



Comparing two config.pro files: Unmodified options are not displayed

Apply changes

Clicking the arrow button → (4) applies changes to individual configuration options or mapkeys.

In the drop-down menu in the centre (5), you can apply several changes at the same time:

- all changes
- apply all removed options or mapkeys
- delete all added options or mapkeys
- apply all changed values

As soon as at least one modification has been made, the Save button (6) of the corresponding file becomes active.

Revert applied changes

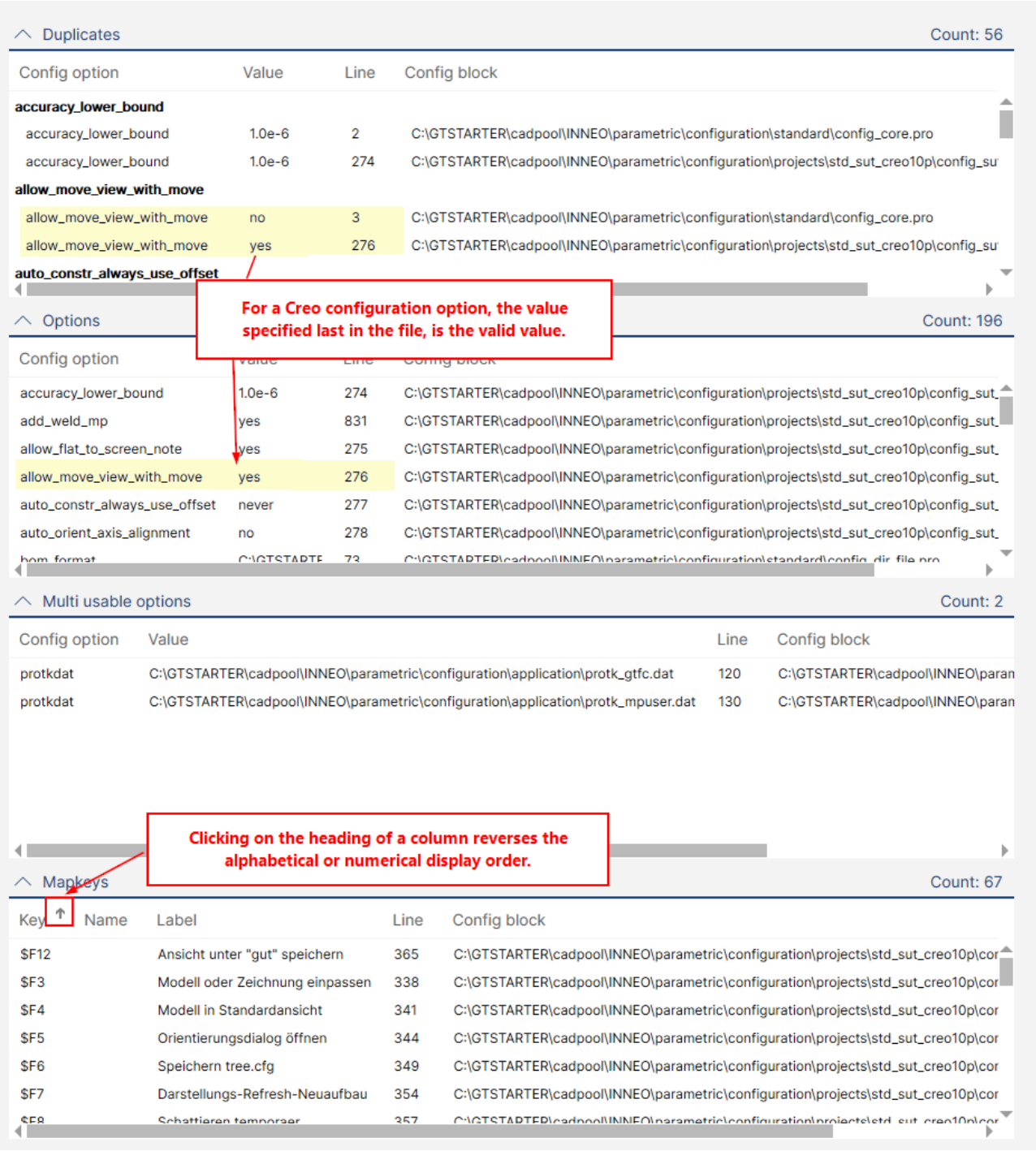
To reverse the changes you have made, click the Reload button (7).

The Analyze button (8) opens a new dialog window.

7.7.5 Analyzing config.pro files

The Analysis button in the Compare page opens a dialog that displays duplicates, options, reusable options and mapkeys for each Config.pro file.

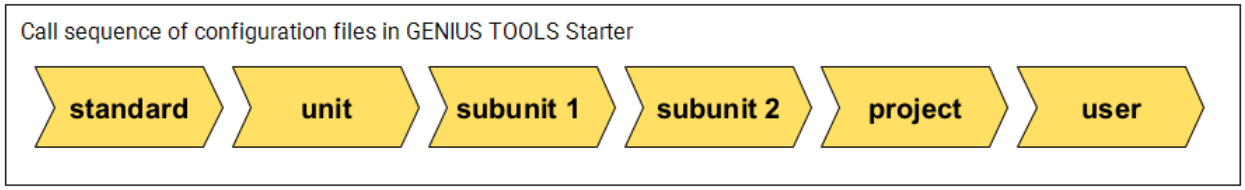
© 2025 INNEO Solutions GmbH



Analyze dialog of the Compare page

Note the call sequence for configuration blocks. The last specified value of a configuration option is the valid value. See the chapter *Configuration concept* in the GENIUS TOOLS Starter manual.

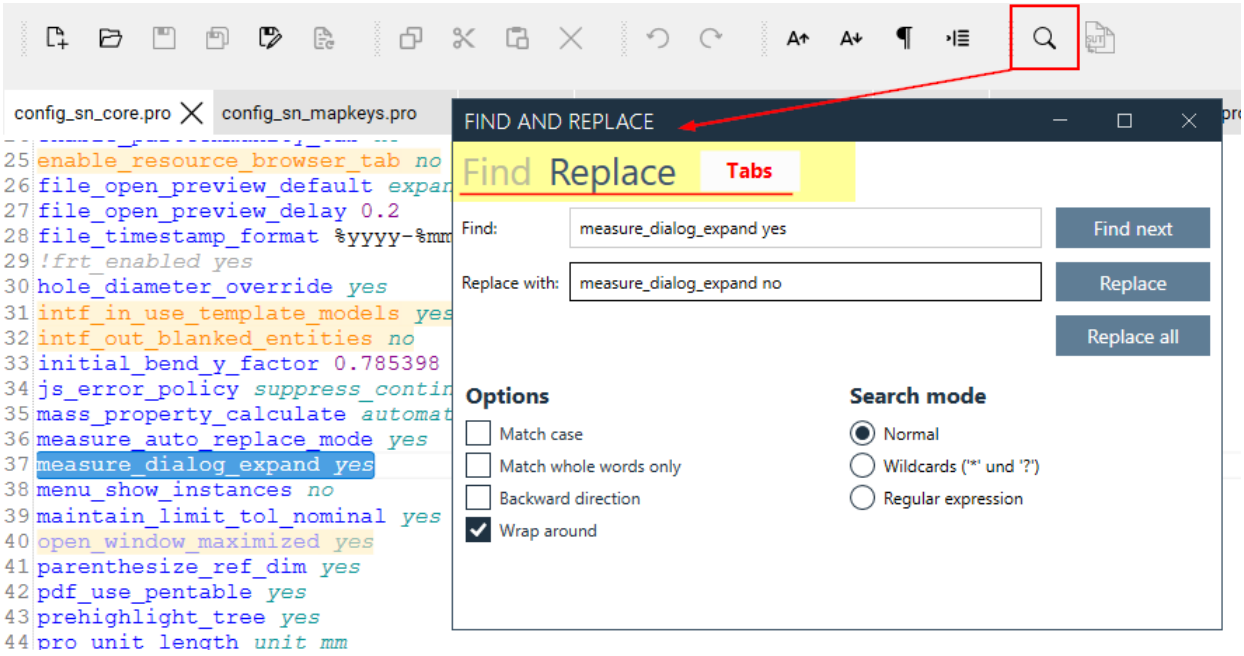
© 2025 INNEO Solutions GmbH



7.8 Editing config files

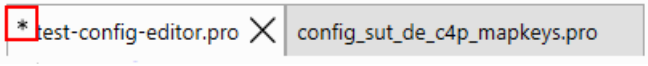
Find and replace

The magnifying glass button opens the Find and Replace dialog. So does Ctrl + F.



Edited file

Changes to a file are indicated with an asterisk.



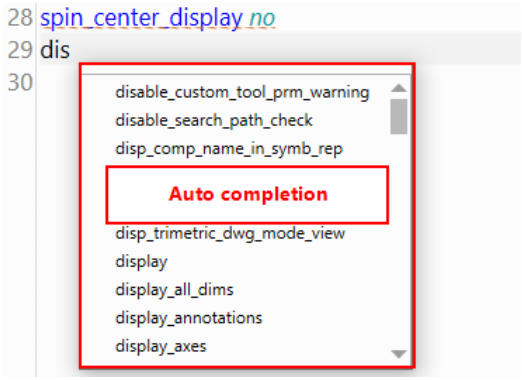
Functions for Creo configuration files

Files that contain configuration options for Creo Parametric (config_*.pro files) are supported by additional functions.

Autocomplete

When entering a new configuration option, a list of the possible configuration options opens. The list includes hidden configuration options.

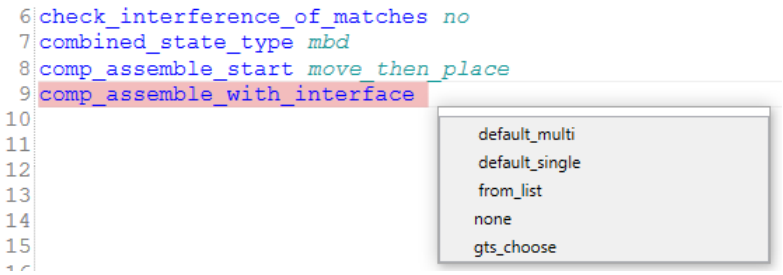
© 2025 INNEO Solutions GmbH



Options when entering "dis".

Suggest function

When entering a value for a the configuration option, a list of all possible values opens. For hidden configuration options no values are suggested. The GTS config variable *gts_choose* is always an option.



Possible values for a configuration option

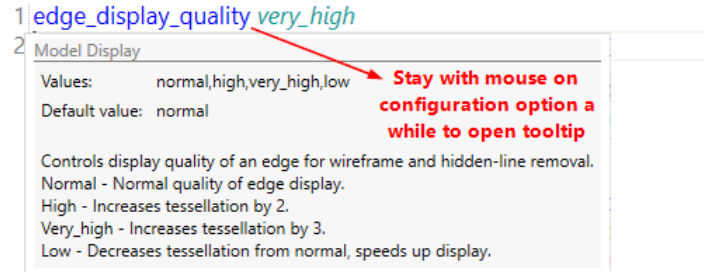
Tooltip

Each configuration option is explained in a tooltip which contains

– the possible input values,

– the default value and

– a description of the option.



Functions for Inventor configuration files

Collapse

Program code can be collapsed with the minus symbol.

© 2025 INNEO Solutions GmbH

config_inneo-templates.xml

```
1  <?xml version="1.0" encoding="utf-16" standalone="no" ?>
2  <ApplicationOptions Platform="Vista" Version="27.1 Production Candidate">
3
4    <File TemplatesPath="%GTS_DATA%\Templates\%LANGUAGE%\" />
5    <Save SaveReminder="0"/>
6
7  </ApplicationOptions>
```

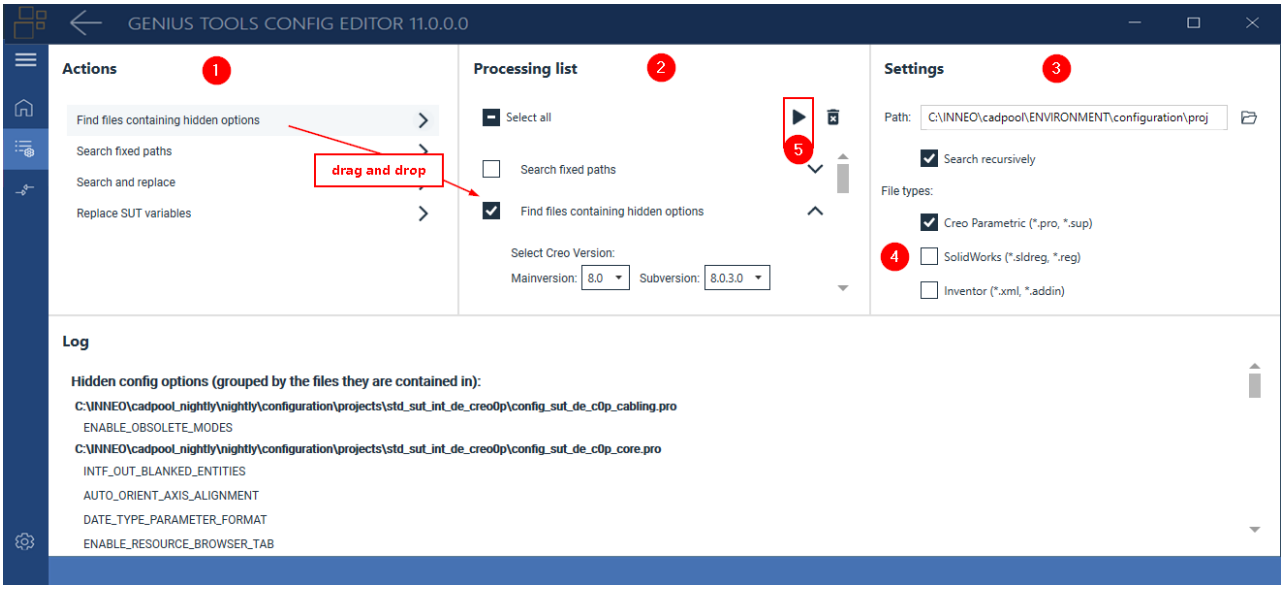
Collapse code

7.9 Batch mode

In batch or batch mode , you can revise any number of config files. You can:

- find files with hidden config options,
- find files that contain fixed paths,
- search and replace words,
- replace SUT variables with GTS variables. (This actions assigns the corresponding GTS variables automatically.)

Please note: Do not mistake GTS variables (environment variables) for GTS config variables.



Batchmode dialog: Finding files with hidden options

Procedure

1. Drag the action you want to perform to the processing list.
2. In the processing list click on the action and fill in the details.
3. Under *Settings* (3) specify the folder where the config files are located. Activate Recursive search to include files in all contained subfolders in the search.

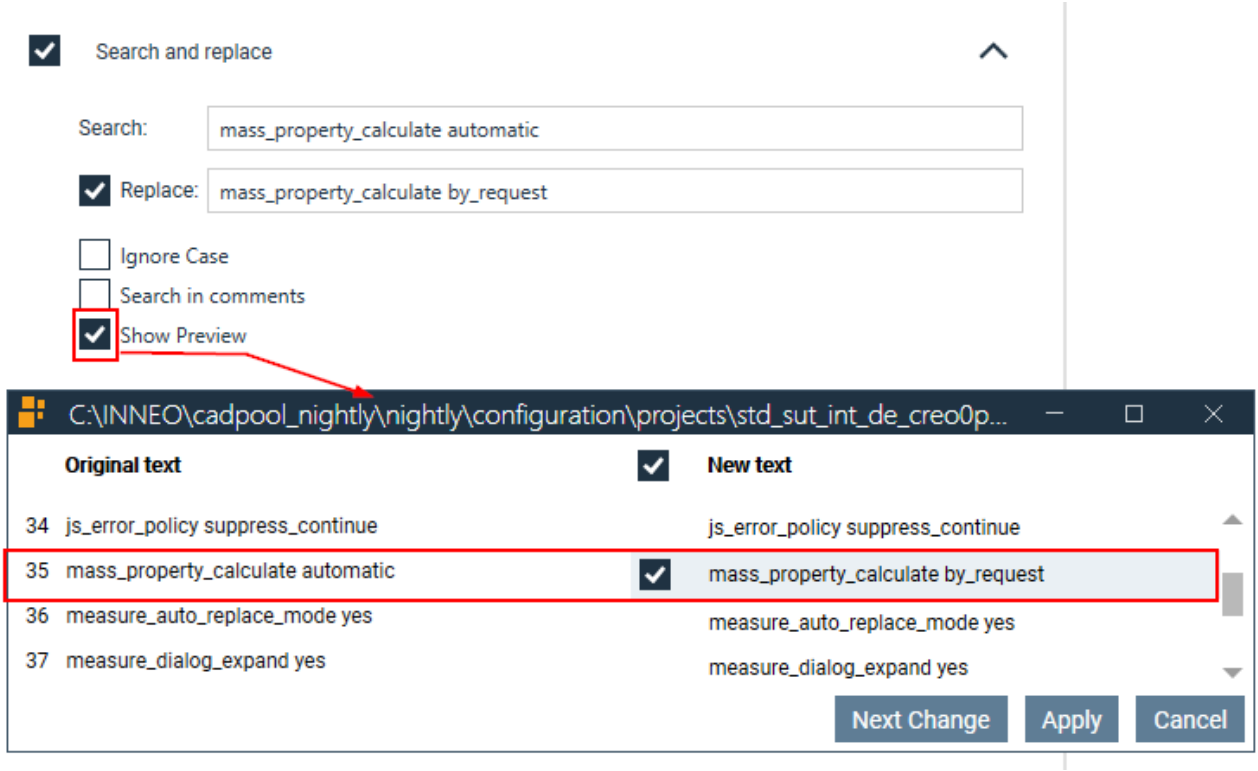
© 2025 INNEO Solutions GmbH

4. Click the arrow icon (4).

Result: You will see the executed actions and the found options and paths in the log area.

Show preview

For the actions *Search and replace* and *Replace SUT variables*, you can get a preview in an extra window which shows all hits. You can disable individual hits and choose to apply or cancel the replacement. With the option *Next change* you can jump to the next hit within a file.



Preview for searching and replacing a value of a configuration option

© 2025 INNEO Solutions GmbH

8 Working with Git

Operating environments can be synchronized with the version control system Git and can be managed on a Git server both in your company and cloud-based.

8.1 Connecting operating environments to Git

To synchronize an operating environment with the Git version control system, proceed as follows.

Connecting to Git

1. Ensure that all requirements for connecting an operating environment to Git are fulfilled, see <%TARGETTITLE%.

Warning: Git environments must be created on the computer on which the caddepot is located (installation computer).

2. Select the Git function in GENIUS TOOLS Environment Administrator.
3. Select an existing operating environment. Create an new operating environment beforehand, if needed.

Checking out an operating environment from Git

4. After migrating an operating environment to Git, GENIUS TOOLS Starter must be restarted on user computers.

For an initial installation of GENIUS TOOLS Starter, start the EXE file *GTS.exe* on the application computer.
Path: \\<*mainserver*>*gtstarter**caddepot*\<*operatingenvironment*>*software**gts.exe*

8.2 Checking in changes to Git

The workflow of a git-versioned operating environment differs from the workflow for non-versioned operating environments.

In a git-versioned operating environment, all changes – e. g. to the database *sut.db* and to files – are made on the user computer, i. e. the computer on which the cadpool is located. These changes are checked into Git using GENIUS TOOLS Git Utility.

Changes to components or software updates are checked in with GENIUS TOOLS Environment Administrator on the installation computer and are automatically checked in.

© 2025 INNEO Solutions GmbH

Git check-in: on any user computer (Cadpool)	
Changes in configuration and batch files	with GENIUS TOOLS Git Utility: – can be opened independently or via GENIUS TOOLS Project Configurator – changes must be checked in (Commit).
Changes to settings in GENIUS TOOLS Project Configurator	with GENIUS TOOLS Git Utility: – is opened automatically when saving in GENIUS TOOLS Project Configurator – changes must be checked in (Commit).
Git check-in: on installation computer (Caddepot)	
Software update Adding components Changing synchronization and license server settings	with GENIUS TOOLS Environment Administrator: – changes are automatically checked into Git. – **Note:** On the installation computer, the check in can only be made by the user who is the owner of the Git repositories, i. e. who has created the operating environment with GENIUS TOOLS Environment Administrator in Git.

Git check-in on the user computer with GENIUS TOOLS Git Utility

In a git-versioned operating environment, changes are made in the Cadpool on a user computer so that configuration files can be checked locally.

1. Open GENIUS TOOLS Project Configurator.
   When starting GENIUS TOOLS Project Configurator synchronization is automatically paused.

   Please note:

   –

Warning: All users who are allowed to start GENIUS TOOLS Project Configurator are contributors and can check in changes to Git. Therefore, make sure that changes to the operating environment are not made by several users simultaneously. This can lead to merge conflicts during check-in.

© 2025 INNEO Solutions GmbH

– You cannot check in changes with GENIUS TOOLS Project Configurator on the installation computer, i. e. from the caddepot. The Git check-in button is grayed out.

2. Change settings for users, units and projects in GENIUS TOOLS Project Configurator.
3. Edit files locally in the cadpool, e. g. configuration and batch files.
4. Check the changes to the files locally before checking them into Git.
5. Click the Git check-in button in GENIUS TOOLS Project Configurator.

Clicking on the *Git checkin* button in GENIUS TOOLS Project Configurator

– saves changes in GENIUS TOOLS Project Configurator to the database *sut.db* and

– opens GENIUS TOOLS Git Utility, which is used for committing all changes to Git, see chapter GENIUS TOOLS Git Utility.

6. Follow the procedure for checking in with GENIUS TOOLS Git Utility, see GENIUS TOOLS Git Utility.
7. Exit GENIUS TOOLS Git Utility.
8. Reactivate the synchronization in the user menu of GENIUS TOOLS Starter App or GENIUS TOOLS Project Configurator by removing the checkmark under *Pause synchronization*.

Git check-in on the installation computer with GENIUS TOOLS Environment Administrator

Execute the functions *Update, Modify* or *Add components*, see chapter GENIUS TOOLS Environment Administrator.

GENIUS TOOLS Environment Administrator recognizes whether you want to modify a git-versioned operating environment.

Changes are automatically checked into Git.

Warning: The following applies to git-versioned operating environments: All changes made on the user computer that have not been commited into Git are discarded when executing a function in GENIUS TOOLS Environment Administrator.

8.3 Further information

System directories
The directories required for configuration layers – *standard, projects, units, users* – must be created and committed manually on the user computer (Cadpool) in a git-versioned operating environment, see Configuration layers.

© 2025 INNEO Solutions GmbH

Please note: Empty directories are not synchronized.

© 2025 INNEO Solutions GmbH

9 GENIUS TOOLS Git Utility

9.1 Introduction

GENIUS TOOLS Git Utility is an add-on application for GENIUS TOOLS Starter that checks changes made to an operating environment into the version control system Git and displays the history of these changes.

9.2 Starting the program

You can start GENIUS TOOLS Git Utility from any user computer on which GENIUS TOOLS Starter is installed.

The program requires a subscription license for GENIUS TOOLS Starter.

It can be opened:

– from GENIUS TOOLS Project Configurator

– as an EXE file.

Starting from GENIUS TOOLS Project Configurator

Click the Git Check-in button in the sidebar of GENIUS TOOLS Project Configurator. This

– saves changes to the database *sut.db* and

– opens GENIUS TOOLS Git Utility.

Please note: If the floppy disk icon is displayed in the sidebar, this is not a git-versioned operating environment.

While GENIUS TOOLS Git Utility is open, it is not possible to work with GENIUS TOOLS Project Configurator.

Starting the EXE file

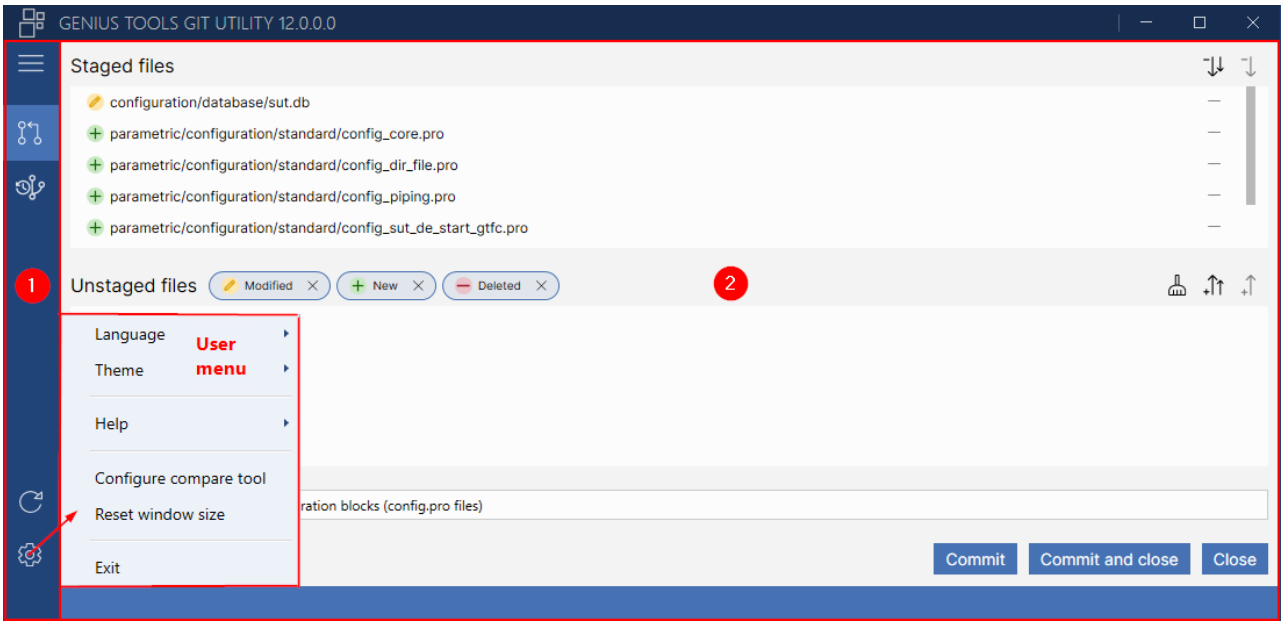
The file *GTGitUtility.exe* is located in the tools folder of an operating environment. Path: *cadpool/<operatingenvironment>/tools/git-utility*

The file must be started from the cadpool of the user computer, as changes cannot be made on the installation computer.

© 2025 INNEO Solutions GmbH

9.3 User interface

The GENIUS TOOLS Git Utility interface is divided into the following areas.



1. Sidebar with
   - Commit page (Checking in changes to Git)
   - History of changes
   - Reload
   - User menu
2. Commit page

User menu

The user menu is opened in the sidebar using the cogwheel button.

– Language
  The language setting of the user interface can be changed between German and English during operation. The setting is saved for the next start.
  GENIUS TOOLS Git Utility starts with German country settings for the operating system in German. All other country settings result in an English language setting at startup.

– Theme
  The software interface is available in light and dark color themes. The setting is saved for the next start.

– Help
  Help (F1): Opens the help for GENIUS TOOLS Git Utility. The help corresponds to this document.

© 2025 INNEO Solutions GmbH

Info (F12): Displays the license agreement for the current version of GENIUS TOOLS Git Utility.

– Specify comparison tool

– Reset window size
Restores the standard size of the GENIUS TOOLS Git Utility dialog window. The window can be enlarged or reduced as required.

– Exit

9.4 Checking in changes: Git commit

Changes to an operating environment are made in the Cadpool, i. e. on the user computer. The commit page lists all changed files such as:

– Changes to the database *sut.db*
These are all changes made with GENIUS TOOLS Project Configurator.

– Configuration blocks
These are all text files that contain one or more configuration options for an application

– Batch files

– All files in the resource directory, e. g. files in PRT, DRW, ASM, SYM, TBL format.

If GENIUS TOOLS Git Utility is open, no changes can be made in GENIUS TOOLS Project Configurator on this computer. However, GENIUS TOOLS Project Configurator can be used on several computers.

Warning: All users who are allowed to start GENIUS TOOLS Project Configurator are contributors and can check in changes to Git. Therefore, make sure that changes to the operating environment are not made by several users simultaneously. This can lead to merge conflicts during check-in.

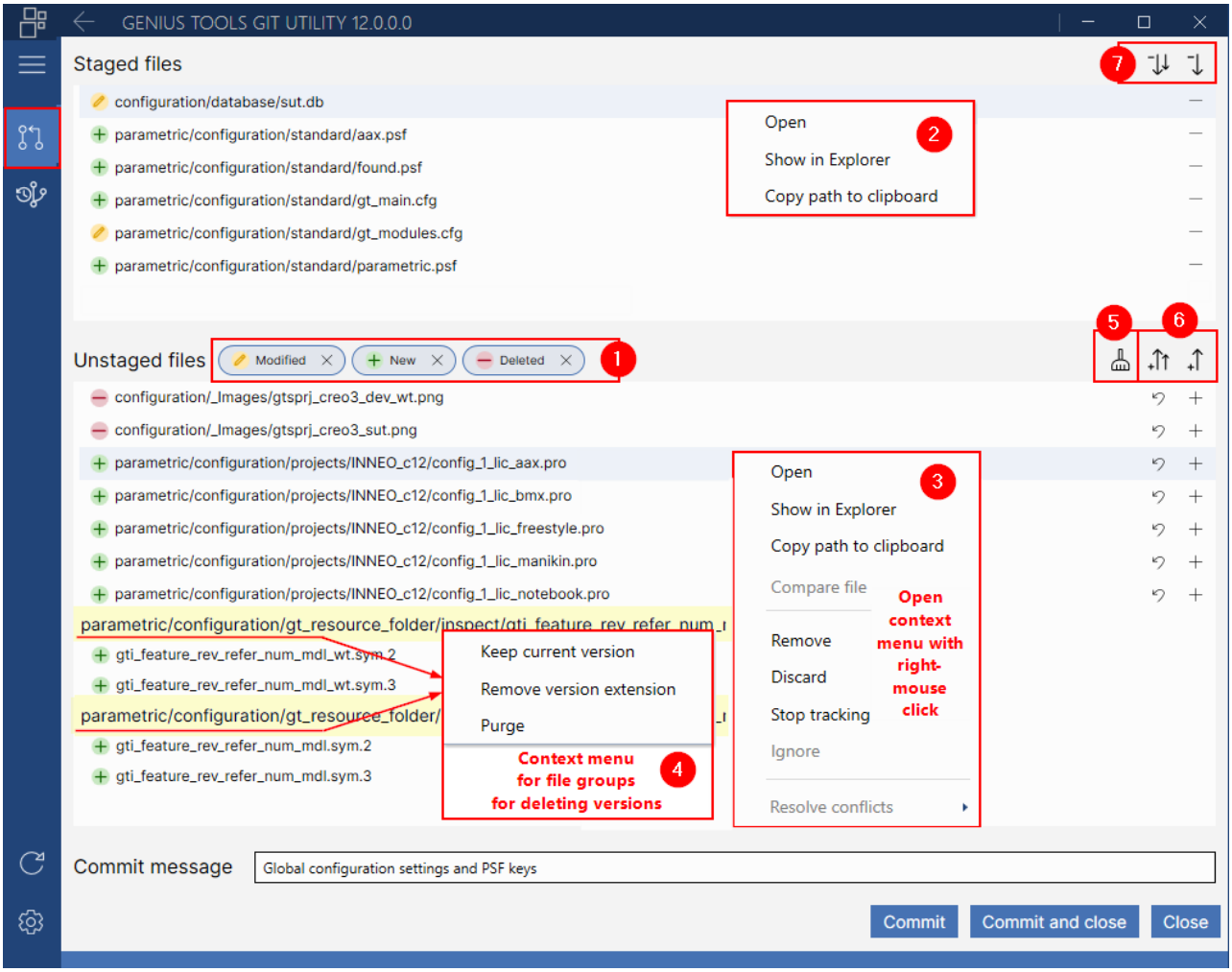
Cleaning up and marking files

A distinction is made between marked and unmarked files. Select the files you want to check in. Click on the button *Stage all* or *Stage selected* or select individual files with the Plus icon .

1. **Filter**
Unchecked files can be filtered by
modified files
new files

© 2025 INNEO Solutions GmbH

deleted files



2. Context menu for marked files

The following actions can be performed from the context menu. The context menu opens by right-clicking on a file:

– Open
  Opens the selected file

– Show in Explorer
  Opens the Explorer in the directory of the selected file

– Copy path to clipboard
  Copies the path of the selected file to the clipboard

3. Context menu for unchecked files

The following actions can be performed:

– Open

– Show in Explorer

– Copy path to clipboard

© 2025 INNEO Solutions GmbH

– Compare file
  Opens the specified comparison tool to compare the current status of a file with the status of the file on the Git server, see Comparing file versions.

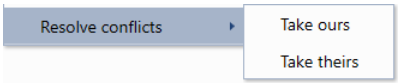
– Remove
  Deletes the selected file

– Discard
  Discards the changes to the file. This function can also be executed with the arrow icon.

– Stop tracking (for files already checked in)
  Stops tracking the file. The file becomes an unknown file and can therefore be ignored.

– Ignore (for new files)
  Adds the file to the file *.gitignore* so that the file is not tracked by Git.

– Resolve conflicts
  This function is activated for files with merge conflicts.



  Merge conflicts can be resolved by deciding whether the changes from the Cadpool ("Take ours") or the changes from the server ("Take theirs") should be kept.

Please note: Files whose conflicts have been resolved with "Take ours" can then be considered as unmodified. In this case, the file no longer appears as a marked file.

4. **Context menu for file groups (unmarked files)**
   Files with different versions are listed in groups and can be cleaned up individually, see Cleaning up operating environment.

5. **Cleaning up the operating environment**
   Old versions of a file can be deleted for the entire operating environment using the broom icon, see Cleaning up the operating environment.

6. **Stage files for commit**
   Unmarked files can be marked with the icons *Stage all* or *Stage selected*.

7. **Unstage files**
   Staged files can be set back to Unstaged with *Unstage all* and *Unstage selected*.

Checking in staged files

Enter a message for the commit and click the Commit button. This checks in all staged files with the specified commit message and lists them in the History page.

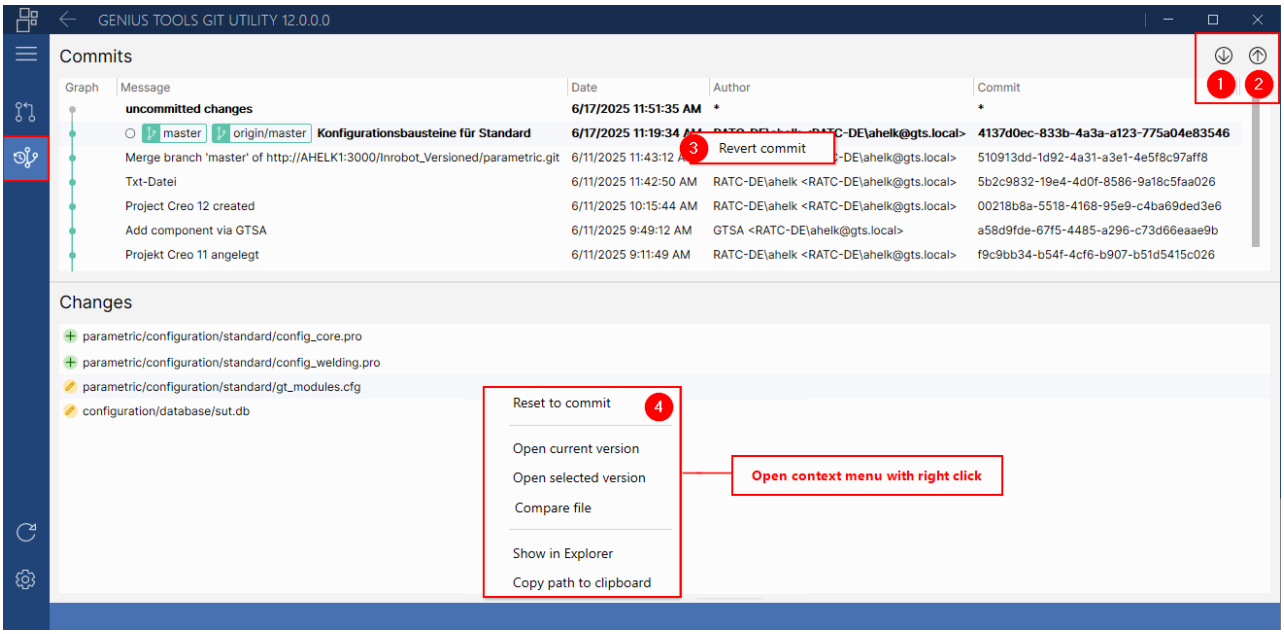
© 2025 INNEO Solutions GmbH

Please note: The commit button is only activated after there is at least one marked file and one commit message.

9.5 History of commits

The History page lists all commits to an operating environment with the commit message and information on the check-in date and author.

Click on the line of a commit to see the changed files in the area *Changes*.



The following functions are available:

1. **Pull**
   Retrieves the current status from the Git server without discarding changes.
   Use case: Another user has checked in changes.
2. **Push**
   Pushes changes to the master.
3. **Undo commit**
   Right-click on the commit that is to be undone.
   You can choose whether a new commit should be created automatically to undo the changes to the original commit.
   If no new commit is created automatically, the changed files can be checked in on the commit page.

The following actions can be performed for the changed files of a commit. Open the context menu by right-clicking.

4. **Context menu**

© 2025 INNEO Solutions GmbH

– Reset to commit
  Resets the file to the status of the selected commit and lists the file as a marked file on the commit page.
– Open current version
  Opens the current version of the file from the Cadpool
– Open selected version
  Opens the version of the file on the Git server.
– Compare file
  Opens the specified comparison tool to compare the current status of a file with the status of the file on the Git server, see Comparing file versions.
– Show in Explorer
  Opens the Explorer in the directory of the selected file.

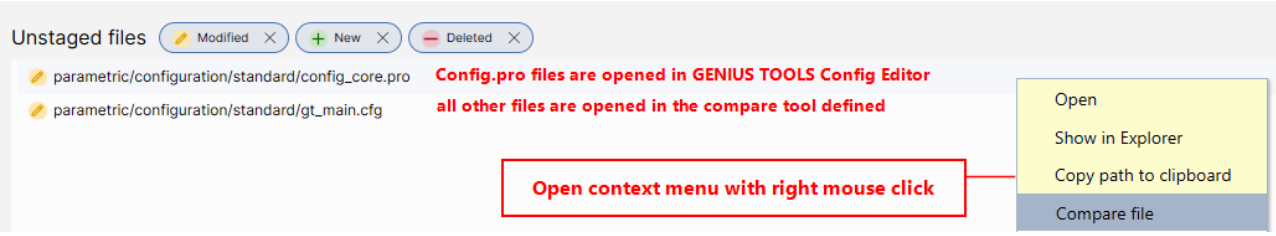
9.6 Comparing file versions

You can compare the current status of a file with a previous status of this file. You can use a separate application or Notepad++ in ComparePlus mode to do this.

The Compare file function is available in the context menu:

– on the Commit page: compares the current file in the cadpool with the last checked-in status of the file
– on the History page: compares the current file in the cadpool with the file of the selected commit

If you compare a Config.pro file or a Config.sup file with an earlier version, they will open in GENIUS TOOLS Config Editor on the Compare page.

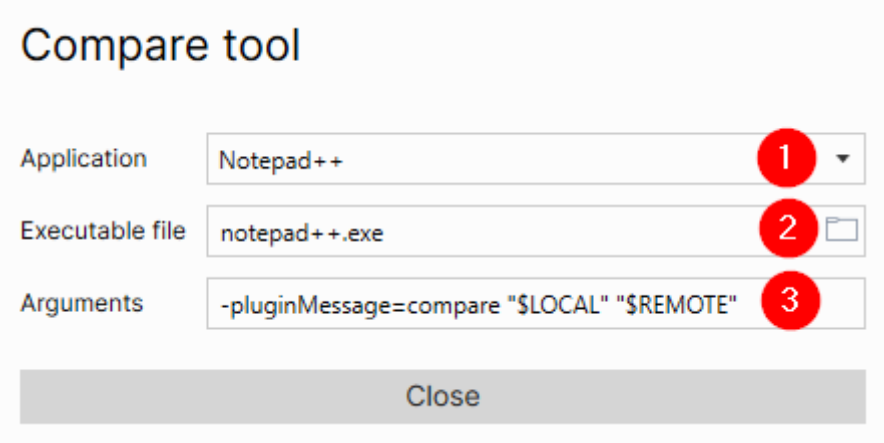


Context menu for unstaged files on the Commit page

Specifying comparison tool

To compare files, you can save your own comparison tool in the sidebar in the user menu ⚙ or use Notepad++ in ComparePlus mode.

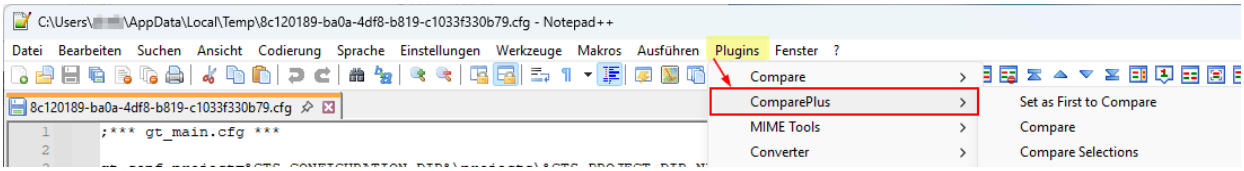
© 2025 INNEO Solutions GmbH



Fill in the following fields in the new dialog:

1. Application
   Select whether you want to use your own application or Notepad++ in ComparePlus mode.
   Note that the ComparePlus plugin must be installed in Notepad++.

   Please note: The required Notepad plugin is called ComparePlus. Do not confuse this with Compare.



2. Executable file
   Enter the directory path to your own application.

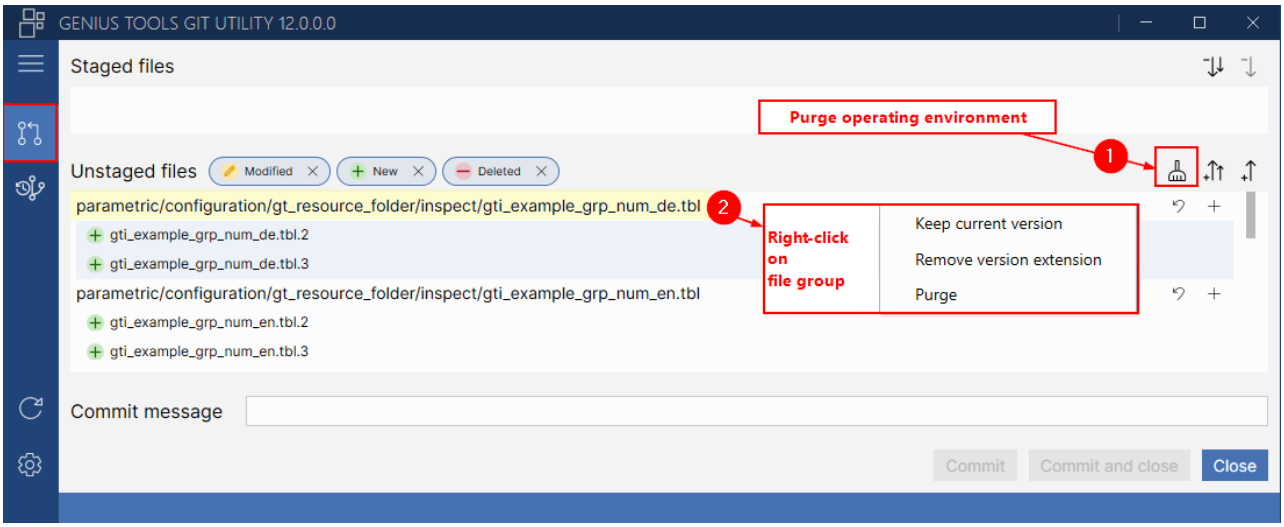
3. Arguments
   Specify transfer arguments for your own application. These may be required to open in the correct mode.
   The arguments "$LOCAL" "$REMOTE" are always needed to compare the local file with the last checked-in version of the file on the Git server.

9.7 Cleaning up operating environment

Click on the broom icon on the Commit page in the Unstaged files area to clean up the entire operating environment (1) or in the context menu on Purge to clean up an individual, versioned file (2).

Please note: The number after the file extension indicates the version of a file, e. g. *part1.prt.6.* is version 6 of part 1.

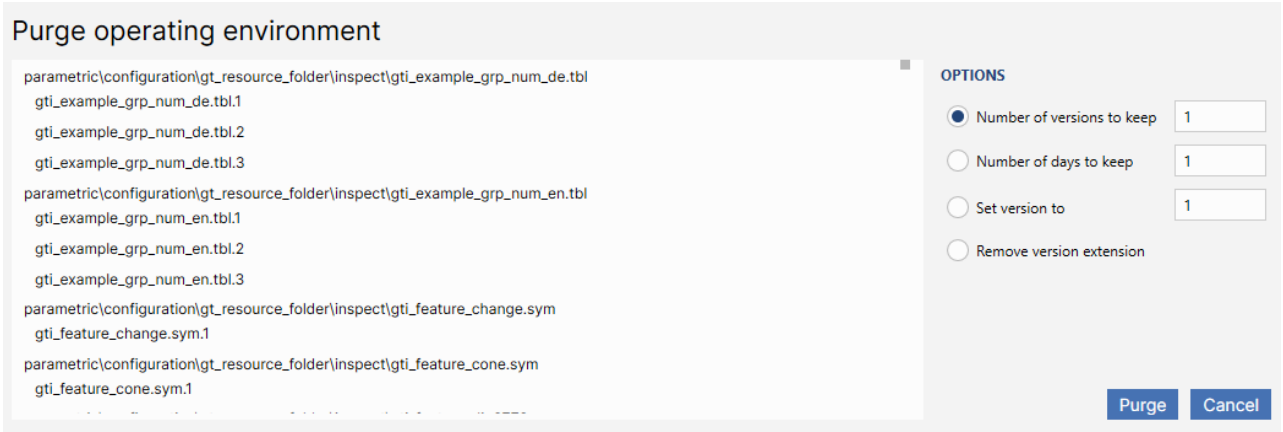
© 2025 INNEO Solutions GmbH



Function Purge operating environment on the Commit page

1. Cleaning up operating environment

The Purge function opens a new dialog box to delete versioned files from the operating environment and to keep a defined number of versions.



Configure the versions to be kept on the right under Options.

- Number of versions to keep
  Deletes all older versions of a file up to the number specified here.
- Number of days to keep
  Deletes all versions of a file that are older than the number of days specified here. The current version of a file is always retained regardless of its age.
- Set version to
  Deletes all versions of a file except for the current one and sets the current version to the specified version number.
- Remove version extension
  Deletes all versions of a file except for the current version and removes the version number of the current file.

© 2025 INNEO Solutions GmbH

2. Cleaning up individual files before committing

All changed versions of one file are displayed in the list of unstaged files as a group. This file group can be cleaned up separately using the actions in the context menu. These actions delete versions of a file before the commit.

- Keep current version
  Deletes all versions of a file except for the current version.
- Delete version number
  Deletes all versions of a file except for the current version and removes the version number of the current file.
- Clean-up
  Opens the Clean-up dialog. The options correspond to those in the Purge operating environment dialog.

© 2025 INNEO Solutions GmbH

10 Appendix

10.1 Start parameters

Start parameter	Description
-gts:admin	Starts GENIUS TOOLS Project Configurator.
-gts:appdata=<directorypath>	Redefines the path to the Appdata directory.
-gts:debug	Activates debug logging.
-gts:exp=<directorypath>	Defines the location of the *expcfg.bat* file of the worker.
-gts:home=<directorypath>	Sets the home directory. Example: *D:\gtstarter\cadpool\inneo\software\GTS.exe -gts:home=%SystemDrive%\home\%USERDOMAIN%.%USERNAME%\pro.creo3*
-gts:lang=<languageacronym>	Starts GENIUS TOOLS Starter App in a defined language (de/en/fr).
-gts:L=<languageacronym>	Sets Creo language.
-gts:CL=<languageacronym>	Set language for GENIUS TOOLS Starter.
-gts:licDebug	Activates debug logging for the license server (loud alarm when license problems occur).
-gts:licServer=<lizenseserver>	Sets the license server.
-gts:licTimeout=<timespecification>	Defines the maximum waiting time to receive a license, in milliseconds. Entries from 1000 to 60000. Default: 10000. Setting is passed on to Creo by environment variable GT_LIC_TIMEOUT.
-gts:networkTimeout=<timespecification>	Redefines the network timeout. Entries in milliseconds.
-gts:noChecksum	Deactivates checksum tests during synchronization.

© 2025 INNEO Solutions GmbH

Start parameter	Description
-gts:noProjectAutostart	Prevents the project (gts:p) from being started immediately.
-gts:noSync	Deactivates synchronization.
-gts:p=<projectname>	Starts a project and filters the project list.
-gts:pui=<projectlist>	Filters the project list to a list of projects specified separated by commas (-gts:pui=pname1,pname2,pname3).
-gts:temp=<directorypath>	Redefines path to the Temp directory.
-gts:units=<unitIDstring>	Starts GENIUS TOOLS Starter with the defined unit ID string. (The ID string is displayed in GENIUS TOOLS Project Configurator under *Configuration* > *GENIUS TOOLS Starter App* > *Desktop shortcut* for the selected unit).
-gts:worker	Starts in Worker setting.
-gts:workingDir=<directorypath>	Defines the directory where the runtime data (log files) of GENIUS TOOLS Starter is stored.

10.2 Environment variables

Created environment variables

GTS environment variable	Description / example	Old SUT variable
GT_LIC_SERVER	contains the specifications of -gts:licServer	
GT_LIC_TIMEOUT	contains the specifications of -gts:licTimeout (maximum waiting time of a license query)	
GT_TELEMETRY	1 if *Send telemetry data* is activated, otherwise 0	

© 2025 INNEO Solutions GmbH

GTS environment variable	Description / example	Old SUT variable
GTFC_ADMIN	contains the result of the switch *Is GTfC Admin* in *GENIUS TOOLS Project Configurator* > *Organization* > *Access* > *Role* > *Function Access*	TBXADMIN
GTS_APPS_DIR	Finds the selected, application-specific directory for add-on applications. <Caddepot>\<operatingenvironment>\<application>\apps	
(GTS_CFG_LW) recommended instead: GTS_ROOT_DIR	GTS:<Cadpool>\<operatingenvironment> GTS: D:\gtstarter\cadpool\2017_latest SUT: <DriveLetter> SUT: P:	STOOLS_CFG_LW
GTS_*_ESCAPED	Variant of a variable that prevents the variable from being resolved, e. g. needed in mapkeys. Is defined automatically, see explanation in section below.	
GTS_CONFIGURATION_DIR	Finds the selected, application specific configuration directory. <Caddepot>\<operatingenvironment>\<application>\configuration	
GTS_CREO_INSTALL_DEFINITIONS_DIR	definitions directory under the install folder	
GTS_CREO_INSTALL_DIAGNOSTIC	1 if *diagnostic tools* are activated, otherwise 0	
GTS_CREO_INSTALL_FIREWALL	1 if *Write firewall entries* is activated, otherwise 0	
GTS_CREO_INSTALL_HELP	1 if *Install help* is activated, otherwise 0	
GTS_CREO_INSTALL_HELP_XML_DIR	XML directory for the help (install/definitions/<Unit or standard>/XML/help_Creo<MainVersion>)	

© 2025 INNEO Solutions GmbH

GTS environment variable	Description / example	Old SUT variable
GTS_CREO_INSTALL_MAIN_VERSION	Creo main version to be installed	
GTS_CREO_INSTALL_TASKSKILL	1 if *Taskkill* is activated, otherwise 0	
GTS_CREO_INSTALL_UNIT_FOLDERS	List of the currently selected units (e. g. “Germany|Leipzig|Construction”)	
GTS_CREO_INSTALL_UPGRADE	-upgrade if the installation type was set to upgrade, otherwise “”	
GTS_CREO_INSTALL_VERSION	Creo version to be installed (e. g. 11.0.1.0)	
GTS_CREO_INSTALL_VIEWER	1 if *Install Thumbnail Viewer* is activated, otherwise 0	
GTS_CREO_INSTALL_XML_DIR	XML directory (install/definitions/<Unit or standard>/XML/Creo<MainVersion>)	
GTS_DATA	Finds the selected data package directory, is from version 9.0 application specific: i. e. in Creo Parametric it has been changed from <Caddepot>\<operatingenvironment>\data\<companydata> to <Caddepot>\<operatingenvironment>\<application>\data\<companydata>	SUTDATA
GTS_DATA_LIB	Datalib directory	
GTS_ENV_NAME	Name of operating environment.	
GTS_EXECUTION_DIR	Points to the directory which contains the executed file (*.exe, *.bat, *.pdf).	
GTS_MAIN_SERVER_DIR	Server path of the main server	
GTS_MC		SUTMC
GTS_NET_LW	Name of the first network drive	

© 2025 INNEO Solutions GmbH

GTS environment variable	Description / example	Old SUT variable
GTS_PLOT_CONFIG_DIR	Directory for the plot configuration of Creo Parametric	PLOT_CONFIG_DIR
GTS_PLOT_FILE_DIR	File for the plot settings of Creo Parametric	PLOT_FILE_DIR
GTS_PROEDATECODE	Version of Creo Parametric	SUT_PROEDATECODE
GTS_PROERELEASE	Version of Creo Parametric	SUT_PROERELEASE
GTS_PROJECT_DIR	Finds the selected project directory, from version 9.0 application-specific. Path: <Caddepot>\<operatingenvironment>\<application>\configuration\projects\<projectname>	APPL_PROJECT_DIR
GTS_PROJECT_DIR_NAME	Name of project directory (until version 9.0 GTS_PROJECT_DIR.)	
GTS_PROJECT_NAME	Name of current project	SUT_PROJECT_NAME
GTS_ROOT_DIR	Main directory of the operating environment	SUT_ROOT_DIR
GTS_SATELLITEONLY_DIR	Directory that only exists on the main server and the satellite	
GTS_SERVERONLY_DIR	Directory that exists only on the server	
GTS_SERVER_DIR	Path to the server	
GTS_SYNC_LAST	Last synchronization date	
GTS_SYNC_MODE	Synchronization mode	
GTS_TEMP	Points to the temp directory	
GTS_TRAIL_DIR	Trail directory of Creo Parametric	TRAIL_DIR

© 2025 INNEO Solutions GmbH

GTS environment variable	Description / example	Old SUT variable
GTS_UNIT_DIR	Finds the selected unit directory, from version 9.0 application-specific. Path: <Caddepot>\<operatingenvironment>\<application>\configuration\units\<unitdirectoryname>	as of version 11.0, use instead of: GTS_USER_GROUP, GTS_COMPUTER_GROUP
GTS_UNIT_DIR_NAME	Name of unit directory	
GTS_UNIT_NAME	Name of unit that is selected by the user	
GTS_USER	Contains the alias name of the user entry in GENIUS TOOLS Starter („GTS alias“)	STOOLS_USER
GTS_USER_COMMENT	Contains the comment of the user entry in GENIUS TOOLS Starter	
GTS_USER_CONFIG_DIR	Directory that contains the personal settings of users	USER_CONFIG_DIR
GTS_USER_EMAIL	Contains the email address of the user entry in GENIUS TOOLS Starter	
GTS_USER_LW	Letter of user drive	STOOLS_USER_LW
GTS_USERLONG	Contains the long alias name of the user entry in GENIUS TOOLS Starter („GTS alias long“)	STOOLS_USER_LONG
GTS_USERSHORT	Contains the short alias name of the user entry in GENIUS TOOLS Starter („GTS alias short“)	STOOLS_USER_SHORT
GTS_VERSION	Version of GENIUS TOOLS Starter	
GTS_WCSRVNAME	Windchill server name	STOOLS_WCSRVNAME

© 2025 INNEO Solutions GmbH

GTS environment variable	Description / example	Old SUT variable
GTS_WCSRVURL	Url of windchill server	STOOLS_WCSRVURL
GTS_WORKING_DIR	Points to the start directory (for Creo Parametric: working directory)	
LANG	Language	LANG

Created environment variables: ESCAPED variant

Since version 6.0.2.0 variables are resolved in configuration files. This means that mapkeys, in which environment variables with path specifications are used, no longer work. In order to allow you to continue using variables in mapkeys and other places where a resolution is undesirable, a new variant of all environment variables was introduced with the extension *_ESCAPED*.

The ESCAPED variant of a variable is defined automatically: If an environment variable is defined without the ESCAPED extension, GENIUS TOOLS Starter automatically writes the value of this environment variable into the ESCAPED environment variable.

All variables can be extended with *_ESCAPED*. In particular, the following variables are required for use in Mapkeys: GTS_PLOT_CONFIG_DIR_ESCAPED, GTS_SERVERONLY_DIR_ESCAPED, GTS_SERVER_DIR_ESCAPED, GTS_TRAIL_DIR_ESCAPED, GTS_UNIT_DIR_ESCAPED, GTS_USER_CONFIG_DIR_ESCAPED.

Affected environment variables

PTC_WF_ROOT

Environment variable that overwrites the default location of the Creo directory. (WF comes from “Wildfire”, name of the predecessor product of Creo.)

PTC_WF_CACHE

Environment variable that refers to additional cache space.

PTC_SESSION_LOG_PATH

PTC_SESSION_TRACEBACK_PATH

PTC_SESSION_TRAIL_PATH

10.3 Regular expressions

Regular expressions can be used for names that create users and computers.

© 2025 INNEO Solutions GmbH

Character	Description
\	Indicates the following character as a special or verbatim character. For example “n” is corresponds to the character “n”. “\n” corresponds to a line-break character. The sequence “\\” corresponds to “\”, “\(” corresponds to “(”.
^	Corresponds to the beginning of the input.
$	Corresponds to the end of the input.
*	Corresponds to the proceeding character zero or multiple times. For example “zo*” matches either “z” or “zoo”.
+	Corresponds to the proceeding character one or multiple times. “zo+” for example matches “zoo”, but does not match “z”.
?	Corresponds to the proceeding character zero or one time. For example “a?ve?” matches the “ve” in “never”.
.	Corresponds to all single characters except for a line-break character.
(Pattern)	Matches Pattern and saves the equivalent. The compared substring can be retrieved from the resulting matches listing using the elements [0]...[n]. For comparing of characters put in parentheses ( ) use “\(” or “\)”.
x|y	Corresponds to either x or y. For example matches “l|red” either “l” or “red”. “(l|r)ed” matches “led” or “red”.
{n}	n is a positive integer. Corresponds to exactly n times. “o{2}” for example does not match the “o” in “Robert” but the first two “o”s in “Booooat”.
{n,}	n is a positive integer. Corresponds to at least n times. “o{2}” for example does not match the “o” in “Robert” but all “o”s in “Booooat”. “o{1,}” is equivalent to “o+”. “o{0,}” is equivalent to “o*”.

© 2025 INNEO Solutions GmbH

Character	Description
{n,m}	m and n are positive integers. Corresponds to at least n and maximum m times. For example “o{1,3}” matches the first three “o”s in “Boooooat”. “o{0,1,}” is equivalent to “o?”.
[xyz]	A group of characters. Corresponds to any of the included characters. “[abc]” for example matches the “a” in “falling”.
[^xyz]	A group of excluded characters. Corresponds to any character not included. “[^abc]” for example matches the “f” in “falling”.
[a-z]	A character range. Corresponds to any character in the specified range. For example, “[a-z]” matches any lowercase alphabetic character in the range from “a” to “z”.
[^m-z]	An excluded range of characters. Corresponds to any character not included in the specified range. “[m-z]” for example matches all characters not included in the range from “m” to “z”.

Examples

Regular expression	Description	Example
[a-zA-Z]*_[a-zA-Z]*-+,	Any alphabetic string with an underscore	user_tbx
[0-9]{5}	Five random numbers	12345
^.{7}$	7 random characters	t_p.prt
^[A-Z]{1}[a-z]{2,10}	A capital letter at the beginning followed by two to ten lower case letters	Tuser
[0-9]{2}\.[0-9]{2}\.[0-9]{4}	German date format	01.07.1975
[0-9]{4}-[0-9]{2}-[0-9]{2}	Date format ISO 8601	1975-07-01
[0-9]{2}/[0-9]{2}/[0-9]{4}	Date format US	01/07/1975

© 2025 INNEO Solutions GmbH

Regular expression	Description	Example
[0-9]{2}-[a-zA-Z]{3}-[0-9]{4}	English date format	01-Jul-1975
[a-zA-Z]{3,9}\s[0-9]{1,2},\s[0-9]{4}	English date format (long form)	July 01, 1975
^(?!ST|B00|DEF).*	combstatefilter="^(?!ST|B00|DEF).*" All combined states that do not begin with ST, B00, or DEF are used. This filters out the Creo Parametric standard states “Default all”.	Combined states are filtered with: ST* B00* DEF*
^ABC	Starts with ABC	ABCDEF
ABC$	Ends with ABC	UVWXYZ
^. {0,3}$	String with a maximum of 3 characters	AB
^\d+\.\d+\.\d+$	Version number	1.0.3
^[A-Z] {3}-\d{4}$	Format	ABC-1234
\b[A-Z] {2}\d{6}\b	Serial number	AB123456
(?<![a-zA-Z0-9])CAD(?![a-zA-Z0-9])	Exact term (not part of a word)	CAD
(?<=\s)Rev\.\s?[A-Z]	“Rev A” or “Rev B” after a space	Version Rev A
\s{2,}	More than one space (for format check)	Scale: 1:100
^DWG\d{6}$	Drawing number	DWG123456
^\d+(.\d+)?\s?(mm	Unit of measurement	cm

© 2025 INNEO Solutions GmbH

Regular expression	Description	Example
^±\d+(\.\d+)?$	Tolerance specification	±0.2
^\d{1,4}x\d{1,4}x\d{1,4}$	Dimension chain: width x height x depth	120x50x80
^PART_[0-9]{3}$	part	PART_001

10.4 GTS config variables

The following GTS config variables are needed for generating single project options to select license extensions and extensions for Creo Parametric projects.

GTS config variable for all applications	Specification / Example	Description
gts_is_selectable =	true/false	Defines if the project option appears as a checkbox (in the Options tab as well as below the project name)
gts_selection_default =	true/false	Defines whether the project option is selected by default or not, i. e. whether the box is checked. Default: false.
gts_display_name =	Simulation Live (Real-time simulation)	display name in the Config tab – if not specified, the file name is used
gts_selection_name =	Simulation Live	display name in selected project and in the Options tab – if not specified, gts_display_name is used
gts_selectable_pos =	1	specifies the position in the list of project options. This does not change the order in which the configuration file is processed. – if this command is not specified, the project option will be placed after the options with position and ordered alphabetically

© 2025 INNEO Solutions GmbH

GTS config variable for all applications	Specification / Example	Description
gts_description =	Simulation for fluids for Creo from version 7.0.	Tooltip text for name of project option – if not specified, the file name is used

The following GTS Config variables are used to create single project options for selecting license extensions for Creo Parametric projects.

GTS config variable	Specification / Example	Description
gts_creo_lic =	<licensenumber>, e. g. 379	Creo Parametric: License number(s) of the extension(s) to be added. Multiple numbers must be separated with empty space. – if this entry is set, an icon key appears next to the checkbox in the project – license numbers can be read from the license.dat file in the licensing folder under PTC/FLEXnet Admin License Server
gts_creo_lic_display_name =	<text>, e. g. Simulation Live	Creo Parametric: Tooltip text for license symbol (key) – if not specified, the line under License name is empty
gts_requires_base_lic =	<baselicense>, e. g. PROE_Foundation	Defines condition: if the base license is not available, the project option will be deactivated, i. e. no checkbox is displayed. – It checks if the base license is specified in the PSF key. – Multiple licenses must be separated with empty space. The project option will be deactivated, unless all of the listed licenses are available.

© 2025 INNEO Solutions GmbH

GTS config variable	Specification / Example	Description
gts_auto_activate_base_lic =	<baselicense>, e. g. PROE_Foundation	Defines condition: If the base license is available, the project option will be preselected, i. e. the box is checked. – Multiple licenses must be separated with empty space. The project option will be deactivated, unless all of the listed licenses are available. – Take care not to simultaneously set the variable ! gts_selection_default to true.

If the file is to control an auxiliary application, specify the corresponding configuration option, such as a protkdat entry. (Example: protkdat $GTS_ROOT_DIR\configuration\application\protk_keyshot.dat). These entries do not create icons next to the checkbox.

The gts_choose variable can be used to create switch options and to include add-on applications for Solidworks.

GTS config variable for switch options	Specification / Example	Description
gts_choose	gts_choose{Big Assemblies || display_points NO || display_points YES}	The gts_choose expression is set instead of the value of a configuration option and must contain two values.

© 2025 INNEO Solutions GmbH

GTS config variable for SolidWorks	Specification / Example	Description
gts_choose	gts_choose{SolidWorks Composer|| 00000001|| 00000000}	The gts_choose expression must contain two values for registry entry.

Comment characters for each application

Application	Configuration block required (text file)	Comment character	Example
Creo Parametric	config_*.pro, config_*.sup	!	`! gts_display_name = Keyshot plugin`
SolidWorks	config_*.sldreg	;	`; gts_display_name = 3DConnexion`
Inventor	config_*.xml, ui_*xml, *.addin	<!-- -->	`<!-- gts_display_name = Additive Manufacturing -->`

10.5 Start values in Startup TOOLS

Access to the individual extension modules of GENIUS TOOLS for Creo and editors

The start switches for user modules are set to 1, i. e. they can be opened by users.

The start switches for the editors of these modules are set to *1* or to *%GTFC_ADMIN%*. The *%GTFC_ADMIN%* variable contains the result of the switch *Is GTfC Admin* in *GENIUS TOOLS Project Configurator* > *Organization* > *Access* > *Roles* > *Function Access*.

The variable *%GTFC_ADMIN%* is set in the delivery state of the Startup TOOLS in the following configuration options.

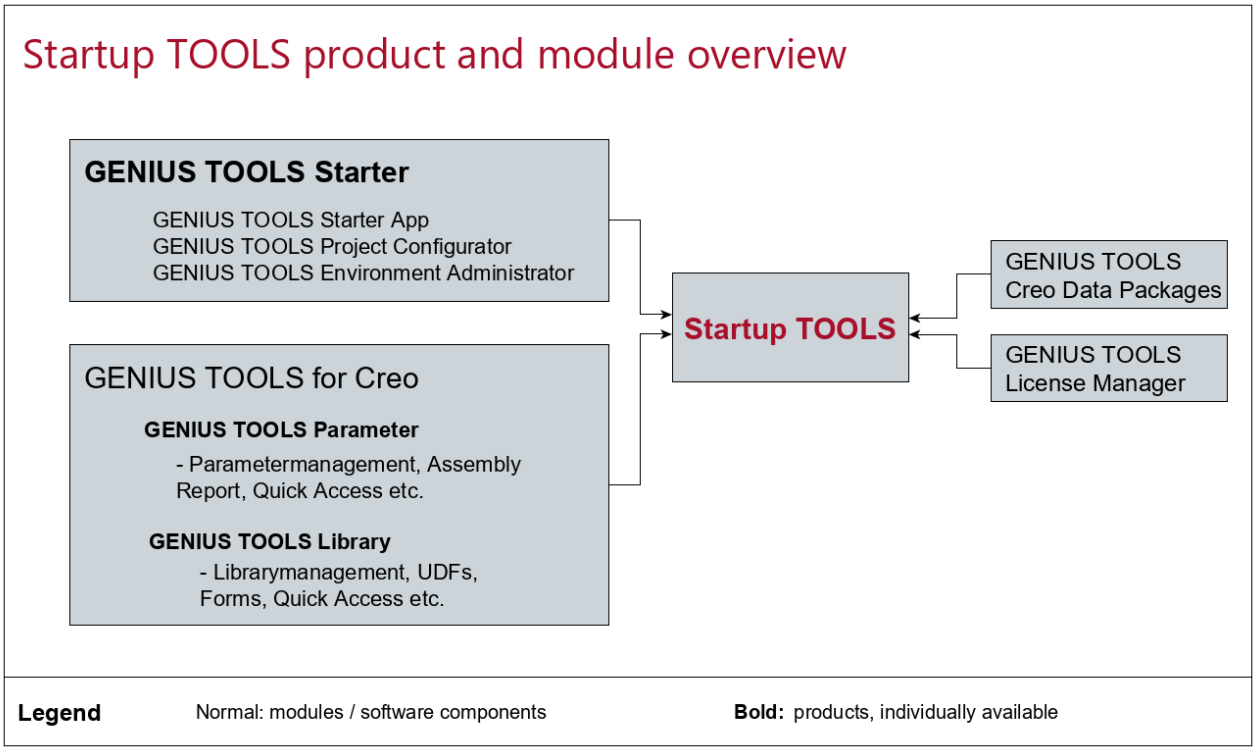
Editor	Name and value of configuration option („start switch“)
GENIUS TOOLS Library Editor	gt_start_library_editor=%GTFC_ADMIN%

© 2025 INNEO Solutions GmbH

Editor	Name and value of configuration option („start switch“)
GENIUS TOOLS Material Editor	gt_start_material_editor=%GTFC_ADMIN%
GENIUS TOOLS Name Generator Editor	gt_start_name_generator_editor=%GTFC_ADMIN%
GENIUS TOOLS Quick Access Editor	gt_start_quick_access_editor=%GTFC_ADMIN%
GENIUS TOOLS UDF Forms Editor	gt_start_udf_forms_editor=%GTFC_ADMIN%

10.6 GENIUS TOOLS Starter: part of Startup TOOLS

GENIUS TOOLS® Starter is a stand-alone application within the product package GENIUS TOOLS Startup TOOLS.



© 2025 INNEO Solutions GmbH

11 Glossary

Administration computer
Computer on which the administrative user has full write access to the Caddepot directory in order to manage all data on the file system level.

Application computer, workstation
Computer on which the (Creo) user works. The application computer houses the Cadpool directory, which contains the local operating environment.

Authentication provider
An authentication provider is an executable file that requests or receives user data from an authentication system.

Cadpool
Directory on the application computer that contains the local operating environments. The Cadpool directory is synchronized from the Caddepot.

Caddepot
Directory on the administration computer that contains the central operating environment.

Client
Term for application computers for Startup TOOLS versions up to 2018.

Computer group
When updating to version 11.0.0.0 and newer, existing computer groups will be transformed into units.

Conditional configuration block
Configuration file whose validity is restricted to condition(s) by one or more tag ID(s). Notation: config_*.TAGID.pro

Config file (also: config_*.pro file)
See configuration block.

Configuration block
Configuration file which is read by GENIUS TOOLS Starter to create the configuration of a Starter project. Notation: *config_*.pro, config_*.sldreg*.

Config.pro
Most important Creo Parametric configuration file, defines user settings.

Config.sup file
Creo configuration file which contains settings that cannot be changed by the users, e.g.

© 2025 INNEO Solutions GmbH

to ensure drawing standards.

Config.val file
Creo Parametric configuration file which contains validation settings for data import.

Creo
Name of CAD software by PTC with the applications Creo Parametric (formerly Pro/Engineer) ans Creo Elements/Direct (formerly CoCreate).

Creo configuration file
File which determines settings for a Creo session. There are four types of configuration file: *config.pro*, *customization.ui*, *config.sup* and *config.val*.

Creo startkey (also: PSF key, start command)
Configured start command that opens Creo Parametric with one or several defined licenses or license extensions. Stored as PSF file in PTC bin directory.

Customization.ui file
Creo Parametric configuration file which contains user interface customizations for a user. The precise name of the file is creo_parametric_customization.ui

Data directory
Main directory for all data related to an operating environment at *<GTS-OperatingEnv>\data*.

Educational license
License for academic institutions.

Escaped variable
Variant of an environment variable that prevents the variable from being resolved. It is defined automatically.

Free tag ID
Textual marking in a configuration block which restricts the file to the selection of a combined project option.

GENIUS TOOLS
Family of software products by INNEO Solutions GmbH, including Startup TOOLS, Model Processor, and freeware tools such as Purge.

GENIUS TOOLS for Creo
Component of the Startup TOOLS software product which contains functional enhancements for Creo.

GENIUS TOOLS Environment Administrator
Stand-alone administrative tool. It is used to create and update work environments, edit work environment properties and migrate from older versions of Startup TOOLS to

© 2025 INNEO Solutions GmbH

version 6 and later. GENIUS TOOLS Environment Administrator is located at ... *installdepot**gtsa-latest**gtsa-exe*.

GENIUS TOOLS License Manager
Administrative tools for managing Startup TOOLS licenses.

GENIUS TOOLS Project Configurator
Administrative component of GENIUS TOOLS Starter for managing project configurations and other properties of an operating environment. Open GENIUS TOOLS Project Configurator from the user menu of GENIUS TOOLS Starter App.

GENIUS TOOLS Starter
Software product consisting of the three components GENIUS TOOLS Project Configurator, GENIUS TOOLS Starter App and GENIUS TOOLS Environment Administrator.

GENIUS TOOLS Starter App
Stand-alone component of GENIUS TOOLS Starter which lets users start configured Creo projects. GENIUS TOOLS Starter app is located in each operating environment under ...*caddepot**lokal**software**GTS.exe*.

GENIUS TOOLS Starter Service
Method in GENIUS TOOLS Starter for faster data synchronization.

GTS
Abbreviation for GENIUS TOOLS Starter.

GTS.exe
Name of the executable file for GENIUS TOOLS Starter App.

GTSA.exe
Name of the executable file for GENIUS TOOLS Environment Administrator.

GTS Alias
User alias in GENIUS TOOLS Starter, for use in additional applications for Creo. The GTS alias is available as an environment variable (`%GTS_USER%`) in Creo. If you do not specify an alias, the user name will be used.

GTS Alias Long
Long user alias. The long alias is available in Creo via the environment variable `%GTS_USERLONG%`.

GTS Alias Short
Short user alias. The short alias is available in Creo via the environment variable `%GTS_USERSHORT%`.

© 2025 INNEO Solutions GmbH

GTS-config-variable
Variable that defines settings in a configuration block to create a single project option for GENIUS TOOLS Starter App, e. g. *gts_display_name*

GTS variable
Environment variable that creates inforamtion for GENIUS TOOLS Starter, e. g. *GTS_UNIT_DIR*.

Home Use license
License for private use.

Initial synchronization, initialization
First synchronization run which creates the Cadpool directory on the application computer and synchronizes it with the Caddepot.

Installdepot
Subdirectory of the installation directory that contains the release and version setups without settings and customizations. All setup programs unpack their data to this directory.

Installation computer
Computer on which the setup programs are run. Typically, this is also the administration computer.

LDAP (Lightweight Directory Access Protocol)
Network protocol for accessing a distributed directory service, e. g. the Windows user management.

License extension
License for additional Creo Parametric functionality that is drawn at the start of the program and blocked during the session.

Mapkey
Macro defining a sequence of commands and functions which can be created in Creo to simplify often-used procedures.

Mediadepot
Subdirectory of the installation directory. It contains setup files for different releases and versions. All setup files will install or unpack to the Installdepot directory.

NAS (Network Attached Storage)
File server providing independent storage capacity in a network of computers.

NC (Numerical Control)
Computer-based applications for controlling machine tools and production lines.

© 2025 INNEO Solutions GmbH

Operating environment
Directory that contains all the data required for working with the desktop application. This includes configuration data, libraries, templates and additional applications. The operating environment also contains a database with all configured projects.

Operating environment, local
Operating environment on the application computer.

Organization tree
Structure of all units and subunits that specifies the call hierarchy. Created in GENIUS TOOLS Project Configurator.

Perpetual license, permanent license
License that allows using a defined version of a software for an unlimited period of time.

PDM directory
Subdirectory of the directory *standard*, u*nits*, *projects* and *users* which is included into the call hierarchy for configuration files and batch files if Windchill is active.

PDMLink
Component of the Windchill software product family that is used for product data management.

Power Extensions
Application from INNEO for central administration of an operating environment for Creo Elements/Direct projects.

PTC
The software company that develops Creo.

Project
See Starter project.

Project, blocked
Project that a user can neither access nor see in GENIUS TOOLS Starter App.

Projekt, hidden
Project that a user cannot see in GENIUS TOOLS Starter App, but is able to access it with a transfer parameter.

Project, invalid
Project, for which a user has no valid license or required license extensions. Access to it an display in GENIUS TOOLS Starter App can be configured.

Project directory
Directory for project data at *<GTS-OperatingEnv>\configuration\projects\% GTS_PROJECT_DIR%*

© 2025 INNEO Solutions GmbH

Project option
Option to select on one or more projects in GENIUS TOOLS Starter App the Creo language, Creo startkey as well as license extensions and add-on programs.

Resource directory
Directory *gt_resource_folder*, which is located in the system directory *configuration* of Creo Parametric and contains information for the modules of GENIUS TOOLS for Creo.

Role
Group of users or computers that are assigned access rights to projects and GENIUS TOOLS Starter App functionality.

Satellite (also: synchronization or mirror server)
Computer or shared folder on a computer to which the state of one or more operating environments of a central main server is mirrored.

Searchmode directory
Name of the directory *PDM* until version 9.0.0.

Starter project
Project created in GENIUS TOOLS Project Configurator which contains company-specific data and additional applications and whose settings, such as license and project specifications, can be made in different configuration levels.

Startup TOOLS
Software package that comprises the products GENIUS TOOLS Starter, GENIUS TOOLS Library, GENIUS TOOLS Parameter, as well as Creo data packages and the GENIUS TOOLS License Manager.

Startup TOOLS Server
Term for the administration computer for Startup TOOLS versions up to 2018.

STOOLS
Root directory name for Startup TOOLS versions up to 2018.

Subscription license
License that allows using a software for a limited period of time.

Subunit
Subordinate unit created by attaching a unit to another unit in the organization tree.

SUT
Abbreviation for Startup TOOLS.

Synchronization
Functionality that copies the data of an operating environment in the Caddepot directory to the Cadpool directory on an application computer.

© 2025 INNEO Solutions GmbH

Tag ID
Textual marking in a configuration block that is recognized by GENIUS TOOLS Starter. There are tag IDs for units (unit tag ID) and for project options (free tag ID).

TeamViewer
Third-party software used by INNEO Solutions GmbH to provide remote support.

UDF (User-defined feature)
Template for repeatedly required Creo features.

Unit
Group of users who belong to a company department defined either geographically or organizationally. Created in GENIUS TOOLS Project Configurator.

Unit directory
Directory in the units system directory that contains configuration blocks and other files for a unit.

Unit tag ID
Tag ID that is assigned to a unit in GENIUS TOOLS Project Configurator.

Unit type
Individually defined category for units, for better representation in GENIUS TOOLS Project Configurator.

User, dynamic
Variable entry in the Resources menu item under *Role* > *LDAP* or *User group (authentication provider)*.

User group
When updating to version 11.0.0.0 and newer, existing user groups will be transformed into units.

User, permanent
Manually entered entry in the Resources menu item under *Users*.

Windchill
Software product by PTC for managing product data over the entire product life cycle.

© 2025 INNEO Solutions GmbH

12 FAQs

GENIUS TOOLS Project Configurator

I created a project in GENIUS TOOLS Project Configurator, but it does not appear in GENIUS TOOLS Starter App.

– You have selected a unit that does not have project access rights.

– The project is invalid and is not displayed. Make new settings for invalid projects, see Displaying invalid projects.

– No start key is available. Take a look at the log file.

I cannot open GENIUS TOOLS Project Configurator.
Delete the .lock file under *caddepot*\<*operating environment*>*configuration**database*.

I changed the authentication method and can no longer log in to GENIUS TOOLS Project Configurator.
Incorrect access data has been saved and you are no longer an administrator.

You can restore the old status of the database for GENIUS TOOLS Project Configurator.

To do this, go to the database directory in Caddepot under *caddepot*\<*operating environment*>*configuration**database* and copy the database before the change of authentication method from the directory *Backup* to the folder *database*. Rename the database to *sut.db*. This will overwrite the last valid database.

Synchronize GENIUS TOOLS Starter App in the user menu with *Synchronize now*.

© 2025 INNEO Solutions GmbH

13 Copyright

Copyright 2025 by:

INNEO Solutions GmbH

IT-Campus 1

73479 Ellwangen

Germany

This documentation is protected by copyright. All rights reserved.

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

The unauthorized use of the documentation can lead to a claim for liquidated damages or legal prosecution. INNEO Solutions GmbH does not accept liability for possible faulty information in this documentation and the consequences resulting from such.

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

Registered trademarks and trade names of INNEO Solutions GmbH:
GENIUS TOOLS, Startup TOOLS, INNEO

- A -

access rights
  grant 103
ADDIN file 242
AddIns 239
Apps 171
apps directory 21
Apps projects 171
Auth_Windchill.exe 139
Auth_Windchill_SSO.exe 139
Authentication
  for Windchill users 139
Authentication provider 136
  create own authentication provider 137
  for Windchill 139
authentication system
  alternative 135
authentication systems
  alternative 101
Auto projects 173

- B -

basic configuration block 157
borrowing period
  define default 181
  define maximum 181
breakpoint 81

- C -

CAD applications 9
call hierarchy
  for subunits 89
computer entries
  static 98
computer groups 93
config.pro block
  basic 41
  conditional 41
  conditional config.pro block 190
  create project options 190
  simple config.pro block 190
  validity 190
config.sldreg 254
config_*.pro file 190
configuration directory 21
configuration file
  config.pro 189
  config.sup 189
  config.val 189
  creo_parametric_customization.ui 189
Content Center libraries 248
create computers 129
Creo
  install 201
  settings 206
Creo License Server
  create 134
Creo startkey 196
Creo startkeys 132
Custom projects 284

- D -

data
  directories 219
  packages 219
Data base mode 276
data directory 21, 187
default settings 134
default.sldreg 254
directory
  data 187
  project 187
directory structure 21
dynamic users 99

- E -

environment variables
  settings 147

- F -

Footer 276
Full version 276
function access 103
  example 107, 108
function rights 103

- G -

GENIUS TOOLS Environment Administrator 43
GENIUS TOOLS License Manager
  settings 149
GENIUS TOOLS Project Configurator 65
GENIUS TOOLS Starter App

© 2025 INNEO Solutions GmbH

GENIUS TOOLS Starter App
settings 144
Git check in 74
group settings 39
GTS config variables 157

- I -

import 130
import computers 130
inheritance
settings 143
install directory 21
Inventor libraries 248
Inventor project file 240
InventorCustomization.xml 239
IPJ file 240

- L -

last unit 81
LDAP 100
license analysis
block 181
License borrowing 291
block 181
license borrowing dialog
analyze 291
borrow 291
license extensions 224
license key 132
license keys 194
License mode 276
licenses
borrow 194
determine 194
distribute 194
LoadOnStartUp 242
LOCK file 65

- M -

Multi-CAD 9

- N -

network connections
settings 150

- O -

operating environment
add components 50
create 46
modify settings 58
update 55
organization tree 79

- P -

permission tree 113
private Config.pro file 294
project
access-restricted 113
block 111
copy 112
create 110
hide 111
project access 113
cross-unit 115
divided, unit-specific 120
example 115, 118, 120
overview 121
unit-specific 118
project collections 174
project directory 187
Project information 278
Project options 153, 224, 228, 278
combined 162
company-specific 155
display in GENIUS TOOLS Starter 170
Inventor projects 170
language 154
single 157
SolidWorks projects 166
switch 166
project restrictions 113
project settings 39, 217
protkdat 228
PSF
file 132, 196
key 132, 196

- R -

resources
create 124
role

© 2025 INNEO Solutions GmbH

role
  assigned 118
role-based authorization concept 94
roles
  add users and computers 98
  Administrator 97
  assigned 94, 107
  create 98
  default 97
  Everyone 97
  example 96
  free 94, 108, 115, 120
  pre-configured 97
  usage 95

- S -

satellites
  create 262
Save database 74
selection options 228
settings
  inherit 143
start command 132
Starter projects 28
subscription license
  functions 12
synchronization
  settings 148
synchronization server
  create 262

- T -

tab 278
tag ID
  free 41
  unitdriven 41

- U -

unit directory
  assign 84
unit tag ID 41
  folder independent 86
units
  assign role 77
  block 85
  create 77
  display in GENIUS TOOLS Starter App 90
  grouping 81
  Tab 77
user entries
  dynamic 99
  static 98
user groups 93
user rights 123
UserApplicationOptions.xml 239
userdata directory 184
users
  create 125
  import from Windchill 132
  static 125

- W -

Windchill
  settings 151
Windchill registration
  automatic 267
  change to HTTPS 267
Windows user management 100

© 2025 INNEO Solutions GmbH