GENIUS TOOLS Starter

Release 7.0.0.0

User Manual

© 2020 INNEO Solutions GmbH

www.inneo.com

1 Overview 5

1.1 GENIUS TOOLS Starter philosophy 5
1.2 Advantages 5
1.3 Component modules 6
1.4 GENIUS TOOLS Starter: part of Startup TOOLS 7

2 System architecture and terms 8

2.1 Important terms 8
2.2 Workflow and synchronization 9
2.2.1 Operating environments 10
2.3 Directory structure 11
2.4 Configuration concept 12
2.4.1 Configuration files 12
2.4.2 Call hierarchy for configuration files 13
2.4.3 User-driven configuration 14

3 License-dependent features 15

4 GENIUS TOOLS Environment Administrator 16

4.1 User interface 16
4.2 Creating an operating environment 18
4.3 Adding components to an operating environment 20
4.4 Updating software 24
4.5 Changing settings 25
4.6 Migrating a Startup TOOLS environment 28
4.7 Converting a Startup TOOLS database 32

5 GENIUS TOOLS Project Configurator 34

5.1 Starting GENIUS TOOLS Project Configurator 34
5.2 User interface and navigation 35
5.2.1 Main menu 36
5.2.1.1 Configuration page 36
5.2.1.2 Projects page 37
5.2.1.3 Resources page 38
5.2.1.4 Access rights page 39
5.2.2 User menu 39
5.2.3 Sidebar 41
5.2.4 Footer 41
5.3 Role-based permission concept 42
5.4 Graphical overview: groups in Project Configurator 43
5.5 Creating resources: users, computers, roles 44
5.5.1 Creating users 45
5.5.2 Creating computers 47

5.5.3 Importing from Excel ... 47
5.5.4 Default roles ... 49
5.5.5 Creating roles ... 50
5.5.6 Add users and computers to a role ... 50
5.5.7 Creating Creo startkeys ... 51
5.5.8 Accessing Windows user management ... 52
5.6 Configuring global environments ... 54
5.6.1 Network drive ... 55
5.6.2 GENIUS TOOLS Starter App ... 55
5.6.3 Additional environment variables ... 55
5.6.4 Creo settings ... 56
5.6.4.1 Application ... 56
5.6.4.2 Licenses ... 58
5.6.4.3 Cleanup ... 59
5.6.4.4 Write ... 60
5.6.5 Windchill settings ... 61
5.6.6 Synchronization ... 62
5.6.7 GTS license server ... 64
5.7 Configuring heterogeneous environments: groups and units ... 64
5.7.1 Create user groups, computer groups and units ... 66
5.7.2 Displaying units in GENIUS TOOLS Starter App ... 67
5.7.3 Assigning elements to groups or units ... 68
5.7.3.1 Assigning a role to a unit ... 68
5.7.3.2 Assigning users to user groups ... 70
5.7.3.3 Assigning computers to computer groups ... 70
5.7.4 Remove users and computers from a group ... 71
5.7.5 Deactivate user and computer groups ... 72
5.7.6 Blocking individual users or computers ... 72
5.8 Deviations from the default configuration ... 73
5.8.1 User-defined language ... 73
5.8.2 Group specific license packages ... 74
5.9 Creating projects ... 75
5.9.1 Defining Creo project configurations ... 75
5.9.2 Creating a new project ... 78
5.9.3 Displaying projects to users ... 79
5.9.4 Hiding and blocking projects ... 79
5.9.5 Settings for Creo projects ... 80
5.9.6 Assigning Creo licenses to projects ... 82
5.9.7 Default settings for license borrowing ... 84
5.9.8 Language of a Creo project ... 85
5.9.9 Workspace for Windchill ... 85
5.10 Working with project access groups ... 87
5.10.1 Creating project access groups ... 87

5.10.2 Using project access groups ... 88
5.10.3 General project access ... 89
5.11 Customizing Creo user interface ... 89
5.11.1 creo_parametric_customization.ui ... 90
5.12 Working with configuration and batch files ... 92
5.12.1 Call hierarchy ... 92
5.12.2 Searchmode directory ... 93
5.12.3 Configuring an operating environment with batch files ... 94
5.13 Working with Windchill ... 94
5.13.1 Object search hierarchy in Creo ... 95
5.13.2 Using a Windchill library ... 95
5.13.3 Automatic Windchill server rename ... 96
5.13.4 Automatic Windchill server registration ... 96
5.13.5 Project-specific Windchill settings ... 97
5.14 Access rights ... 97
5.14.1 Creating function access groups ... 98
5.14.2 Assigning access rights ... 100
5.15 Creating projects from other applications ... 102
5.16 Settings for GENIUS TOOLS Starter App ... 104
5.16.1 Configuring the desktop link ... 104
5.16.2 Support link and logging ... 106
5.16.3 Information pane ... 106
5.16.3.1 Info tab ... 107
5.16.3.2 Licenses tab ... 107
5.16.3.3 Config tab ... 109
5.16.4 Project settings: warnings and language ... 109
5.16.5 Operating environment clean-up ... 110
5.16.6 Sending messages to the users ... 110
6 GENIUS TOOLS Starter App 112
6.1 Starting GENIUS TOOLS Starter App ... 112
6.2 User interface ... 112
6.3 Information pane ... 113
6.4 Working with units ... 116
6.5 User menu ... 117
6.6 Sidebar ... 118
6.7 Footer ... 119
7 GENIUS TOOLS product overview 120
7.1 GENIUS TOOLS product family ... 121
7.2 Startup TOOLS product development ... 122
8 Glossary 123

9 Copyright 128

1 Overview

GENIUS TOOLS Starter is used to start locally installed applications (for example Creo Parameteric) using a centrally managed configuration. All required data is synchronized from a central storage location (Caddepot) to the local computer (Cadpool).

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 application computers using GENIUS TOOLS Starter. GENIUS TOOLS Starter also works with multiple operating environments, so that test environments or environments with customer-specific configurations can be configured with little effort.
An operating environment can contain any number of projects.
The Startup TOOLS software package includes pre-defined projects for a number of Creo versions that can be adapted or extended as required by each company. GENIUS TOOLS Starter also works with publicly available configurations for Creo.
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 Creo workstation and also distribute the required data. Changes to the configuration are made centrally on the administration computer and are automatically made available to all users. Different configuration settings can be defined for user groups, computer groups or units. The software offers global administration capabilities for heterogeneous IT landscapes and user-specific adaptation options.

1.2 Advantages

– project-oriented workflow
– support for different operating environments
– easy handling through graphical configuration interface for the Creo setup
– central configuration for distributed application computers
– database-driven management of Creo configuration settings
– licensing with FlexLM, fail-safe mode and license borrowing supported
– organization of resources into user groups, computer groups and units
– role-based permission concept
– Windchill integration
– Creo configuration file management
– blocking or granting of access to projects based on project access groups
– support for multiple languages
– license management

© 2020 INNEO Solutions GmbH

– synchronization based on a configurable interval
– fastest possible Creo Parameteric startup, as all data is stored locally
– easy offline work using license borrowing

1.3 Component modules

GENIUS TOOLS Starter provides user-friendly graphical interfaces for managing the Creo installation. It consists of three components with separate UIs:
– GENIUS TOOLS Environment Administrator for managing operating environments
– GENIUS TOOLS Project Configurator for configuring projects within an operating environment
– GENIUS TOOLS Starter App for starting the configured projects

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.

GENIUS TOOLS Project Configurator

GENIUS TOOLS Project Configurator provides functionality for configuring different Creo projects with only a few mouse clicks. Projects are provided to the end users for starting an application using specific configuration settings. Use GENIUS TOOLS Project Configurator to
– define adaptable configuration settings for homogeneous or heterogeneous Creo landscapes
– define group-specific settings
– manage different projects
GENIUS TOOLS Project Configurator is started from the user menu of GENIUS TOOLS Starter App. The administrator can bar users from accessing Project Configurator.

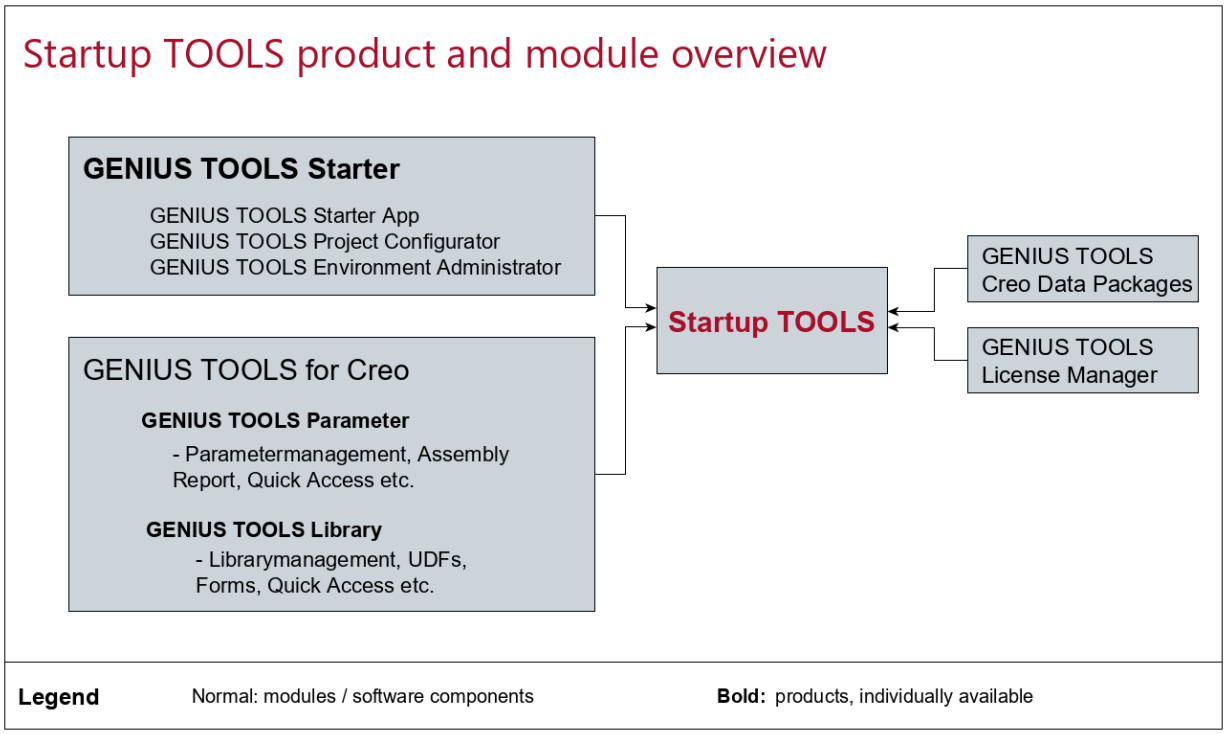
GENIUS TOOLS Starter App

The configured projects are listed in GENIUS TOOLS Starter App for the users to select and start. The user interface also displays additional information, e.g., available Creo 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**.

© 2020 INNEO Solutions GmbH

1.4 GENIUS TOOLS Starter: part of Startup TOOLS

With Startup TOOLS version 6.0, GENIUS TOOLS Starter has been introduced as a stand-alone tool for managing Creo workstations.



© 2020 INNEO Solutions GmbH

2 System architecture and terms

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. It is the work station where
– GENIUS TOOLS Environment Administrator is used
– GENIUS TOOLS Project Configurator is used
– the configured projects can be run
Caddepot is a subdirectory of the installation directory. It is the source for the synchronization of the local work environments on the application computers, that is, the source for the local **Cadpool** directories.
The **Caddepot** directory is shared to be accessible for distributed work.
All work environments that are used locally, via network shares or via synchronization are managed in the **Caddepot**.
An **operating environment** is a 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. An operating environment can contain an arbitrary number of projects.
If you work locally, the directory you use for your operating environment is the Caddepot.
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 GENIUS TOOLS Starter App (**GTS.exe**) in a defined version.
A **project** is a collection of application properties such as project directory, data directory and license. Projects allow users to start an application with a specific set of configuration settings. A project combines locally available data with a centrally managed configuration settings.
Projects are opened by the users via GENIUS TOOLS Starter App, and edited by the administrator using GENIUS TOOLS Project Configurator. Each project is saved in a work environment under **cadpool** > **configuration** > **projects**, e.g., **project_creo6p_en**.
When a project is started, the configuration settings in the standard directory as well as in the directories for the unit and for the user are considered.
The central **configuration file** in Creo is the **config.pro** file. This file contains all user configuration settings. GENIUS TOOLS Starter uses a number of configuration file building blocks that are then assembled into a **config.pro** file. Configuration file building blocks in GENIUS TOOLS Starter are called **config_*.pro** files, for example, **config_sut_de_c5p_mapkeys.pro** or **config_sut_de_c6p_dir_file.pro**.

© 2020 INNEO Solutions GmbH

2.2 Workflow and synchronization

Standard workflow: Working locally with synchronization

With GENIUS TOOLS Starter, Creo users typically have all the data they need locally on their workstation. This ensures the fastest possible data access and makes it possible to work offline.
If the data is copied to the local workstation, it has to be kept up-to-date with data synchronization. The local data is kept in the operating environment in the Cadpool directory, which is synchronized with the Caddepot directory, meaning that the data is copied from Caddepot to Cadpool at a configurable interval.
Data synchronization means that local configuration changes will be overwritten. Changes to the operating environment, for example entries in a configuration file, have to be copied manually to the Caddepot. Synchronization has to be paused during the time in which changes are made. To pause synchronization, open GENIUS TOOLS Project Configurator and select **Pause synchronization** from the user menu .

Please note: For data synchronization to work, the users need to have access to the Caddepot directory. It is recommended to only grant read access if you do not want users to change settings by themselves.

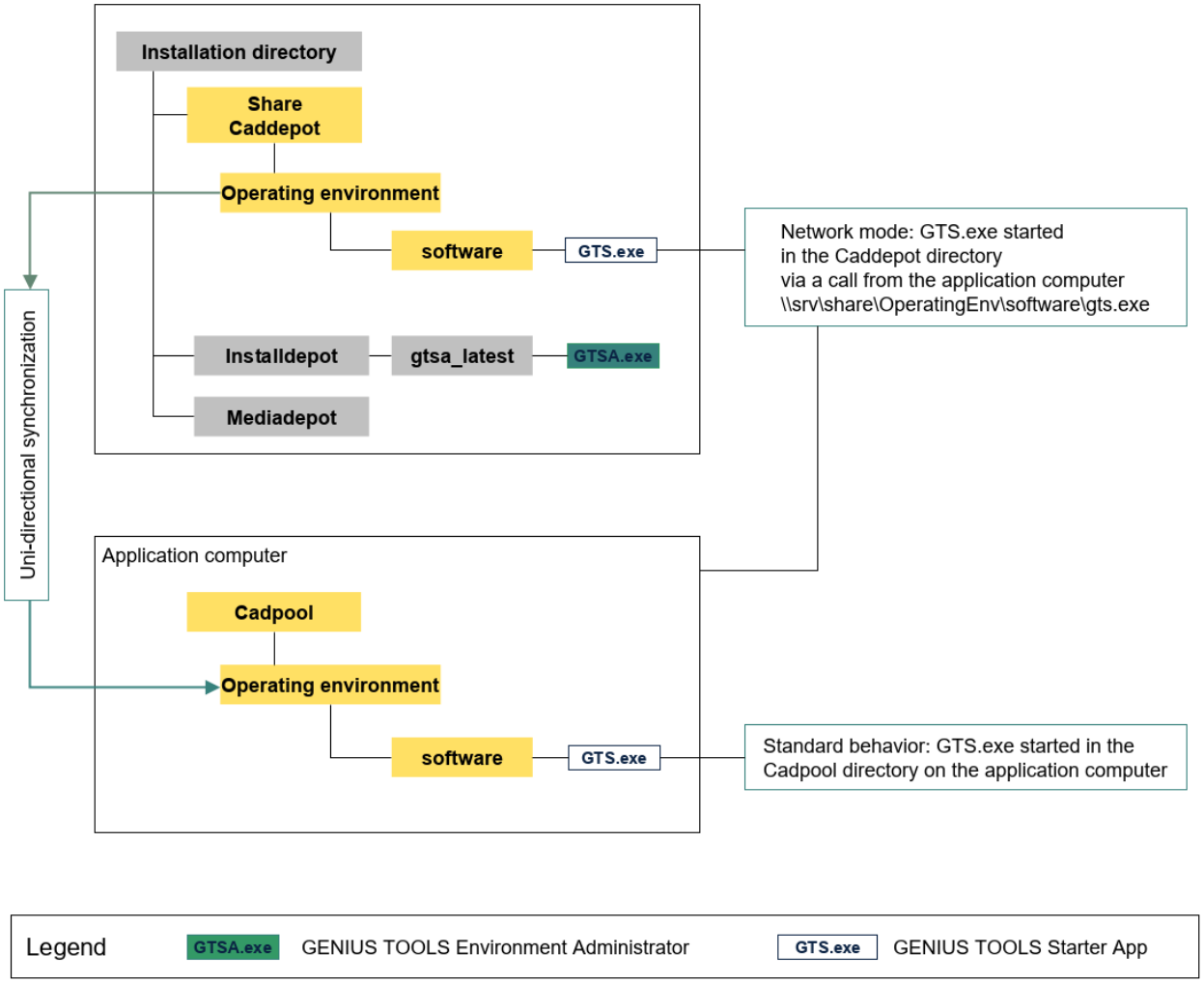
The setup for working locally with synchronization is created by GENIUS TOOLS Starter by default. If you start the **GTS.exe**, it will open from the local Cadpool directory, or create the Cadpool directory if it does not exist (initial synchronization).

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 changed and set to network mode, meaning that the **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 group** > **Function access** > **Prevent switch to local installation: Yes**.

© 2020 INNEO Solutions GmbH



Way of synchronization from Caddepot to Cadpool in GENIUS TOOLS Starter.

2.2.1 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. The directory for the operating environment contains configuration data, libraries and templates, additional applications as well as the database for project-specific configuration settings.
Data in an operating environment cannot be changed by setup programs. Changes to an operating environment and software updates are managed using GENIUS TOOLS Environment Administrator. This gives the IT administrator better control over which data

© 2020 INNEO Solutions GmbH

is actually being changed or updated in an operating environment, e.g., GENIUS TOOLS Starter software, GENIUS TOOLS for Creo, configuration files, or standard parts.

2.3 Directory structure

The directory for an operating environment contains the following subdirectories:

_Images contains an image or images for the operating environment as well as the start icon. The image and the icon have to use the operating environment name as their file name. The icon has to be in the icon format (ICO). See also Configuring the desktop link 104.

_Information contains messages to the users as text files. See also Sending messages to the users 110.

apps contains all additional applications for Creo Parametric. The subdirectory **ui** contains the freeware tool GENIUS TOOLS UI File Loader. The subdirectory **gtfc** contains the data for the GENIUS TOOLS for Creo products Library and/or Parameter, which are part of the Startup TOOLS software package 121.

configuration contains all configuration data for the operating environment, e.g., settings for units, usergroups and computer groups.

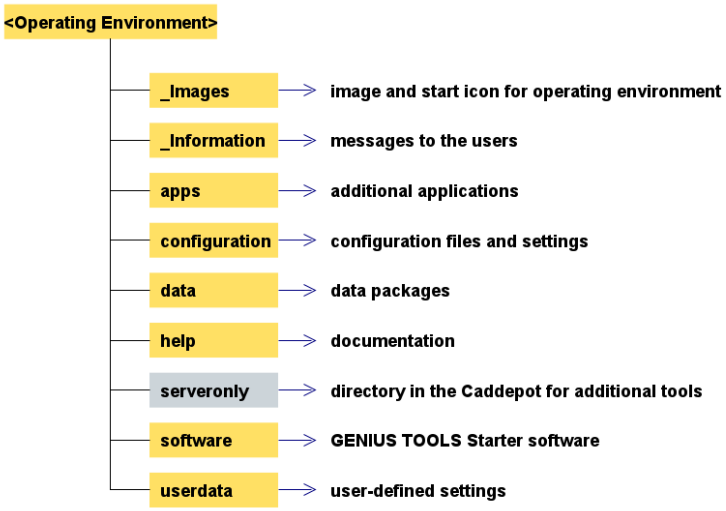
data contains all data directories available in a project, e.g., libraries, materials, ModelCheck configuration files etc. See also Defining Creo project configurations 75.

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

serveronly is only present in the Caddepot directory. 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

userdata contains user-defined settings, e.g., mapkeys or user images. In contrast to the directory in **configuration/Users**, this directory can be managed by the user themselves.



© 2020 INNEO Solutions GmbH

2.4 Configuration concept

As delivered by PTC, Creo does not support settings for different groups of users, for example for different projects, business units or locations. Creo reads a number of configuration files that determine the behavior of the application. The central configuration file is the **config.pro**. It contains user settings such as appearance of objects and of the graphics window, units and tolerances, or layers and mapkeys.
GENIUS TOOLS Starter assembles configuration files that can then be applied to project groups, user groups, computer groups and units. It takes a number of configuration file building blocks, called **config_*.pro** files, e.g., **config_sut_de_c5p_mapkeys.pro**, and assembles them into a **config.pro** file that can be read by Creo.
If an option is not specified in the **config.pro** file, the default value will be used.

2.4.1 Configuration files

The following configuration files determine the settings for a Creo application.

Configuration file	Function
config.pro	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
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
customization.ui 90	contains UI customizations for a user

config_*.pro files are GENIUS TOOLS Starter configuration files. They can be located in four subdirectories of the **configuration** directory: **standard** directory for global system settings, **units/<Unit>** for unit-specific settings, **projects/<Project>** for project-specific settings, and **users/<User>** for user-specific settings.

Please note: Configuration files that should be used by GENIUS TOOLS Starter have to have a file name starting with **config_** and a file name extension of **.pro**, e.g., **config_sut_de_c6p_dir_file.pro**.

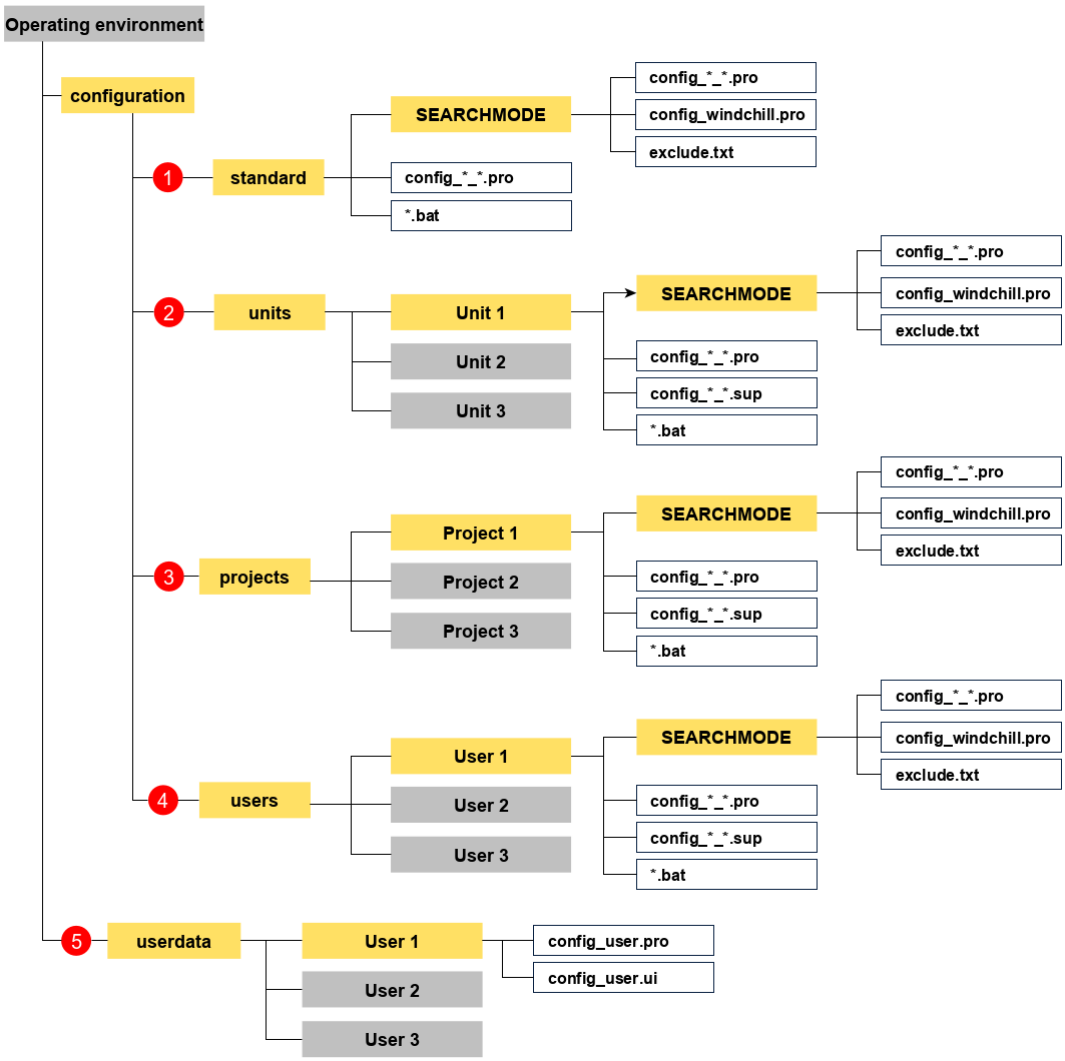
© 2020 INNEO Solutions GmbH

2.4.2 Call hierarchy for configuration files

Many configuration options can be set only once in Creo. For such options, the value used is the last value that is found when reading the **config.pro** file from top to bottom. If multiple settings are defined for an option, only the last settings is relevant.
The configuration settings are copied into the **config.pro** file for Creo in the following sequence by GENIUS TOOLS Starter.

1. Standard (global directory)
2. Standard searchmode, if Windchill is active
3. Unit (individual unit subdirectory
4. Unit searchmode, if Windchill is active
5. Project (individual project subdirectory)
6. Project searchmode, if Windchill is active
7. User (individual user subdirectory)
8. User searchmode, if Windchill is active
9. Userdata (configurable)

For more information on searchmode, please refer to Searchmode directory 93.

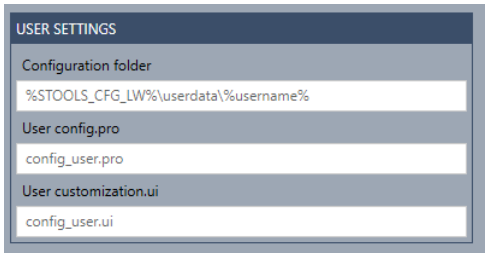


© 2020 INNEO Solutions GmbH

2.4.3 User-driven configuration

Users may manage configuration files on their own 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 to which the user needs to be given write access. There are two ways to provide a user with a **userdata** directory.

1. Users can work in **userdata** that is a subdirectory of the Caddepot directory of the adminstrator computer and which is synchronized to the Cadpool directory of the client computer.
2. A **userdata** directory can be set up on any location on the client computer. There, it does not undergo data synchronization. The storage location has to be defined in **Configuration > (select) group > Creo Settings > Application > User settings > configuration folder.**



© 2020 INNEO Solutions GmbH

3 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 limited to subscription licenses:

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

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.

For information on managing PTC license packages, please refer to Assigning Creo licenses to projects 82.

© 2020 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.

- create operating environments **(Create)**
- add components to an operating environment **(Add Components)**
  - project folders (directories with **config.pro** and other project-specific files)
  - data folders
  - additional applications
- update operating environments (GENIUS TOOLS Starter App and GENIUS TOOLS for Creo) (**Update**)
- change the settings for an operating environment **(Modus)**
  - license server
  - synchronization settings (Caddepot, Cadpool)
- migrate from Startup TOOLS versions prior to 6.0 (**Migration**)
- convert Startup TOOLS databases **(Convert)**

The following sections describe the functions of GENIUS TOOLS Environment Administrator. GENIUS TOOLS Environment Administrator also comes with inline help, which describes the individual steps and is displayed in the rightmost pane when you use the software.

4.1 User interface

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

© 2020 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.

Help (F1)

Opens the software help.

About (F12)

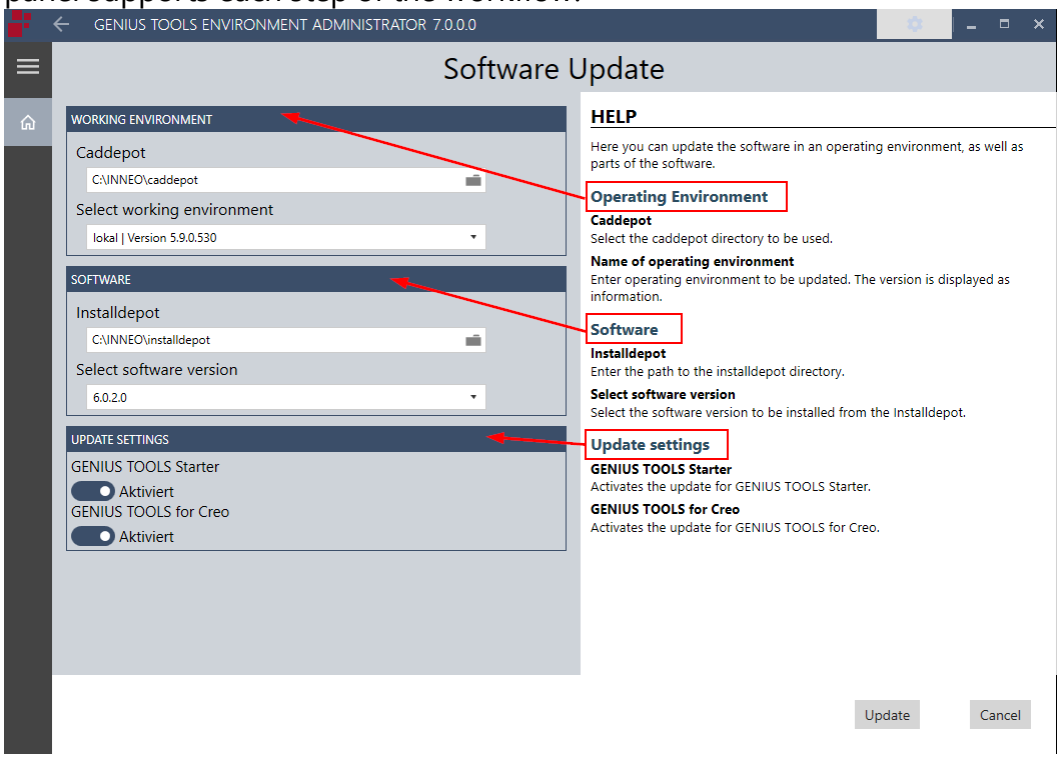
Shows the current GENIUS TOOLS Starter version.

Exit

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

Step-by-step workflow

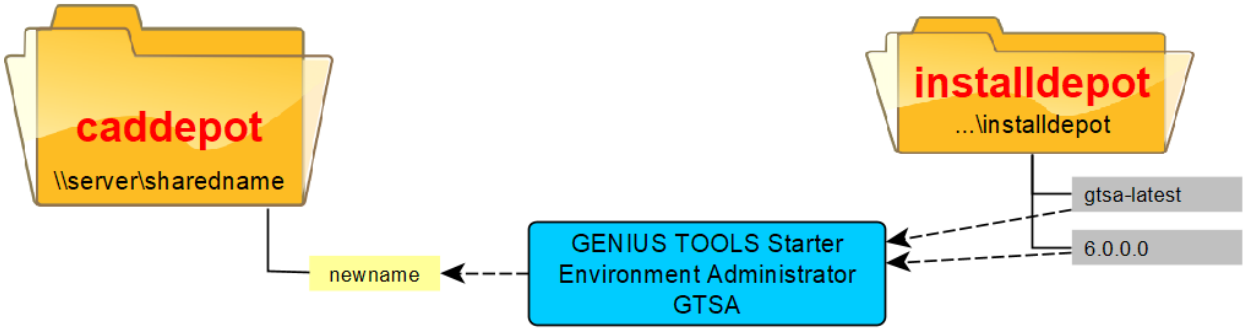
When you select a function on the GENIUS TOOLS Environment Administrator start page, a wizard with one or more dialog pages is displayed. The inline help in the rightmost panel supports each step of the workflow.



© 2020 INNEO Solutions GmbH

4.2 Creating an operating environment

GENIUS TOOLS Environment Administrator lets you create different operating environments with only a few mouse clicks. Each operating environment consists of GENIUS TOOLS Starter App and its accompanying directory structure. You can add new components at any time, for example, UI and functional configurations for Creo (**config.pro, config.sup config.ui**), start object templates, project-specific libraries, drawing frames, ModelCheck configurations or additional applications (toolkit).



Creating a new operating environment

The **Create** wizard lets you start a new, empty operating environment. The new operating environment consists of the directory structure, the GENIUS TOOLS Starter software, and an empty **sut.db** database. Use the **Add Components** wizard to add toolkit applications, data packages or standard projects later on.

Create operating environment

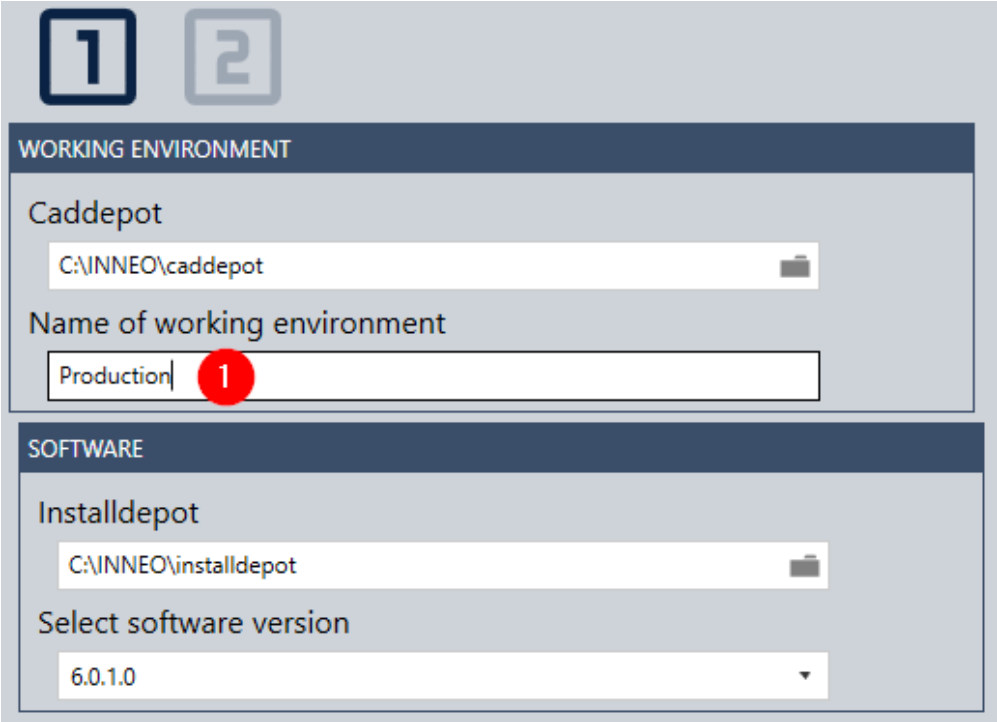
Creating a new operating environment with GENIUS TOOLS Environment Administrator

Create wizard: step 1

Click the **Create** symbol on the start page to start the **Create** wizard. GENIUS TOOLS Environment Administrator will find the Caddepot and Installdepot directories automatically if the software is started from a default installation setup. Verify the paths for the Caddepot and Installdepot directories and enter a name for the operating environment (1). The name is used to create a directory of the same name in the Caddepot and setting up the directory structure there.
Click **Next** to go on to the next page of the **Create** wizard.

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

© 2020 INNEO Solutions GmbH

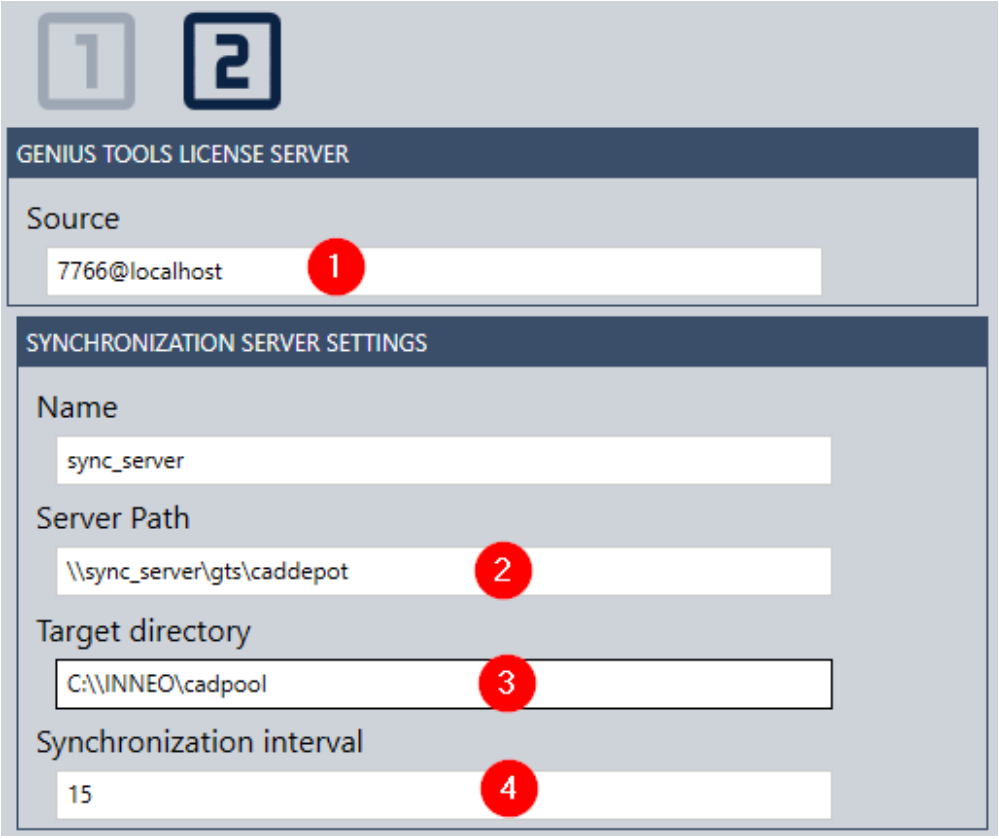


Creating an operating environment: Step 1

Create wizard: step 2

The users need to connect to GENIUS TOOLS License Manager in order to use a full version of GENIUS TOOLS Starter App.
Under **Source** (1), enter the name of the server that GENIUS TOOLS Starter App should access to get licenses.
Under **Synchronization server settings**, define the synchronization to keep data current on the local application computers and give the users fast access to any changes.
The synchronization will not update any toolkit applications as long as Creo is running. For this to work, the toolkit applications have to be located in the **apps** directory of GENIUS TOOLS Starter.
Enter the synchronization server path (2) down to the Caddepot directory. 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 create test environments quickly without having to change the settings. Also, operating environments can be renamed without having to change the settings.
Under **Target directory** (3) 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.

© 2020 INNEO Solutions GmbH



Arbeitsumgebung erstellen: Schritt 2

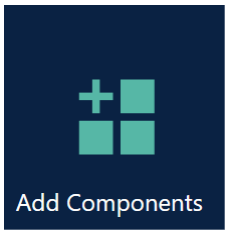
Enter the synchronization interval (4) in minutes. The synchronization interval defines how often GENIUS TOOLS Starter App should synchronize the data from the central Caddepot. A synchronization is also run automatically when GENIUS TOOLS Starter App is started. The best setting for the synchronization 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.

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

4.3 Adding components to an operating environment

GENIUS TOOLS Starter App can provide the users with data and toolkit applications in addition to the configuration for the desktop application. The Startup TOOLS product package contains operating environments with stardardized templates and add-on applications for Creo (GENIUS TOOLS for Creo). When you create a new operating environment, an empty directory structure is created and the GENIUS TOOLS Starter software is copied. Use the **Add Components** functionality to add components from the Installdepot directory to an operating environment.

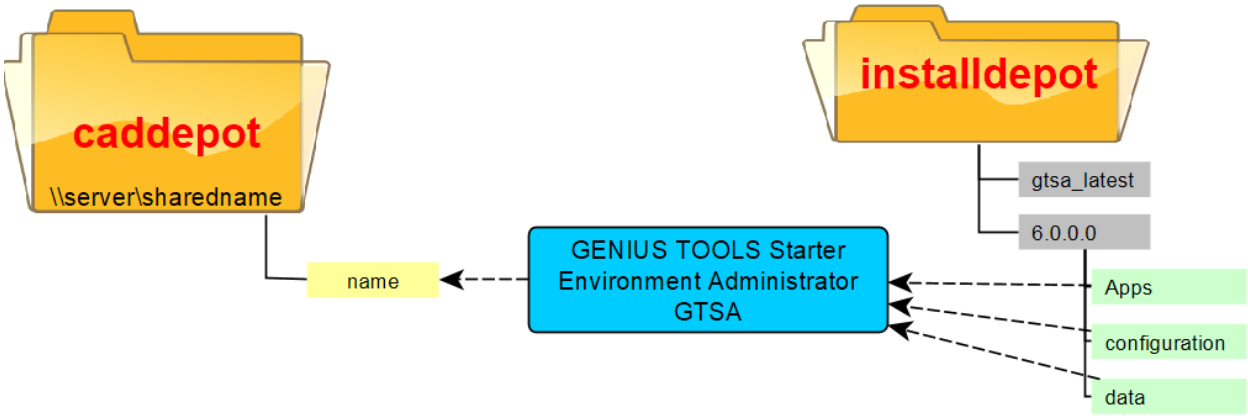
© 2020 INNEO Solutions GmbH



Add components to operating environment

Examples for operating environment components:
– GENIUS TOOLS for Creo
– project configuration directory for Creo applications
– project data directory for Creo applications

Please note: In order to add components, you first have to install them into the Installdepot directory from the data setups.



Adding components to an operating environment

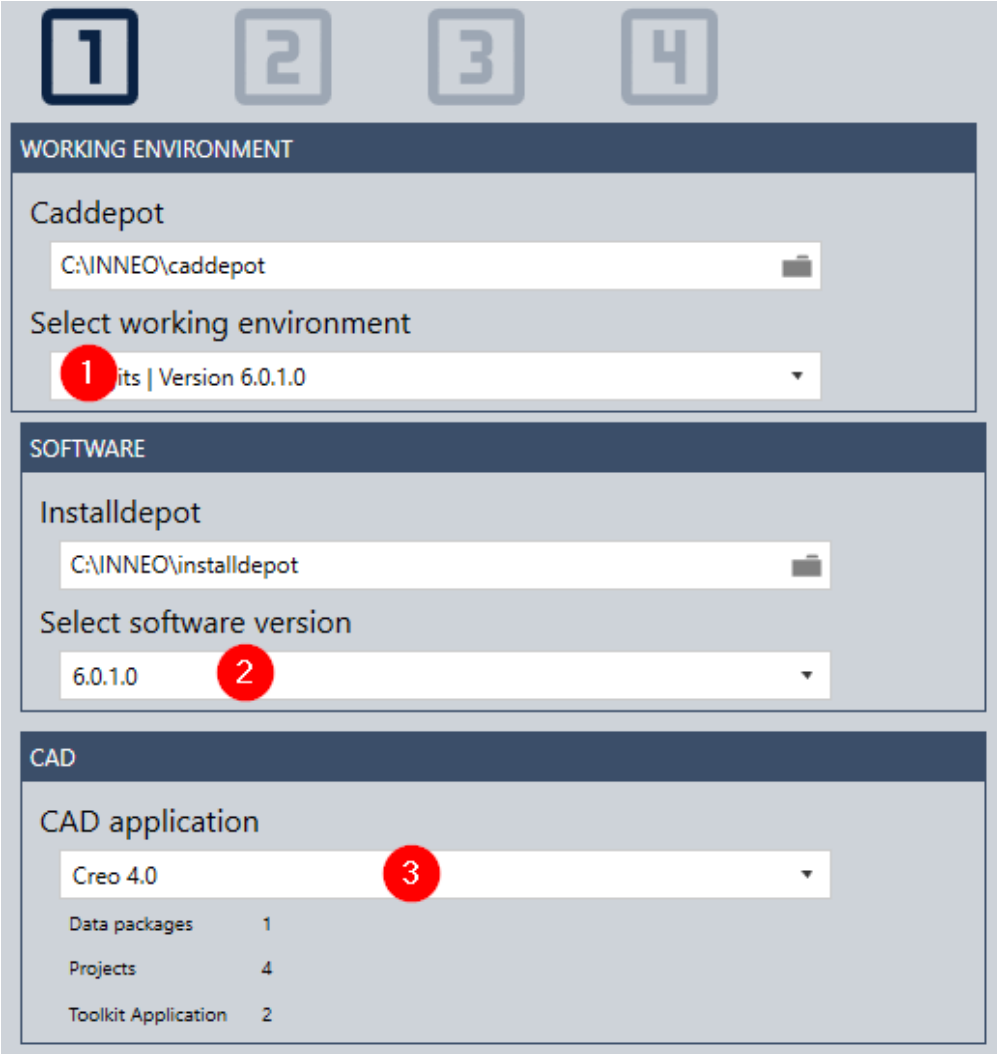
Adding components to an operating environment

Add components wizard: step 1

On the first page of the **Add components** wizard, first select the operating environment you want to configure (1).
Then select the software version to use (2). Select a software version that has the required components installed.
Select the CAD application (3) that you want to use the new components with.

Please note: You can add components to the **apps** directory. GENIUS TOOLS Starter App will synchronize additional applications from this directory. Additional apps are only synchronized when Creo is not running. For example, you can add toolkit applications to the **apps** directory. However, there is no way to automatically check which Creo versions the applications are valid for.

© 2020 INNEO Solutions GmbH

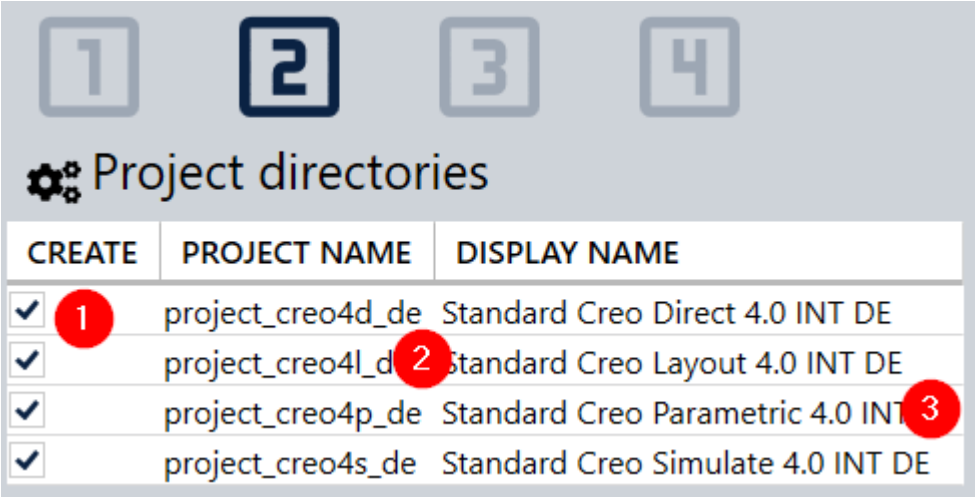


Add components wizard: Step 1

Add components wizard: step 2

On the second page of the **Add components** wizard, you can create standard projects that you can later modify using GENIUS TOOLS Project Configurator.
Set or unset the check boxes (1) to define which standard projects should be created.
Double-click on the project name (2) or display name (3) to change it.

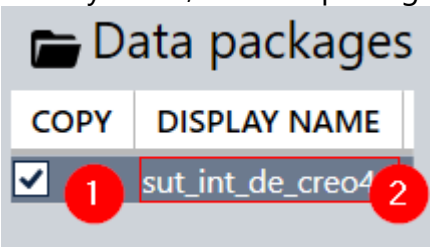
© 2020 INNEO Solutions GmbH



Add components wizard: Step 2

Add components wizard: step 3

On the third page of the **Add components** wizard, you can add data packages.
Set or unset the check boxes (1) to define which data packages should be added to the operating environment. Double-click on the display name (2) to change it. The display name is used as the name of the subdirectory under **data**. If a subdirectory with this name already exists, the data package cannot be copied to the operating environment.



Add components wizard: Step 3

Add components wizard: step 4

On the fourth and last page of the **Add components** wizard, you can select toolkit applications that should be available in the operating environment.
GENIUS TOOLS Environment Administrator tries to read the name of the toolkit applications from a **protk.dat** file. If Environment Administrator finds the name in this file, it is displayed in the **Add components** wizard. You cannot edit the target directory. The target directory will have the same name as the source directory under **apps** in the Installdepot. If a directory with this name already exists in the operating environment, the toolkit application cannot be copied.
To finish the **Add components** wizard, click **Add**. All components that you have specified are added to the operating environment.

© 2020 INNEO Solutions GmbH

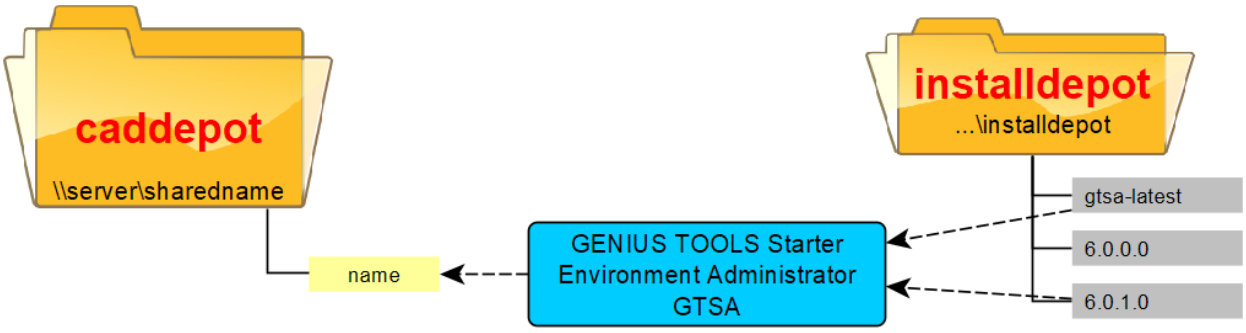
4.4 Updating software

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.

Update software in an operating environment

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.



Updating an operating environment

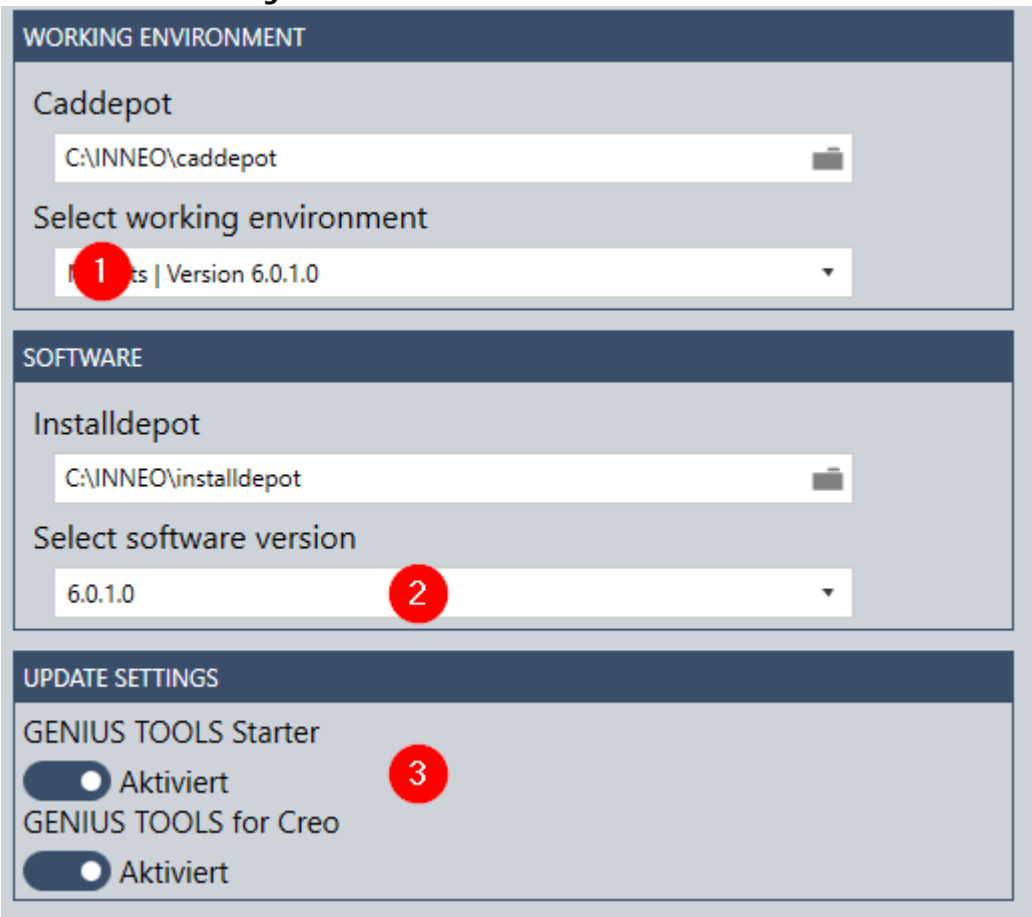
Updating software in an operating environment

Update wizard

On the first page of the **Update** wizard, first select the operating environment you want to configure (1). Then select the new software version (2). Under **Update settings** (3) you can

© 2020 INNEO Solutions GmbH

select the components to update: GENIUS TOOLS Starter, GENIUS TOOLS for Creo, or both. Click **Update** to start the update process.
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.



4.5 Changing settings

Some settings for operating environments can only be changed using the **Modus** 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 changes the standard settings, that is, the settings for the group **Standard**. If you have made individual settings for a user group or computer group, you have to change these settings using GENIUS TOOLS Project Configurator (C**onfiguration** > **(select group)** > **Synchronization**)

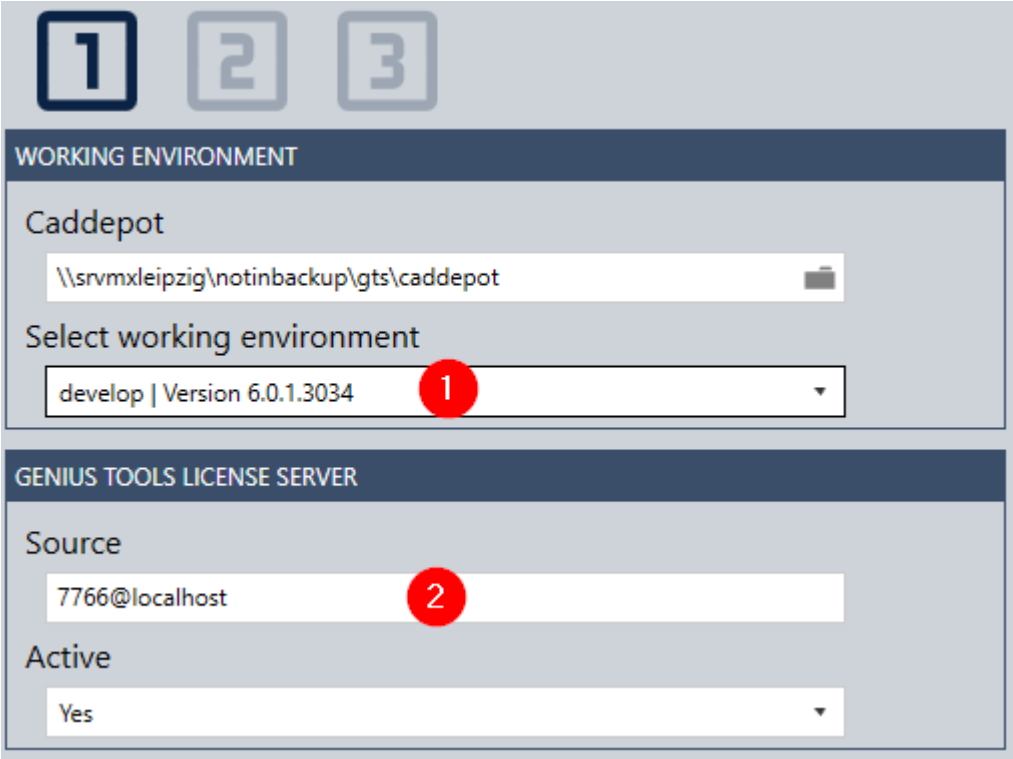
© 2020 INNEO Solutions GmbH

Changing settings for an operating environment

Changing settings for an operating environment (Modus)

Modus wizard: step 1

On the first page of the **Modus** wizard, you can change the license server settings. First, select the operating environment you want to modify (1). Then enter the license server settings (2). You can also deactivate the license server. 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.



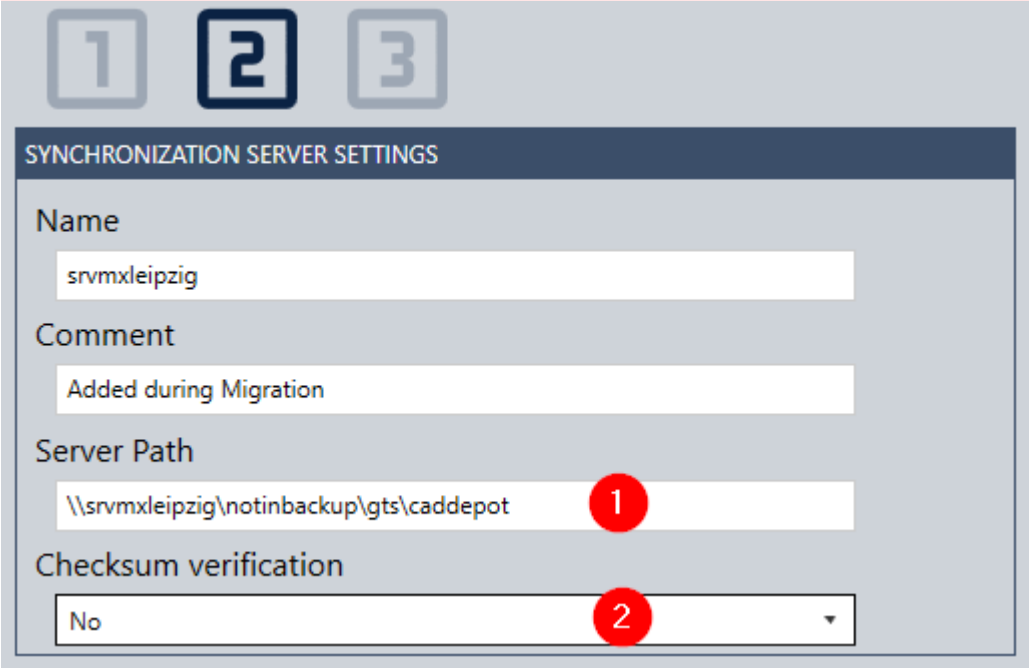
Modus wizard: Step 1

Modus wizard: step 2

On the second page of the **Modus** wizard, you can edit the synchronization settings. The server path is always given down to the Caddepot directory (1).
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.

© 2020 INNEO Solutions GmbH

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



Modus wizard: Step 2

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
   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.

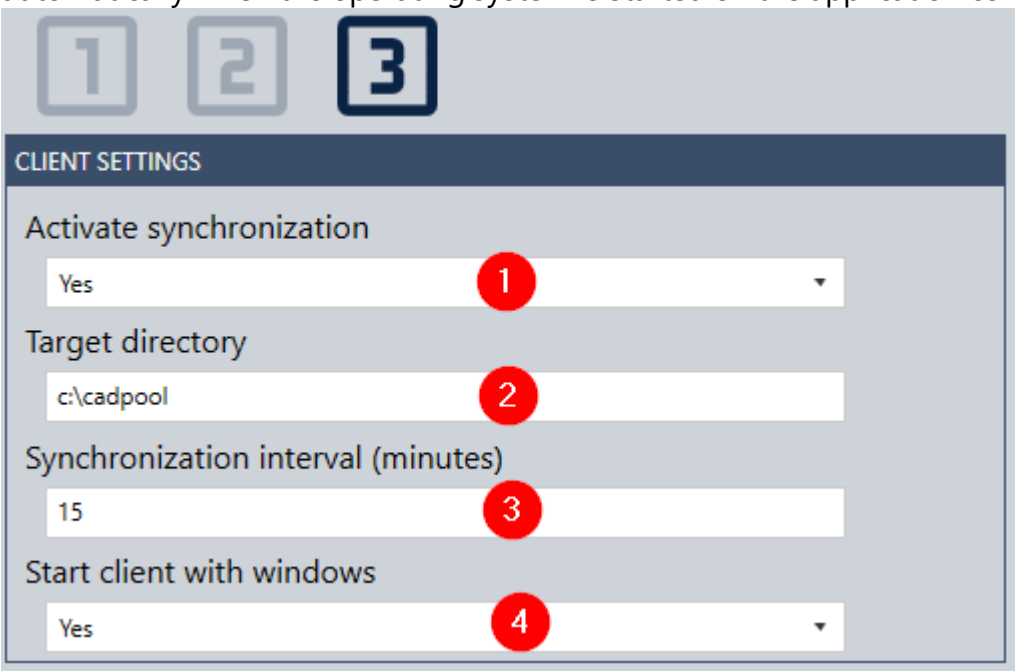
Modus wizard: step 3

On the third page of the **Modus** wizard, you can edit settings for the application computers. Activate or deactivate synchronization between the central Caddepot and the application computer Cadpool directories under **Activate synchronization** (1).

© 2020 INNEO Solutions GmbH

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:\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.
If **Start client with Windows** (4) is set to **Yes**, GENIUS TOOLS Starter App will be started automatically when the operating system is started on the application computers.



Modus wizard: Step 3

4.6 Migrating a Startup TOOLS environment

Startup TOOLS 2018 and earlier (20xx) are based on a different technology than GENIUS TOOLS Starter. When you migrate a Startup TOOLS environment, the data from the specified Startup TOOLS directory are copied to the Caddepot. The database also has to be

© 2020 INNEO Solutions GmbH

migrated and the directory cleaned up. Cleaning up the directory during migration will never lead to any data loss, as you make any changes to the copied data only, while the original data remain untouched. This also means that you can work in parallel on GENIUS TOOLS Starter and on your previous Startup TOOLS 20xx environment.
The migration workflow helps you to use your current configuration setup as a base for the GENIUS TOOLS Starter configuration. However, manual adaptations may be necessary.

Please note: GENIUS TOOLS Starter does not contain web server functionality. If you require a web server in your new setup, please install and maintain it separately.

Migration from Startup TOOLS 20xx to GENIUS TOOLS Starter 6.0.

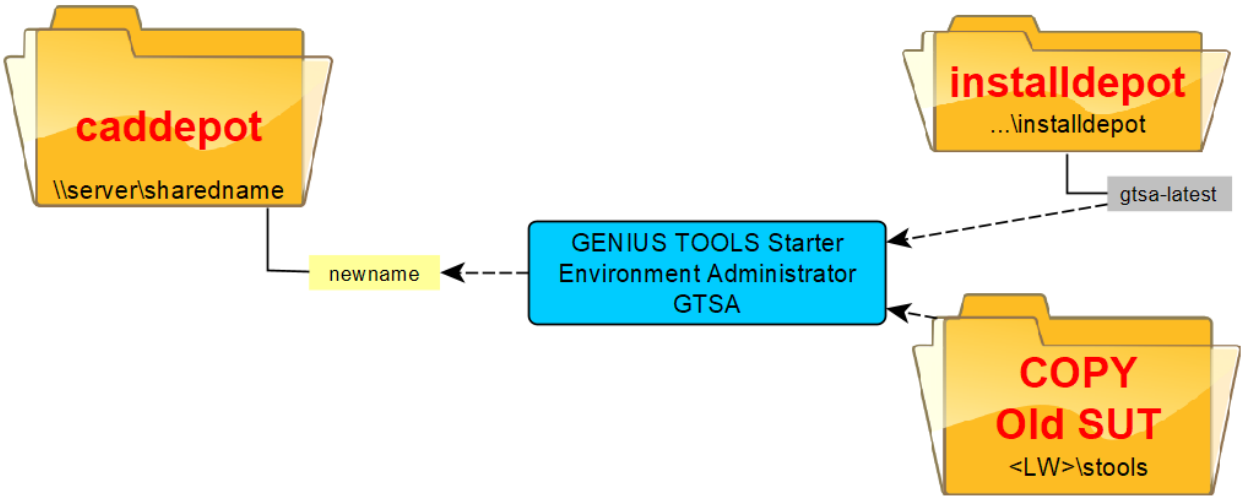
For a thorough description of the migration process, please refer to the separate document **Startup TOOLS-Migration to version 6**. The following section gives an overview of the steps that you have to take in the GENIUS TOOLS Environment Administrator software. We recommend working on a copy of the Startup TOOLS directory.

Preparations

1. Copy the Startup TOOLS directory. Stop the Startup TOOLS service while you copy.

Please note: If you cannot stop the Startup TOOLS service for copying the directory, the ABS databases cannot be copied. Starting with version 6, only one configuration database is supported. Rename one of the ***abs.bak** files in the copied data to **sut.abs**.

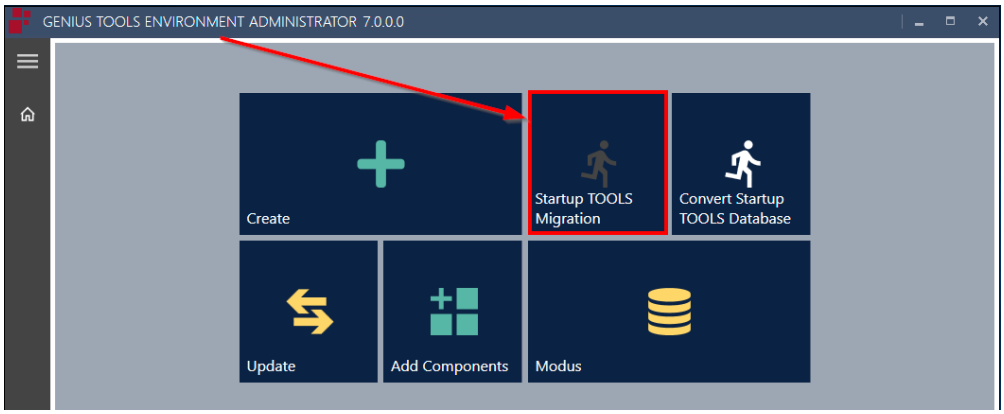
2. We recommend cleaning up the copied Startup TOOLS directory and deleting any data that is not required anymore, such as setups, backup copies etc. This reduces the amount of data that will have to be synchronized with the application computers.



Migrating a Startup TOOLS 20xx environment

3. Run the software setup for Startup TOOLS 6.x on the administration computer (example installation path **C:\inneo**). This step creates the directories **caddepot**, **installdepot** and **mediadepot**.
4. Open GENIUS TOOLS Environment Administrator and run the function **Startup TOOLS Migration**.

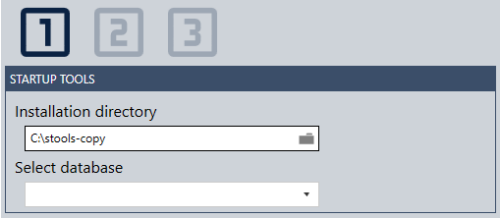
© 2020 INNEO Solutions GmbH



Migration wizard: step 1

Under **Installation directory**, enter the path to your copy of the old Startup TOOLS installation (stools). The migration wizard will automatically find the Startup TOOLS installation if it is on the same computer, but you can correct the directory or select another one.

Under **Select database**, select the database **sut.abs**. If there is no database with this name, select a database that should be converted.

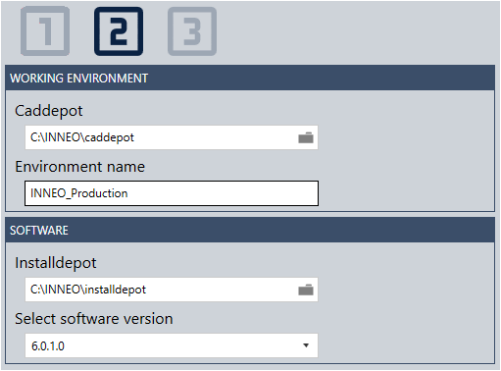


Migrating Startup TOOLS: Step 1

Migration wizard: step 2

On the second dialog page, specify the Caddepot directory and the operating environment name, e.g., **company-name**. The migration will be done in the operating environment defined here. First, the old Startup TOOLS data will be copied to the operating environment, then the migration proper will be run. In this way, any changes are made to the copied data in the new operating environment, and the original data remains untouched.

Under Software, select the Installdepot directory from which to get the GENIUS TOOLS software. Then select the GENIUS TOOLS Starter version to be used.



Migrating Startup TOOLS: Step 2

© 2020 INNEO Solutions GmbH

Migration wizard: step 3

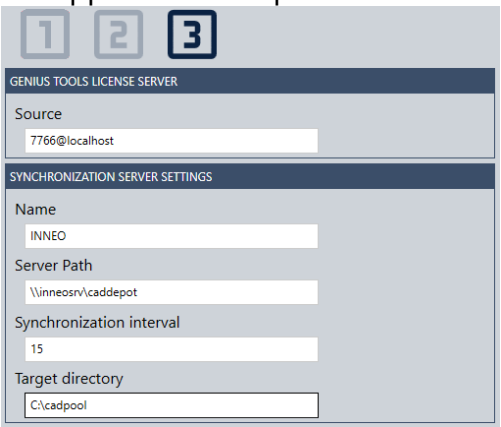
On the third dialog page, configure the license server and the synchronization server. Under **Source**, enter the license server that GENIUS TOOLS Starter App should use to get licenses. Enter the license server in the format **Port@ServerName**, e.g., **7766@<license_server_name>**.

Configure the synchronization between the server (Caddepot) and the operating environment on the local computer (Cadpool). Synchronization to the local Cadpool allows fast access to the local files. Note that toolkit applications will not be synchronized while Creo is running. For this to work, the toolkit applications have to be located in the **apps** directory of GENIUS TOOLS Starter.

Enter a descriptive server name, then enter the path to the Caddepot on the server. Specify the synchronization interval in minutes. The synchronization interval defines how often GENIUS TOOLS Starter App runs the data synchronization. Additionally, the synchronization is 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.

Under **Target directory**, 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.



Migrating Startup TOOLS: Step 3

Click **Migrate** to run the migration process. Afterwards, the Caddepot will contain a migrated operating environment that contains all previously present project configurations.

Please note: The time required for the migration process depends on the amount of data and on the network connection speed.

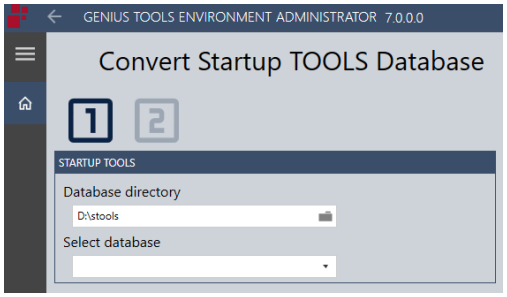
© 2020 INNEO Solutions GmbH

4.7 Converting a Startup TOOLS database

Use the function **Convert Startup TOOLS Database** if you are using a GENIUS TOOLS Starter or Startup TOOLS version 6.0.0.0 or later and want to convert a database from a previous Startup TOOLS version (up to 2018). If you are not using a ≥ 6 version of GENIUS TOOLS Starter or Startup TOOLS yet, use the function **Startup TOOLS-Migration** instead.
When you convert a Startup TOOLS database, a single ABS database is converted into the new SQLite format without copying the directory structure.
The **Convert** wizard corresponds to steps 1 and 3 of the **Startup TOOLS Migration** wizard.

Convert wizard: step 1

Under **Installation directory**, enter the path to your copy of the old Startup TOOLS installation (stools). The convert wizard will automatically find the Startup TOOLS installation if it is on the same computer, but you can correct the directory or select another one.
Under **Select database**, select the database **sut.abs**. If there is no database with this name, select a database that should be converted.

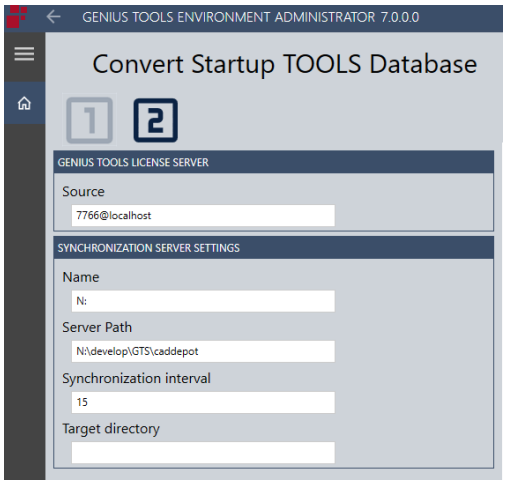


Convert Startup TOOLS database: Step 1

Convert wizard: step 2

Configure the license server and the synchronization server.
Under **Source**, enter the license server that GENIUS TOOLS Starter App should use to get licenses. Enter the license server in the format **Port@ServerName**, e.g., **7766@<license_server_name>**.
Configure the synchronization between the server (Caddepot) and the operating environment on the local computer (Cadpool). Enter a descriptive server name, then enter the path to the Caddepot on the server.

© 2020 INNEO Solutions GmbH



Convert Startup TOOLS database: Step 2

Specify the synchronization interval in minutes. The synchronization interval defines how often GENIUS TOOLS Starter App runs the data synchronization. Additionally, the synchronization is 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.
Under **Target directory**, 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.
Click **Convert** to start the database conversion.

© 2020 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 **project** is a collection of application properties such as project directory, data directory and license. Projects allow users to start an application with a specific set of configuration settings. A project combines locally available data with a centrally managed configuration settings.
Projects are opened by the users via GENIUS TOOLS Starter App, and edited by the administrator using GENIUS TOOLS Project Configurator. Each project is saved in a work environment under **cadpool** > **configuration** > **projects**, e.g., **project_creo6p_en**.
When a project is started, the configuration settings in the standard directory as well as in the directories for the unit and for the user are considered.
Project Configurator manages project information by modifying the central **sut.db** database. The project configuration for each operating environment can be synchronized to the Creo application computers.

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. After you have saved your changes, the configuration can be updated in GENIUS TOOLS Starter App by manually refreshing the available projects or by running the synchronization process.

5.1 Starting GENIUS TOOLS Project Configurator

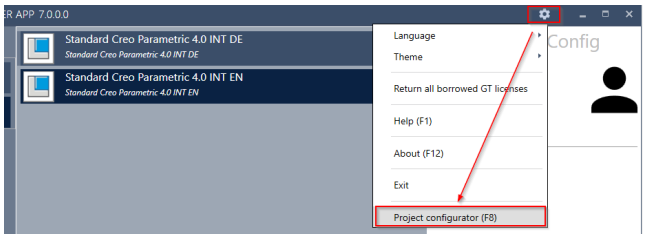
GENIUS TOOLS Project Configurator can be started from the installation computer as well as from any synchronized application computer. On the installation computer, Project Configurator is located in the Caddepot directory, on the application computers it is located in the Cadpool directory. In both cases, Project Configurator accesses the same central database in the Caddepot.

Starting Project Configurator on the installation computer

There are two ways to start Project Configurator:

1. Open GENIUS TOOLS Starter app via **<caddepot>\<environment>\software\GTS.exe**. In the user menu , select **Project Configurator (F8)** or press **F8**.

© 2020 INNEO Solutions GmbH



User menu in GENIUS TOOLS Starter App

1. Start Project Configurator directly using a start parameter:
   `<cadpool>\<environment>\software\GTS.exe -gts:admin`

Starting Project Configurator on an application computer

There are two ways to start Project Configurator:

1. Open GENIUS TOOLS Starter app via **<caddepot>\<environment>\software\GTS.exe**. In the user menu , select **Project Configurator (F8)** or press **F8**.
2. Start Project Configurator directly using a start parameter:
   `<cadpool>\<environment>\software\GTS.exe -gts:admin`

The item **Project Configurator** in the user menu can be hidden for the users (see Assigning access rights 100) so they cannot access Project Configurator from the UI. However, the start parameter `-gts:admin` can always be used to open Project Configurator.

5.2 User interface and navigation

GENIUS TOOLS Project Configurator opens on the **Configuration** page of the main menu (1) with the **Groups** and **Settings** lists. Use the **Configuration** page to manage global settings or settings specific to units (with subscription license), computer groups and user groups.

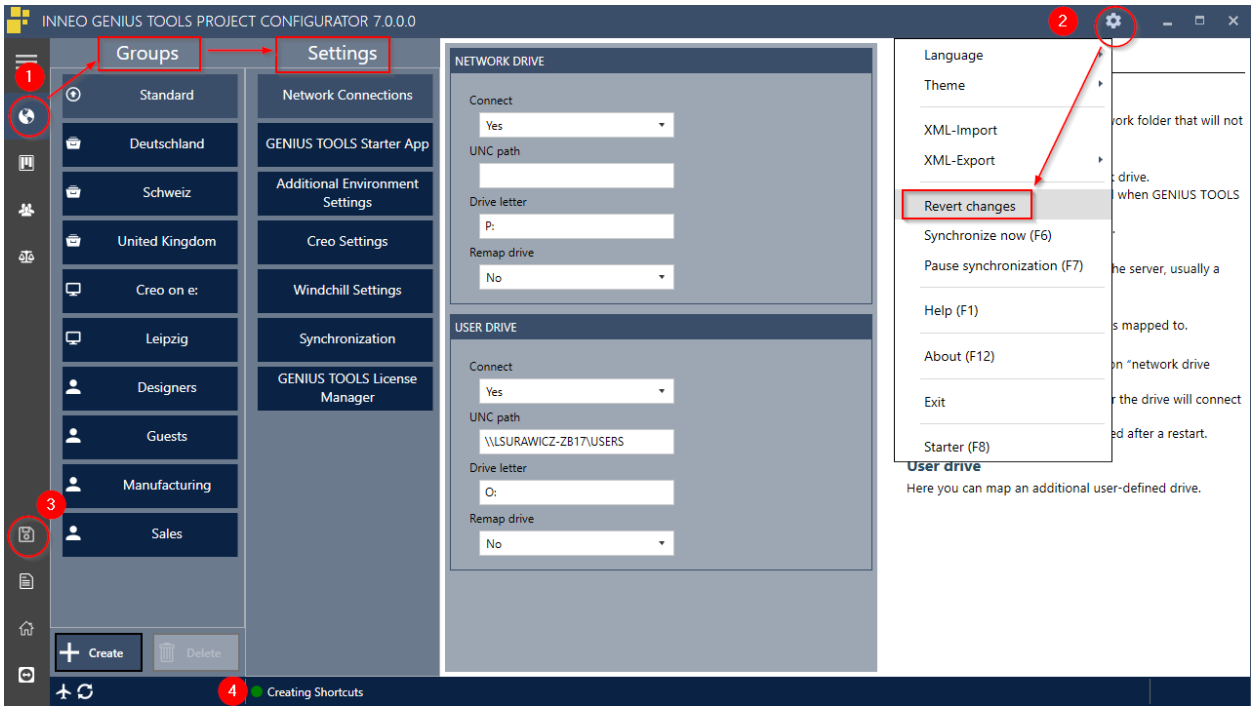
The main menu is located on the left side of the Project Configurator window and lets you access the pages **Configuration** , **Projects** , **Resources** and **Access rights** . You can show or hide descriptions for the menu items by clicking the menu symbol . For more information on the main menu pages, please refer to Main menu 36.

Note that GENIUS TOOLS Project Configurator, in contrast to previous Startup TOOLS versions, does not save changes immediately. To save any changes, click **Save** in the sidebar. Until you save, any changes can be undone by selecting **Revert changes** in the user menu (2).

The Project Configurator window also has a sidebar (3) and footer (4).

The following sections contain information on the main menu pages and the other control elements.

© 2020 INNEO Solutions GmbH



5.2.1 Main menu

The main menu is located on the left side of the Project Configurator window and lets you access the pages **Configuration**, **Projects**, **Resources** and **Access rights**.

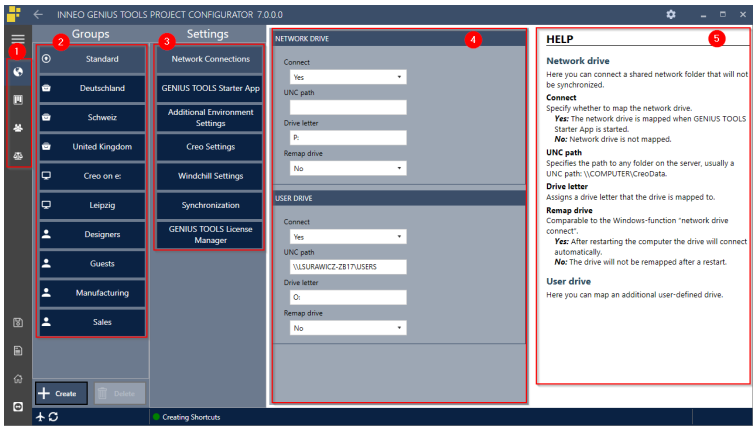
5.2.1.1 Configuration page

Use the **Configuration** page (1) to manage global settings or settings specific to units (with subscription license), computer groups and user groups. The **Settings** list (3) contains the following items:

– Network Connections
– GENIUS TOOLS Starter App
– Additional Environmental Settings
– Creo Settings
– Windchill Settings
– Synchronization
– GENIUS TOOLS License Manager

Click one of the list items to open the corresponding settings pane (4) and help (5).

© 2020 INNEO Solutions GmbH

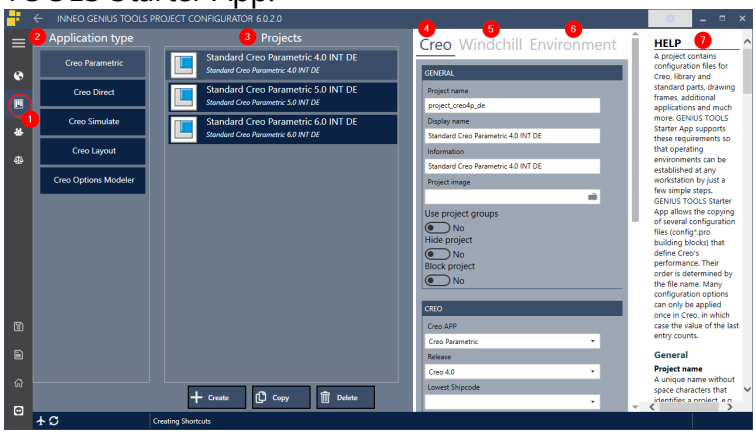


Project Configurator user interface

Select a group (2) to show the settings list (3) applicable to this type of group. There are three types of groups: computer groups, user groups and units.
The **Standard** group is used for managing global settings. In a newly created database, only the Standard group will be present.
To create a new group, click **Create**. For more information, please refer to User and computer groups, units 66.
For more information on the individual settings, please refer to Configuring global environments 54 and Configuring heterogeneous environments 64.

5.2.1.2 Projects page

Use the **Projects** page (1) to create and configure projects. The **Application type** list (2) contains configurable Creo applications, the **Projects** list (3) contains configured projects. These two panes correspond to the project selection that the users will see in GENIUS TOOLS Starter App.



Projects page

Click a project in the **Projects** list (3) to open the settings pane for this project with the tabs **Creo** (4), **Windchill** (5) and **Environment** (6). The corresponding help page is also shown (7).
For information on how to create projects and define their settings, please refer to Creating projects 75.
Projects can be accessible to all users of the operating environment, or managed using project groups, see Working with project groups 87.

© 2020 INNEO Solutions GmbH

5.2.1.3 Resources page

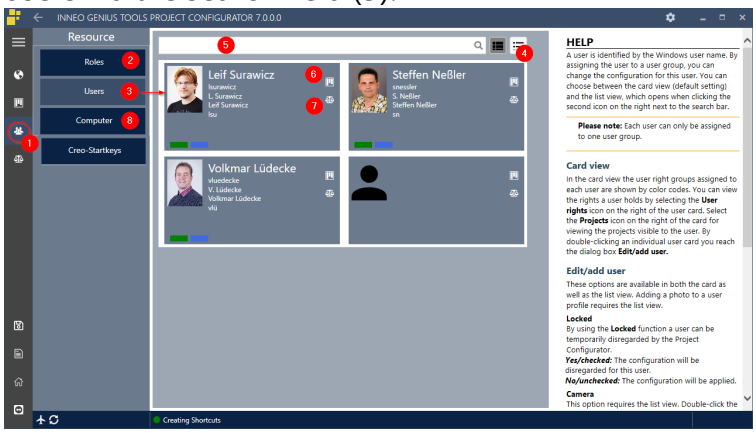
Use the **Resources** page (1) to manage the resource types **role**, **user** and **computer**.

Roles

Under **Roles** (2), you can create and edit roles, that is, named groups of users, computers and LDAP queries that will be given access to defined projects and GENIUS TOOLS Starter App functionality, or assigned to a unit. For more information on roles, please refer to Role-based permission concept 42.

Users

The **Users** page (3) displays the configured users in two different views, the card view (default setting, shown in the screenshot) and the list view, which can be accessed by clicking the list view symbol (4) to the right of the search field. You can find configured users via the search field (5).



Users page

To view the projects a user can access, click the **Projects** symbol on the user's card (6).
To view the access rights for a user, click the **Access rights** symbol on the user's card (7).
To create a new user, double-click on the empty card or fill in the empty entry in the list view. For more information, please refer to Creating users 45.
For more information on creating and managing user groups, please refer to User and computer groups, units 66 and Assigning users to user groups 70.

Computers

Under **Computer** (8), you can create and edit computers that should be able to access GENIUS TOOLS Starter. Each computer is identified by its Windows computer name. For more information on how to create and manage computers, please refer to Creating computers 47.
For more information on creating and managing computer groups, please refer to User and computer groups, units 66 and Assigning computers to computer groups 70.

© 2020 INNEO Solutions GmbH

5.2.1.4 Access rights page

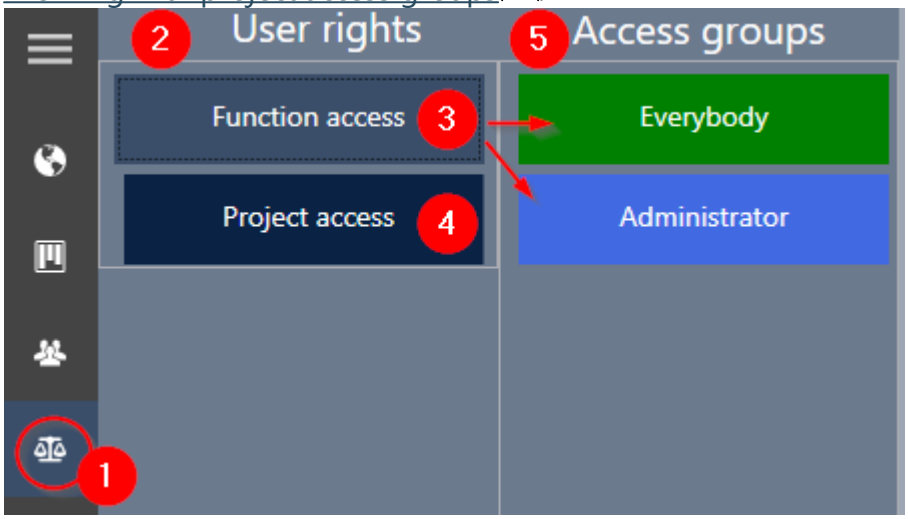
Use the **Access rights** page (1) to access to projects and access to functionality of the GENIUS TOOLS Starter App.

Function access

Manage access to functionality of the GENIUS TOOLS Starter App by configuring function access groups (5) under **User rights** (2) on the **Function access** (3) page.
The function access groups **Everyone** and **Administrator** are pre-configured. For more information on function access groups, please refer to Access rights 97.

Project access

Manage access to projects by configuring project access groups under **User rights** (2) on the **Project access** (4) page. For more information on project access groups, please refer to Working with project access groups 87.



5.2.2 User menu

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

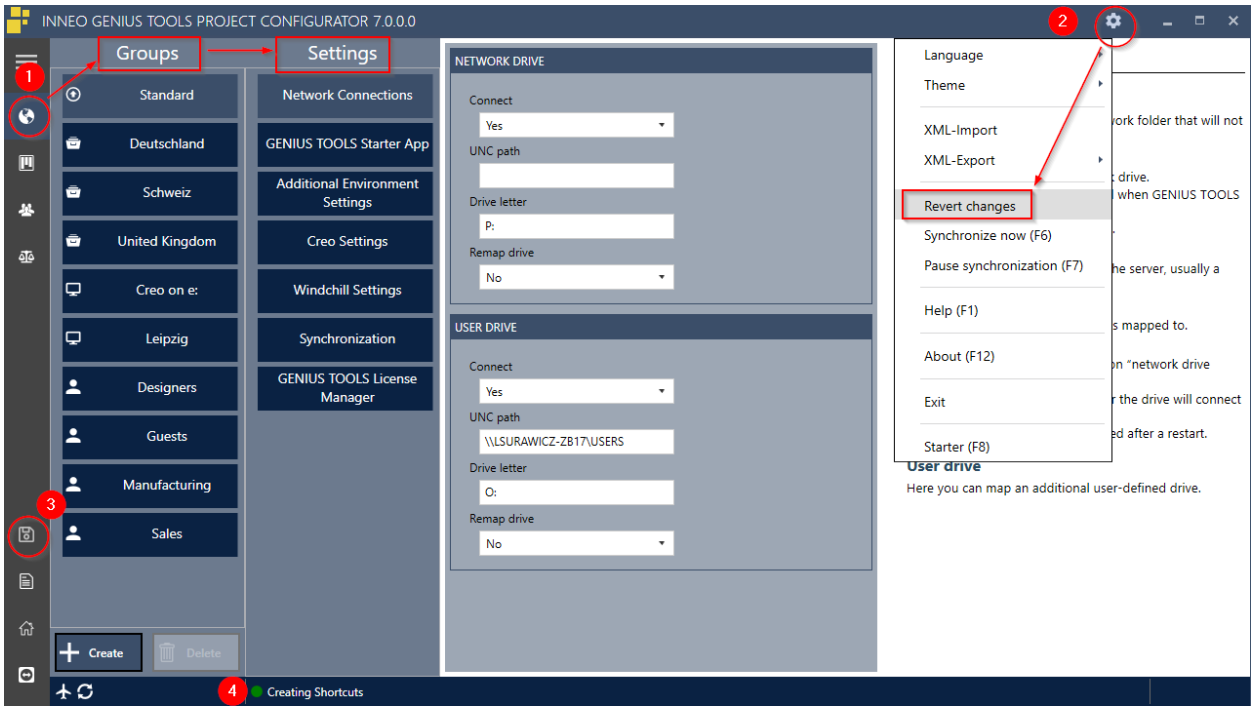
Language: user interface language

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. 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.

© 2020 INNEO Solutions GmbH



XML Import

You can import users and computers from an XML file. If the users or computers are assigned to a group that has not yet be configured, the group 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 (3).

Synchronize now (F8)

GENIUS TOOLS Starter immediately synchronizes from the central Caddepot, regardless of the specified synchronization interval, and loads any updated files into the Cadpool.

Pause synchronization (F7)

GENIUS TOOLS Starter stops synchronization until it is re-started by the user. 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

© 2020 INNEO Solutions GmbH

resume and overwrite local changes.
Pause synchronization if you want to prevent local changes from being overwritten until they have been added to the Caddepot by your administrator.

Please note: Your administrator defines whether you can pause the synchronization. If you are not allowed to pause the synchronization, the item **Pause synchronization** is not displayed in the menu.

Sort projects alphabetically

You can sort projects alphabetically by project name. This menu item is only displayed when the **Projects** view is active.

Starter App

Switch to the GENIUS TOOLS Starter App.

5.2.3 Sidebar

The sidebar contains the functions **Save** , **Open log file** , **Open Home** and **Online help** .

Save

Any settings you make in GENIUS TOOLS Project Configurator will only become active after you save them. As long as you have not saved your changes to the database, you can revert them by selecting **Revert changes** in the user menu .

Open log file

Opens the log file that is written on each project start. The log file is saved in the application computers user directory.

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 home

Opens the user directory in the file manager.

Online help

Online help opens an internet link to the INNEO Teamviewer software for remote support.

5.2.4 Footer

License mode

The GENIUS TOOLS Starter App footer shows the current license mode by displaying an

© 2020 INNEO Solutions GmbH

icon.

– full version
– borrowed license
– failsafe mode
– educational or home use

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 9.

– 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.
– local operating environment without synchronization
– synchronization of toolkit applications is paused as long as Creo is running

Messages

RED: Error message. Please troubleshoot.
YELLOW: Warning message. Please decide whether you want to keep on working regardless.
GREEN: Last synchronization run was completed without errors.
Creating shortcuts: This message shows that the desktop link for GENIUS TOOLS Starter App has been updated.

5.3 Role-based permission concept

Starting with version 6.0.1, GENIUS TOOLS Starter comes with a role-based permission concept. A role is a group of users and/or computers that can be assigned project access and access to functionality of GENIUS Starter App in one step.
First, you have to configure roles by defining role membership on the **Configuration** page under **Roles**. Then you can use the role in the following ways.

1. Control project access

Assign the role to a project access group, see Working with project access groups 87.

2. Control access to functionality of the GENIUS TOOLS Starter App

Assign the role to a function access group, see Access rights 97.

3. Defining assignment to a unit

Assign the role to a unit. You can then define unit-specific settings for the Creo applications.

© 2020 INNEO Solutions GmbH

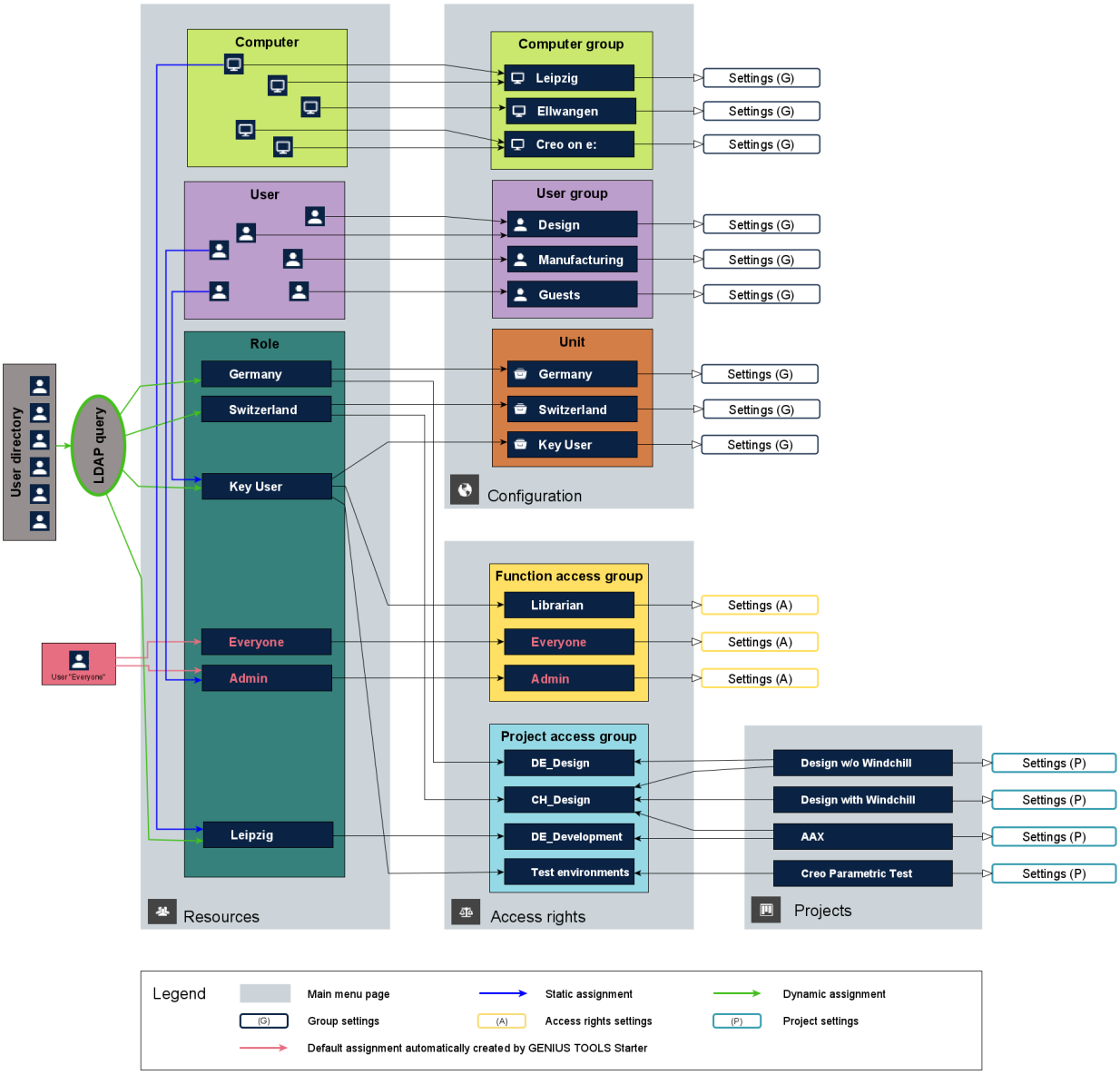
You can use roles to the best effect when you are also using LDAP queries to define assigned users instead of creating all users individually. This functionality is only available with subscription licenses. With an LDAP query, you can assign users dynamically. You can also still assign users and computers statically, meaning that user and computer entries need to be updated individually. Computers can only be assigned statically, not via LDAP queries. For more information on using LDAP user management, please refer to Accessing Windows user management 52.
You find a graphic on the use of roles in the next chapter (Graphical overview: groups in Project Configurator) 43.

5.4 Graphical overview: groups in Project Configurator

The graphic gives an overview of the relationships between different types of resources and groups and also shows where the corresponding configuration is located in Project Configurator: C**onfiguration** , **Projects** , **Resources** and **Access rights** pages.

1. Individual computers and users can be assigned to a role as well as to a computer group or user group.
2. A role is a group of computers and users that are either assigned individually and statically via Project Configurator, or, in the case of users, dynamically via an LDAP query.
3. A unit always has an assigned role.
4. An access group always has an assigned role.
5. A project access group has an assigned role and one or more assigned projects.
6. Groups and units can be configured with specific settings.

© 2020 INNEO Solutions GmbH



5.5 Creating resources: users, computers, roles

Use the **Resources** page to manage the resource types **role**, **user** and **computer**.
Roles are a new concept in GENIUS TOOLS Starter version 6.0.1. A role is a group of users, computers, and (with a subscription license) LDAP queries 52 that can be assigned project access and access to functionality of GENIUS Starter App in one step. To assign a user or a computer to a role, the user or computer already has to be present in Project Configurator.
To create new users or computers, use the sections **Users** and **Computers** on the **Resources** page. You can create users and computers manually or import a list, see Importing from Excel 47.
To assign users or computers to groups or units, use the **Configuration** page, see Assigning elements to groups or units 68.

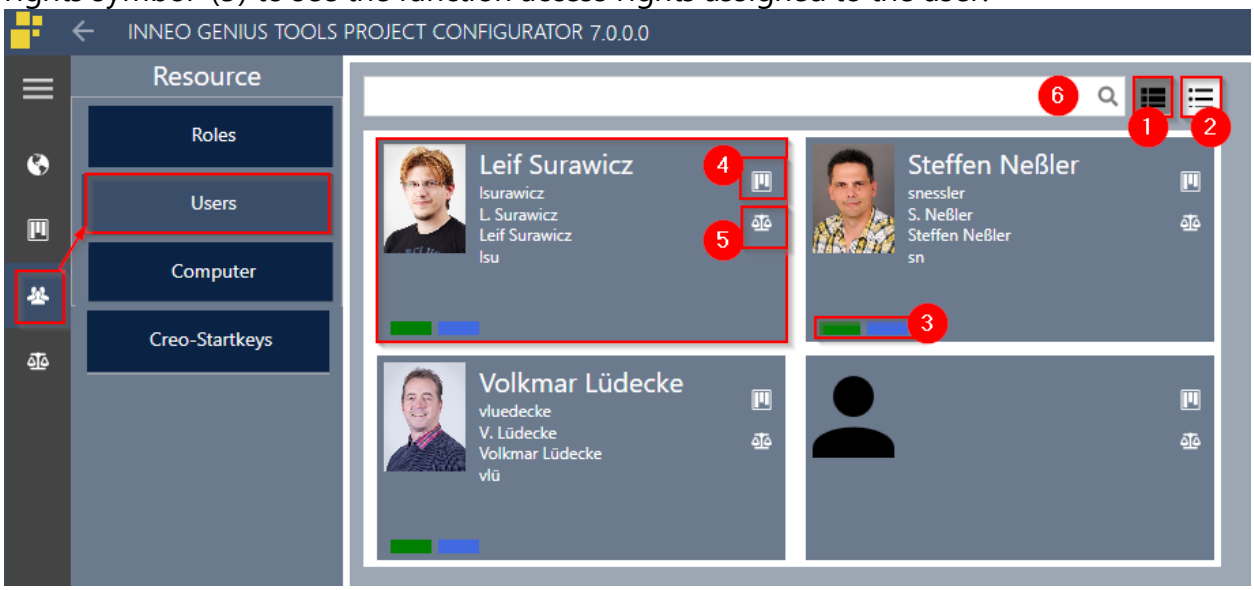
© 2020 INNEO Solutions GmbH

5.5.1 Creating users

To manage users, go to the **Resources** page and select **Users**. Each user is identified by their Windows user name.
You can switch between the card view (default) (1) and the list view (2), using the list symbols to the right of the search input box.
Project Configurator saves the active view. User images and assignment to a user group can only be edited in the list view.

▶ Card view

The color codes (3) let you check which access groups each user is assigned to. Click on the project symbol (4) to see a list of the projects visible for the user. Click on the access rights symbol (5) to see the function access rights assigned to the user.



▶ Searching for users

To find existing users, enter a search term in the search input field (6). A search term has to be at least three characters long.

▶ Creating or editing users

To create or edit a user, double-click on a visiting card or go to an entry in the list view. You need to use the list view for defining a user image and for displaying and editing user group assignment.

Card view > edit user

© 2020 INNEO Solutions GmbH

Blocked
You can block a user, which means that user group settings or role assignment will not be used.
Yes/set: User group settings or role assignment for this user will not be considered.
No/not set: User group settings and role assignment will be used.

Windows user
Enter the Windows user name. 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.

GTS Alias
Enter a GENIUS TOOLS Starter alias for the user, for use in additional 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
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%`.

Comment
Enter an optional comment.

Email
Enter the user e-mail address.

Save
Click **Save** to save your changes to the user data.

Delete
Click **Delete** in the card view or the recycle bin icon in the list view to delete the user data.

Camera column
The camera column is only available in list view. Double-click on the upload symbol in the camera column to add a user image.

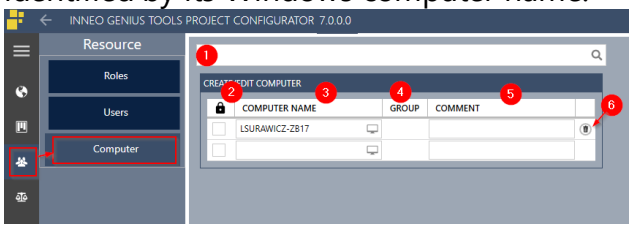
Group column
The group column is only available in list view. It shows the user group the user is assigned to. You can edit the user group assignment. Alternatively, to assign a user to a user group, go to **Configuration** > **(Select group)** > **Name / members.** (See also Assigning users to user groups 70.)

Hint: You can change the configuration for a user by assigning them to a user group.

© 2020 INNEO Solutions GmbH

5.5.2 Creating computers

To manage users, go to the **Resources** page and select **Computers**. Each computer is identified by its Windows computer name.



▶ Searching computers

To find existing computers, enter a search term in the search input field (1).

▶ Creating or editing computers

Blocked (2)
You can block a computer, which means that computer group settings or role assignment will not be used.
Yes/set: Computer group settings or role assignment for this computer will not be considered.
No/not set: Computer group settings and role assignment will be used.

Computer name (3)
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.

Group (4)
The group column shows the computer group the computer is assigned to. To assign a computer to a computer group, go to **Configuration** > **(Select group)** > **Name / members.** (See also Assigning computers to computer groups 70.)

Hint: You can change the configuration for a computer by assigning it to a computer group.

Comment (5)
Enter an optional comment on the computer.

Delete (6)
Click the recycle bin icon to the right of the **Comment** column to delete a computer.

5.5.3 Importing 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. If you want to import users or computers, please follow the procedure described below.

© 2020 INNEO Solutions GmbH

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.

Please note: 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.

	A	B	C
1	COMPUTERNAME	DESCRIPTION	COMPUTERGROUP
2	CAD12	TB1	PROE on C:
3	CAD13	TB1	PROE on C:
4	CAD14	TB1	PROE on C:
5	CAD15	TB2	PROE on E:
6			
7			
8			

Example Excel table for importing computers

	A	B	C	D
1	USERNAME	ALIAS	USERGROUP	DESCRIPTION
2	meier	Meier	SUT	Bielefeld
3	mueller	Mueller	SUT	Ellwangen
4	schulze	Schultze	SUT	Leipzig
5				
6				

Example Excel table for importing users

Enter the name of the computer or user in the first column.
You can use the following columns.
For computers:
– COMPUTERNAME (mandatory)
– DESCRIPTION
– COMPUTERGROUP
For users:
– USERNAME (mandatory)
– ALIAS
– ALIASLONG
– ALIASSHORT
– USERGROUP
– DESCRIPTION
– EMAIL

Please note: A USERGROUP or COMPUTERGROUP that does not yet exist will be created on import.

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 computer list:

© 2020 INNEO Solutions GmbH

```
COMPUTERNAME;DESCRIPTION;COMPUTERGROUP
CAD12;TB1;CREO on C:
CAD13;TB1;CREO on C:
CAD14;TB1;CREO on C:
CAD15;TB2;CREO on E:
```

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 49.

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 user or computer groups, the groups are available on the **Configuration** page in the groups list.

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
```

5.5.4 Default roles

To create roles, use the **Resources** page. There are two pre-configured roles **Everyone** and **Administrator** that you cannot delete.
The role **Everyone** contains all Windows user names known to the system. You can use the role **Everyone** to avoid having to manage all users manually in GENIUS TOOLS Project Configurator.
The role **Administrator** also contains all Windows user names known to the system in its default setting. This means that by default, every user is a member of the role **Administrator**. When you first use GENIUS TOOLS Project Configurator, assign some individual users to the role **Administrator** and remove the user entry **Everyone** for this role.

© 2020 INNEO Solutions GmbH

5.5.5 Creating roles

To manage roles, go to the **Resources** page and select **Roles**.
In a next step, a role can be assigned to a unit, a project group or an access group, where configurations settings take place. (See also role-based permission concept 42.)
Click **Create (1)** to create a role. The roles **Everyone** and **Administrator** are pre-configured and cannot be deleted, see Default roles 49.

Hint: You can use the role **Everyone** in order to avoid configuring each individual user. By default, this role includes all users.

▶ Role

Role name
Enter a name for the role.

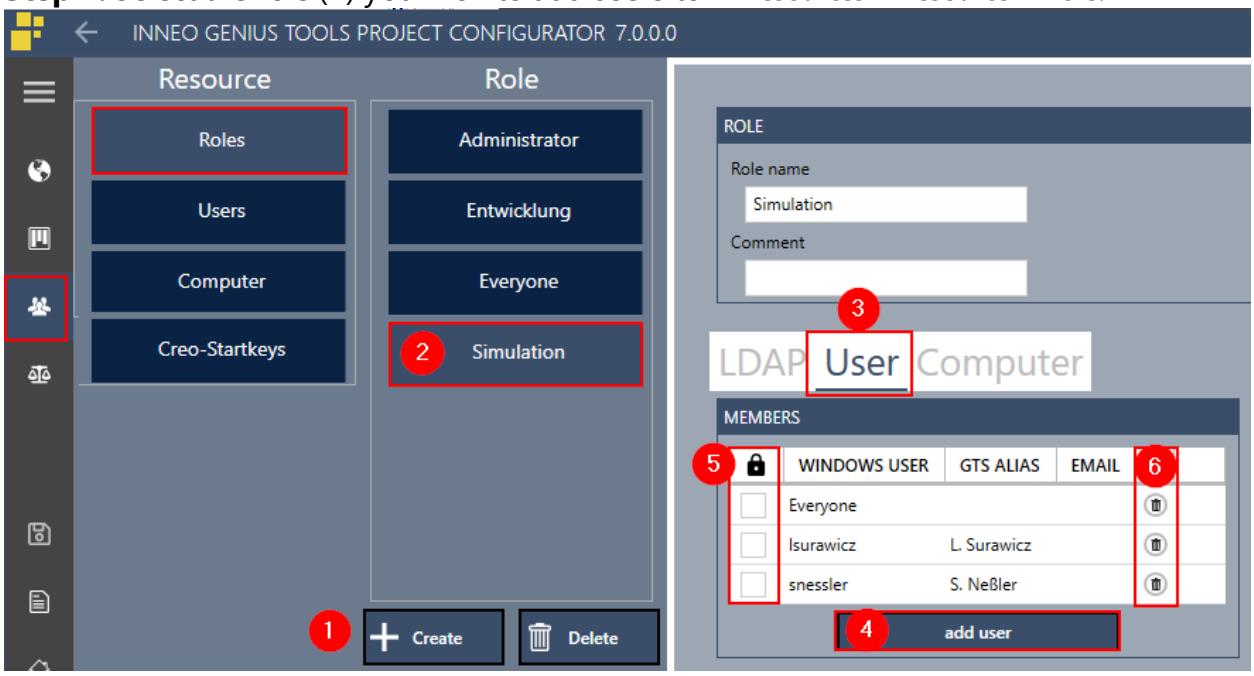
Comment
Enter an optional comment for the role.

5.5.6 Add users and computers to a role

You can add users and computers statically, i. e. the entries you assign to a role do not change automatically as is the case with an LDAP query 52.

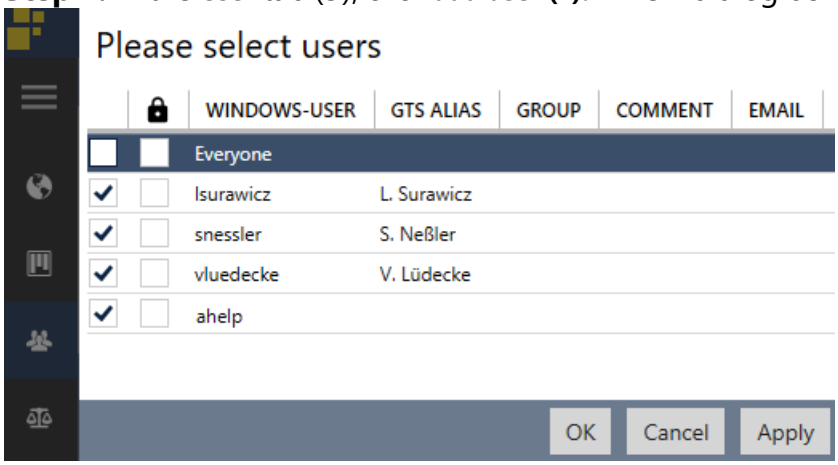
Please note: To assign a user or computer to a role, you have to first create an entry in **Resource > Users/Computers.**
A user/ computer can be assigned to several roles.

Follow these steps, using the example of user entries.
Step 1: Select the role (2) you wish to add users to in **Resources > Resource > Role**.



© 2020 INNEO Solutions GmbH

Step 2: In the **User** tab (3), click **add user (4).** A new dialog box opens.



Step 3: Select the users you wish to add to the role. If the user you are looking for is not listed, it has not yet been created under **Resources** > **Users** > **Edit user.** (See also Creating users 45.)

You can select the entry **Everyone** that contains all users.

Step 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.

Blocked users (5)

A checked box means that a user is blocked, i. e. for this user neither any role nor any group configuration is applied. To change the blocked status, go to **Resources** > **Users** > **Edit user**. (See also Block users or computers 72.)

Delete user (6)

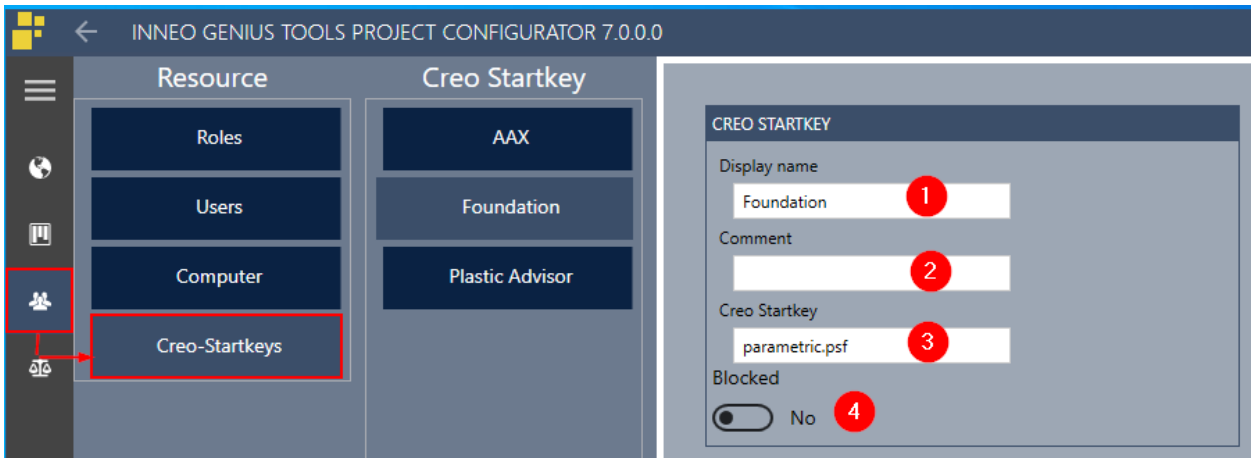
Click the recycle bin icon to the right of the user name.

5.5.7 Creating Creo startkeys

A startkey is a configured start command that opens Creo with one or several defined licenses or license extensions. An administrator can provide user with a choice of several Creo startkeys per project so that the quantity of projects can be minimized.
Startkeys can be managed in GENIUS TOOLS Project Configurator after creating them in PTC's installation assistant (when setting up or reconfiguring Creo)- Each startkey should be assigned a specific licence package and the name of the startkey should reflect this package as to find the key easily in GENIUS TOOL Project Configurator. Startkeys are stored as PSF files in the PTC **bin** directory. Go to this directory for reconfiguring Creo and its startkeys or consult the Creo manual for more information.

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.

© 2020 INNEO Solutions GmbH



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 be directly used or selected by users in GENIUS TOOLS Starter App.
No: The Startkey can neither be used nor selected by users.
Startkeys can now be
– directly assigned to a project (see chapter %TARGETTITLE% 82)
– assigned to groups or units which have access rights to particular projects and/or
– entered as a global standard (see Configuring global environments > Creo settings 58)

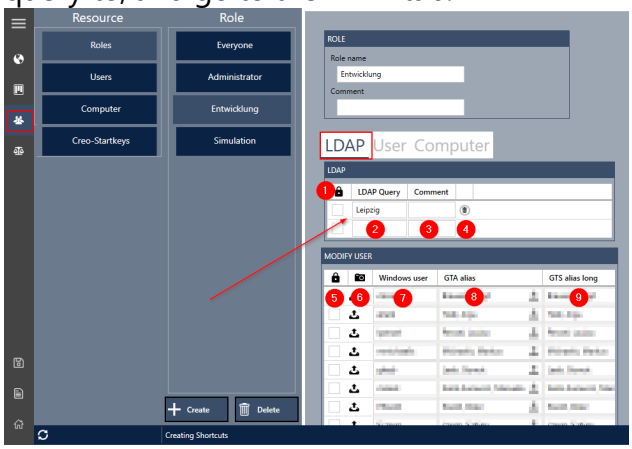
5.5.8 Accessing Windows user management

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.

© 2020 INNEO Solutions GmbH

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.



Defining an LDAP query

LDAP

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

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 (4)
Deletes the LDAP query from the configuration.

▶ Modify user

Please note: Changes you make here will not be written back to LDAP.

Blocked (5)
A user can be blocked from the role.
Set: This individual user is not assigned to the role.
Not set: The user is assigned to the role.

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

Windows user (7)
Displays the Windows user name.

GTS Alias (8)
Enter a GENIUS TOOLS Starter alias for use in additonal applications. The alias is available in Creo via the environment variable `%GTS_USER%`. If you do not specify an alias, the

© 2020 INNEO Solutions GmbH

Windows user name will be set

GTS Alias Long (9)
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%`.

LDAP query
Displays the LDAP group.

Comment
Displays the staff position.

Email
Displays the e-mail address.

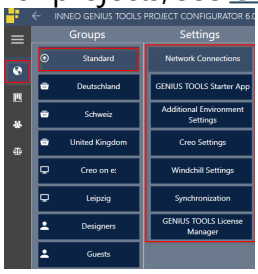
5.6 Configuring global environments

The next sections explain the potential of the GENIUS TOOLS Starter configuration option. This section describes the basic general configuration that is required for each system. This general configuration is represented by the standard group in the **Configuration** page.

The **Standard** group for global settings is always present on the **Configuration** page.

Please note: The group **Standard** contains global, system-wide configuration settings. This group does not have any members, you cannot assign users or computers to it.

Settings that deviate from the global configuration can be defined for computer groups, user groups and units. For information on how to configure such groups, please refer to Configuring heterogeneous environments 64. Additionally, you can define specific settings for projects, see Creating projects 75.



The **Standard** group contains the following settings:
– Network connections
– GENIUS TOOLS Starter App
– Additional environment settings (environment variables)
– Creo settings
– Windchill setttings
– Synchronization settings
– GENIUS TOOLS License Manager
– GENIUS TOOLS Starter App

© 2020 INNEO Solutions GmbH

For more information on how to configure deviations from this global configuration, please refer to Deviations from the default configuration 73.

5.6.1 Network drive

▶ 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.

▶ User drive

Here you can map an additional user-defined drive.

5.6.2 GENIUS TOOLS Starter App

For information on settings for GENIUS TOOLS Starter App, please refer to Settings for GENIUS TOOLS Starter App 104.

5.6.3 Additional environment variables

You can define environment variables that are assigned to the client workstation in a Creo session under **Additional Environment Settings**. This allows you to define additional, company-specific variables that are available after starting Creo 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

© 2020 INNEO Solutions GmbH

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.

5.6.4 Creo settings

5.6.4.1 Application

▶ Startup settings

Creo install path
Enter a directory on the workstation that has Creo installed, e.g. D:\PTC\Creo6.0.

Creo startkey
Specify the startkey (PSF file) of the respective Creo installation in the directory defined above. You can either give a file name (**parametric.psf**) or a complete path (**D:\PTC\Creo 6.0.2.0\Parametric\bin\parametric1.psf**).

Warning: If several keys are permitted for a project (in the **Licences** tab), the startkey will become the default setting for the selection field in GENIUS TOOLS Starter App, i. e. users will be able to choose another startkey.

Startup directory
Enter the working directory of Creo.

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
- ***ModelCheck:*** configuration files for ModelCheck
- ***NC:*** templates and configurations for NC machining.
- ***Drawings:*** files for drawing frames, notes and symbols

© 2020 INNEO Solutions GmbH

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**.

Language
Specify the language in which Creo should run.

<not defined / empty>: The Creo language is defined by a language variable (`LANG` or `PROLANG`) set on the application computer.

System: The locale of the operating system is used. Any language variable (`LANG` or `PROLANG`) set on the application computer is ignored.

<language>: The selectected language is used, and the language variable (`LANG` or `PROLANG`) on the application computer is set to that language.

Windchill user root folder
Specify a directory in which user-specific Windchill data is stored. The directory corresponds to the Creo favorites folder.

Windchill cache directory
Cache directory for caching of Windchill data.

Please note: Try not to modify this option. To change the storage location of the cache, rather change the setting Windchill user root directory.

Creo Agent home directory
Directory in which data relevant for Creo Agent, such as server information, is saved. We recommend setting Creo Agent Home to %PTC_WF_ROOT%.

Enable stop batches

Ja: Additional batch files can be executed after Creo has been stopped.

Nein: 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.

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

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

▶ Creo startkey

Synchronize Creo startkey
You can add Creo startkeys (PSF files) for each project in the project directory under **configuration**. For each PSF file, a matching BAT file will be 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: Creo startkeys and any startkeys stored in the project directory are copied to the BIN directory of the Creo installation **before** project selection.

Yes, cleanup before: All startkeys in the **bin** directory of the specified Creo version are

© 2020 INNEO Solutions GmbH

deleted before synchronization, except **cocreatesim.psf** und **gts.psf.** This option can only be set for groups and units, not for projects.

Warning: Setting this option may lead to invalid projects, if no other Creo startkey(s) are synchronized.

No: Creo startkeys will not be synchronized to application computers.

Please note: The key synchronization setting is a general settings which will only be used for a project if the project does not have its own specific key synchronization setting.

Copy project-related startkey only
Only the startkey required for a project is copied. This option can only be used if the above option **Synchronize Creo startkey** is set to **Yes**.
Yes: Only the startkey relevant to a project is copied.
No: All PSF files stored in the project folder will be copied as startkeys.

▶ 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.

▶ 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%\configuration\plot**.

Plot file folder
Directory on the workstation in which Creo stores the plot files. e.g: **C:\Temp**.

5.6.4.2 Licenses

Select one or more Creo startkeys (PSF files) that include license packages for starting projects. If several startkeys are checked, users can select one startkey when starting a project in GENIUS TOOLS Starter App.
Startkeys available for selection for a project can either be only the startkeys set for this

© 2020 INNEO Solutions GmbH

project or include startkeys set for higher-ranking groups or units. The search hierarchy for Creo startkeys is that of the general hierarchy: standard > unit > computer group > user group > project.)
Additive: User can choose from these startkeys as well as startkeys from superordinate groups and unit that contain the project.
Overwrite: User can choose from these startkeys. Startkeys from superordinate groups and unit are disregarded.

5.6.4.3 Cleanup

Configuration files of Creo 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

Define whether following configuration files are deleted or retained in the text directory of a Creo installation: **config.pro, config.sup, customization.ui.**
Ja: Delete
Nein: 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 a **config.pro** file in the user's home directory is deleted or retained.
Ja: Delete
Nein: Retain

Customization.ui
Determines whether a **customization.ui** file in the Settings directory in **PTC_WF_ROOT** is deleted or retained.
Ja: Delete
Nein: Retain

▶ Startup directory

Define whether following old configuration files are deleted or retained in the text directory of a Creo installation: **config.pro, customization.ui, config.val.**
Ja: Delete
Nein: Retain

© 2020 INNEO Solutions GmbH

5.6.4.4 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

Config.pro
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.

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.

Customization.ui
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: When existing, the **creo_parametric__admin_customization.ui** file is copied to the text directory. The **creo_parametric_customization.ui** file is copied to the Settings directory in **PTC_WF_ROOT.**
Start: When existing, 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.

© 2020 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.

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.

5.6.5 Windchill settings

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.
– 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.

Automatic server registration is configured under **configuration > (Select group) > Windchill settings**. The Windchill settings are expanded once you set **Use Windchill** to **Yes**.

▶ General

Use Windchill
Activate/deactivate the Windchill server.
Yes: Activates Windchill-relevant settings such as automatic server registration.
No: Windchill settings will be disregarded.

© 2020 INNEO Solutions GmbH

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.

Windchill context
Context of the workspace.

5.6.6 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.

© 2020 INNEO Solutions GmbH

▶ General

Activate synchronization
Shows whether synchronization from the Caddepot to the Cadpool directory is active. If synchronization is suspended, all computers will only operate locally.

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 client with windows
Determines whether GENIUS TOOLS Starter App should be started automatically with Windows.

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.**
No: The result is not transferred to the server.

▶ Server

Checksum validation
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.

© 2020 INNEO Solutions GmbH

Server path
The UNC path to the synchronization server.

5.6.7 GTS license server

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.

Please note: If no license server is registered or if it is deactivated, only Creo projects that have an academic or home-use license can be started.

▶ 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.

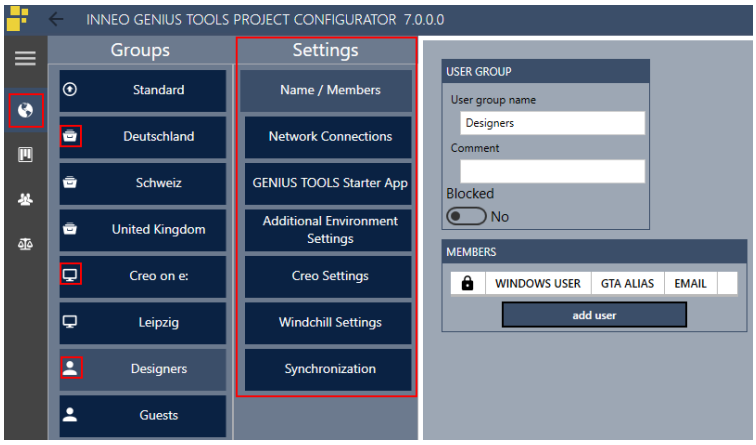
Comment
An optional comment on the license server(s).

Hint: The used license server can be found in **GT_LIC_SERVER** in Creo. You can use this variable, for example, in GENIUS TOOLS for Creo.

5.7 Configuring heterogeneous environments: groups and units

IT landscapes very seldom have a homogeneous structure. There are different hardware setups and different user requirements, so that Creo configuration differences arise automatically and heterogeneous environments are created. GENIUS TOOLS Starter has been designed to meet these requirements and makes it possible, to organize similar configurations into groups or units. In this way, you can define group-specific configurations for Creo and PTC data management software (e.g., PDM Windchill), as well as make settings for GENIUS TOOLS Starter App and for data synchronization. Please refer to Deviations from the default configuration 73 for an example of how to set a different UI language for Creo users.
Differences from the default configuration, that is, from the settings in the **Standard** group, are defined for computer groups, user groups and units on the **Configuration** page. You can configure computer groups or user groups to reflect hardware-specific or user-specific requirements, or use units to manage groups of users. Use units if you want to assign users dynamically via LDAP queries.

© 2020 INNEO Solutions GmbH



Select a group or unit to view the specific **Settings**. Groups and units come with a separate settings item **Name/Members**, which is not available in the **Standard** group. In contrast, only the **Standard** group has the settings item **GENIUS TOOLS License Manager**.

Please note: If you do not specify a setting for a group or unit, the group or unit will inherit the setting from the **Standard** group. (See also Configuring global environments 54.)

Computer groups

Computer groups organize similar hardware setups into groups to allow creating general configuration settings for this hardware in GENIUS TOOLS Starter. A computer group should contain all settings for this group that deviate from the general default configuration.
Computers are permanently assigned to a computer group. If a computer has to be added to or removed from a computer group, you have to change the assignment manually in the group's settings under **Name/Members**. (See also Assigning computers to computer groups 70.)
Each computer can be assigned to only one computer group.

User groups

In a concept similar to computer groups, users can be organized into user groups. User groups are typically used to define function access in GENIUS TOOLS Starter for a certain number of users, or to define the UI language independently of the hardware used. A user group should contain all settings for this group that deviate from the general default configuration.
Users are permanently assigned to a user group. If a user has to be added to or removed from a user group, you have to change the assignment manually in the group's settings under **Name/Members**. (See also Assigning users to user groups 70.)
Each user can be assigned to only one user group.

© 2020 INNEO Solutions GmbH

Units

Units are an alternative way of grouping users and assigning group-specific configuration settings. Units are typically used to reflect organizational structures such as company departments or sites.

Warning: Using units 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 units, you cannot go back to using perpetual licenses.

In contrast to computer groups or user groups, the assignment of users to a unit can be made dynamically via a role. The role in turn accesses the Windows user management functionality using LDAP queries. 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.

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.

A user can be a member of more than one unit. If a user belongs to multiple units, they can select the unit they want to work with in the user interface of GENIUS TOOLS Starter App (see chapter Working with units 116).
The following sections explain how to work with groups and units and how to add elements (users or computers) to them.

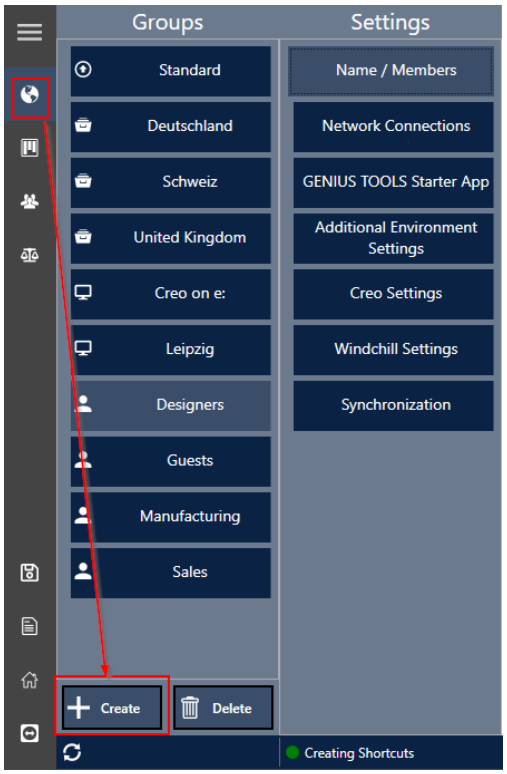
5.7.1 Create user groups, computer groups and units

To create new user groups, computer groups and units, go to the **Configuration** page. First, create the new group or unit, then go to the settings item **Name/Members** of the new group or unit to assing computers or users (see Assigning users to user groups 70). To create individual computers or users, go to the **Resources** page (see Creating resources: users, computers, roles 44).
In contrast to user groups and computer groups, a unit always has to have a role assigned.

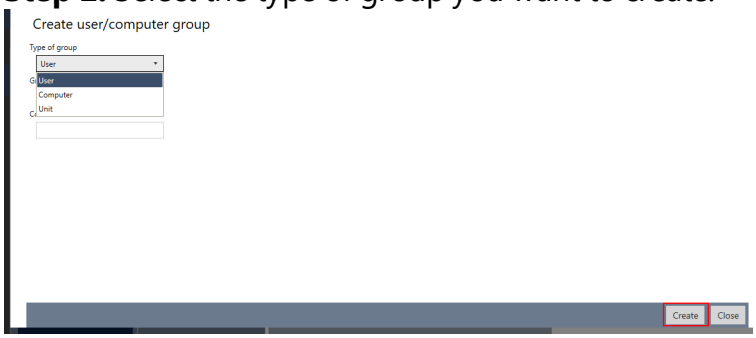
Warning: Using units is a new feature in GENIUS TOOLS Starter 6.0.1, which means that you need a subscription license to use it. Once you have configured units, you cannot go back to using perpetual licenses. See also License-dependent features 15.

Step 1: Go to the **Configuration** page and click **Create** under the **Groups** list.

© 2020 INNEO Solutions GmbH



Step 2: Select the type of group you want to create.



Step 3: Enter a name for the group or unit, as well as an optional comment.

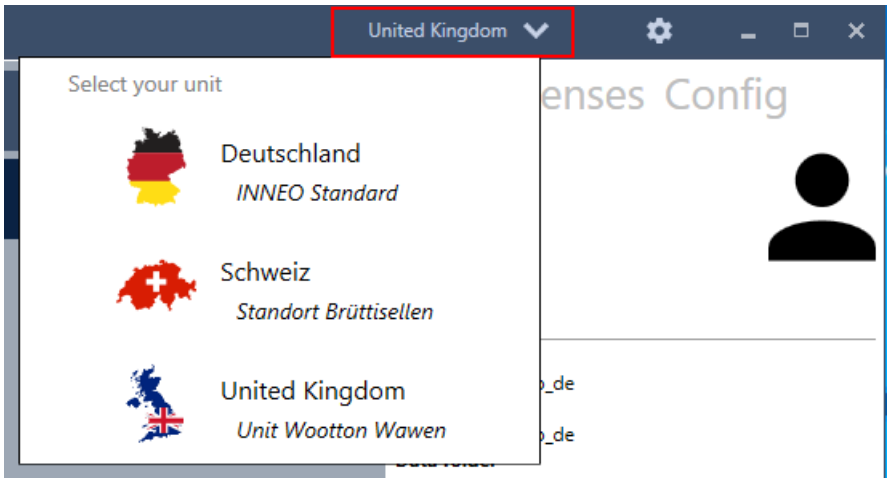
Step 4: Click **Create**. If you have configured a unit, a warning will be displayed to inform you that you are using a feature only available with subscription licenses. See also License-dependent features 15.

The new group or unit is displayed in the **Groups** list. Select the new group or unit, go to the settings item **Name/Members**, and assign computers or users to the group, or a role to the unit.

5.7.2 Displaying units in GENIUS TOOLS Starter App

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

© 2020 INNEO Solutions GmbH



Units will be displayed in alphabetical order.

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 Starter App.

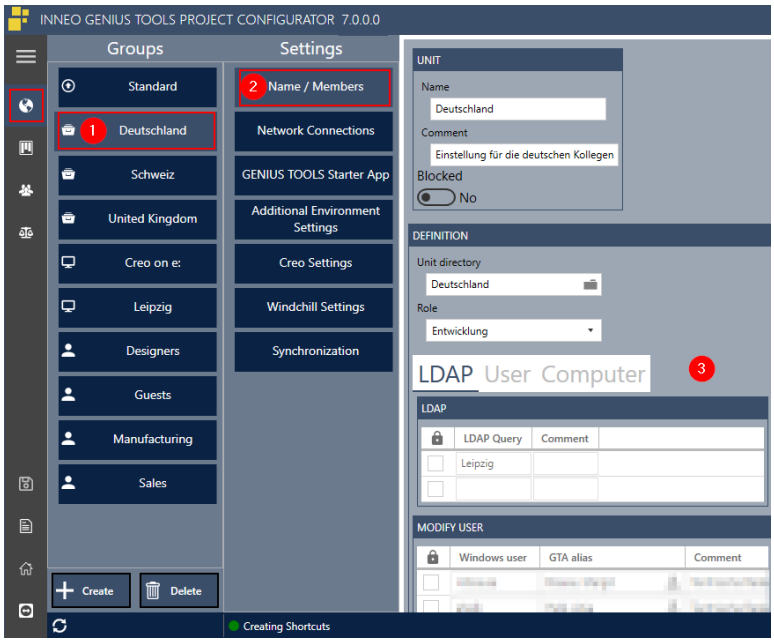
5.7.3 Assigning elements to groups or units

On the Configuration page, select a group that you want to assign computers or users to. There are three types of groups:
– units
– computer groups
– user groups
For units, computer and users are assigned to via roles.
You cannot assign elements to the group **Standard**. This group contains system-wide settings that apply to all users and computers. Therefore, the standard group does not have the settings item **Name/Members**, and you cannot change the group's name.

5.7.3.1 Assigning a role to a unit

Units are part of the role-based permission concept. First, assign a group of users to a role, then assign the role to the unit. A user can be assigned to different units by being a member of different roles.
In contrast to static user groups and computer groups, unit membership can be dynamic, as users can be assigned to a role via an LDAP query.
To add elements to a unit, proceed as follows:
Step 1: Go to the **Configuration** page and select the unit that you want to assign a role to.
Step 2: Go to the **Settings** item **Name/Members**.

© 2020 INNEO Solutions GmbH



Step 3: Edit the unit details as required.

▶ Unit

Name
Enter the name of the unit.

Comment
Enter an optional comment on the unit.

Blocked
A unit can be blocked in the GENIUS TOOLS Project Configurator.
Yes: The configuration will be disregarded for this unit.
No: The configuration will be applied.

Please note: Block a unit in Project Configurator if you do not want to apply the unit configuration, but want to keep the unit. You can also block individual users or computers without blocking the entire unit. Please refer to Block users or computers 72.

▶ Definition

Unit directory
Select a directory for unit-specific data (under **configuration** > **units**).

Role
Select a role to assign a group of users to the unit. Roles can be added in **Resources** > **Roles.**

▶ LDAP – User – Computer

This section shows the users and computers assigned to the role. To assign elements to a role, go to **Resources** > **Roles** > **Select role.**

© 2020 INNEO Solutions GmbH

If the checkbox before the user or computer name is set, the corresponding user or computer is locked. To make changes to the lock status, go to **Resources** > **Users** > **Create or edit user**, or to **Resources** > **Roles** > **Select role** > **LDAP.** (See also Block users or computers 72.) When assigning a role to a unit, the LDAP query for the role is displayed for your information but cannot be accessed..

5.7.3.2 Assigning users to user groups

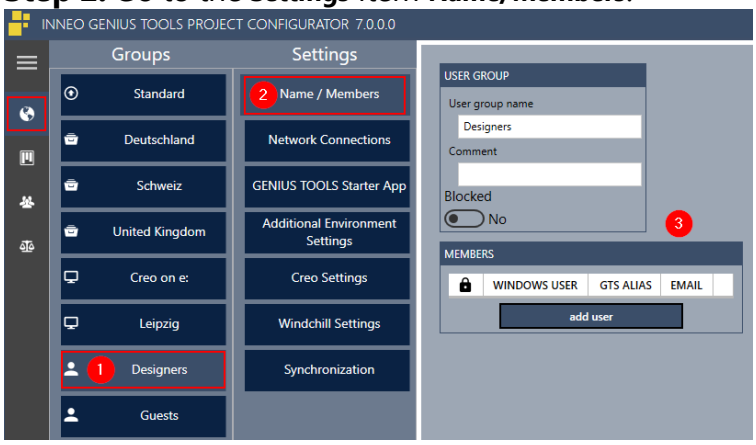
When you assign a user to a user group, the configuration settings for the user group will apply to that user.

Please note: Each user can only be assigned to one user group.

To assign a user to a user group, either use the list view for users under **Resources** > **Users**, or edit the members of the user group under **Configuration** > **Groups**.

Step 1: Go to the **Configuration** page and select the user group that you want to add users to from the **Groups** list.

Step 2: Go to the **Settings** item **Name/Members**.



Step 3: Under **Members** click on **Add user.**

Step 4: Select the users you wish to add to the group. If the user you are looking for is not listed, it has not been configured under **Resources** > **Users** > **Edit user.** (See also Creating users 45.)

Step 5: 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.

5.7.3.3 Assigning computers to computer groups

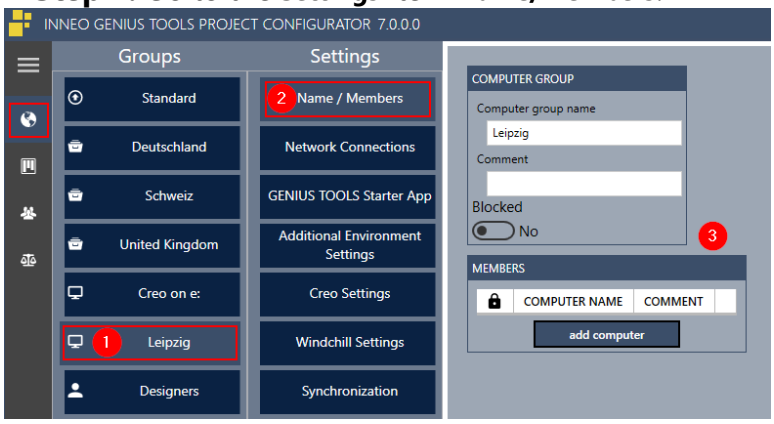
Each computer is identified by its Windows computer name. When you assign a computer to a computer group, the configuration settings for the computer group will apply to that computer.

Please note: Each computer can only be assigned to one computer group.

Step 1: Go to the **Configuration** page and select the computer group that you want to add computers to from the **Groups** list.

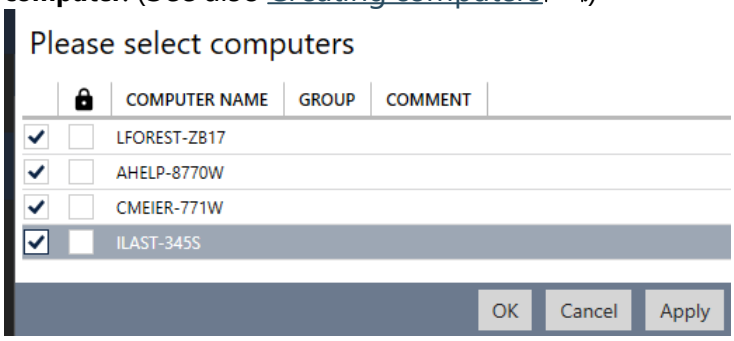
© 2020 INNEO Solutions GmbH

Step 2: Go to the **Settings** item **Name/Members**.



Step 3: Under **Members** click on **Add computer.**

Step 4: Select the computers you wish to add to the group. If the computer you are looking for is not listed, it has not been configured under **Resources** > **Computers** > **Edit computer**. (See also Creating computers 47.)



Step 5: Finish the dialog box by clicking on either:

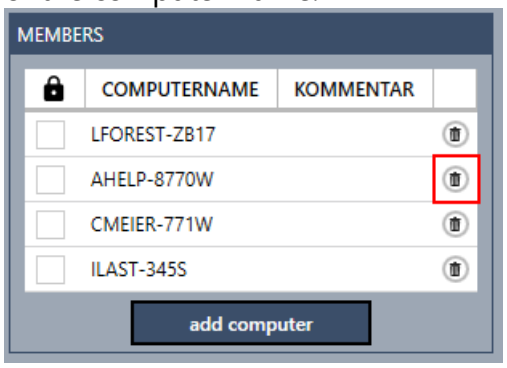
– **Ok**: Add selected computers and close dialog box,

– **Cancel**: Close dialog box without adding selected computers,

– **Apply:** Add selected computers without closing dialog box.

5.7.4 Remove users and computers from a group

To remove a computer from a computer group go to the item **Members** in **Configuration** > **(select) Computer group** > **Name/Members** and click the recycle bin icon on the right of the computer name.

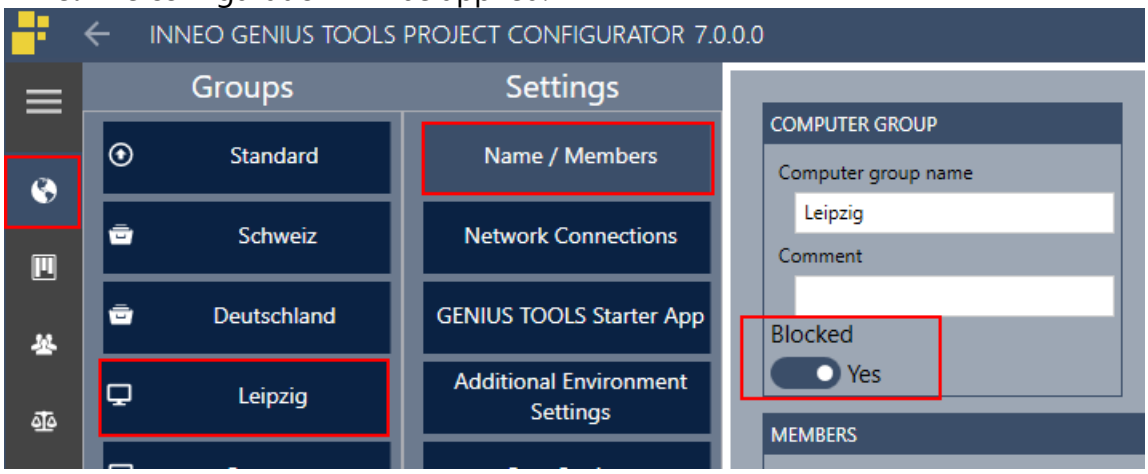


To remove a user from a group, select the respective user group in the **Configuration** page and click the recycle bin icon on the right of the user name.

© 2020 INNEO Solutions GmbH

5.7.5 Deactivate user and computer groups

You may want to deactivate a user or computer group in Project Configurator if you do not want to apply the group configuration without deleting the group altogether.
To deactivate a computer group go to **Configuration** > **(select) Computer group** > **Name/Member** and select the item **Blocked.**
Yes: The configuration will be disregarded for this computer group.
No: The configuration will be applied.



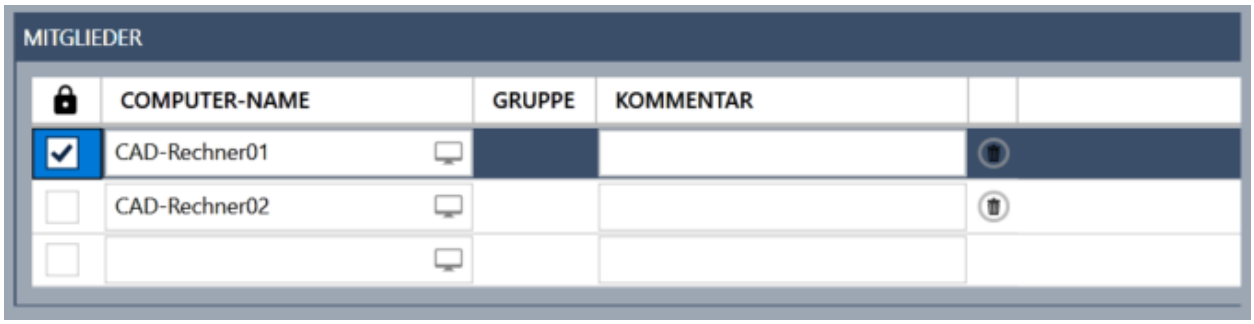
Deactivate computer group

To deactivate a user group go to **Configuration** > **(select) User group** > **Name/Member** and select the item **Blocked.**
You can also block individual users and computers without blocking the entire group.
Please refer to Block users or computers 72.

5.7.6 Blocking individual users or computers

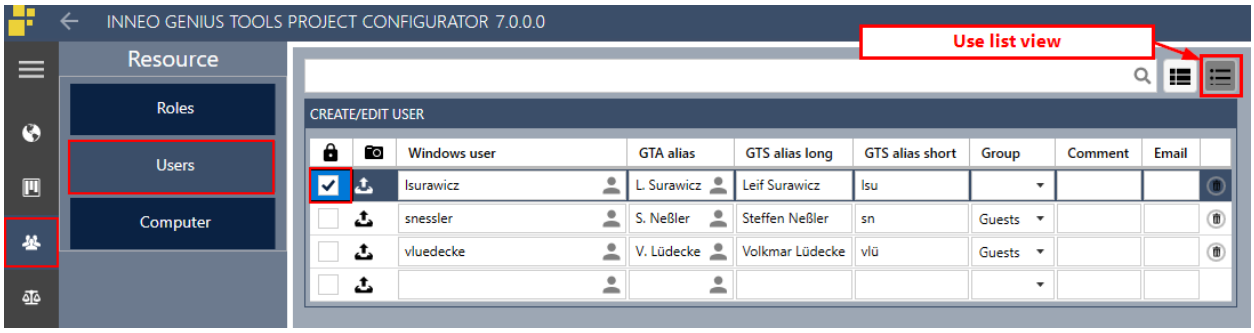
Individual computers or users can be blocked. Settings made for these computers or users in GENIUS TOOLS Project Configurator will not be applied, that is, the system-wide general settings will be used for blocked computers or users.
Block a computer, for example, if you want to keep it assigned to a group, but temporarily want to disable the group's settings for this computer.
Blocking a user or computer lets you test the system-wide general settings defined in the standard group by disabling any overlying user- or computer-specific settings.
To block individual computers, go to **Resources** > **Computers** > **Edit/create computer**.

© 2020 INNEO Solutions GmbH



A blocked computer

To block individual users, go to **Resources** > **Users** > **Edit/create user**. You have to use the list view.



A blocked user

You can also block an entire computer group or user group. Block a group if you want to keep the group configuration, but temporarily do not want to apply its settings. To block a group, go to **Configuration** > **(Select group)** > Settings item **Name/Members**. (See also Assigning elements to groups or units 68.)

5.8 Deviations from the default configuration

This sections explains how to define a UI language as a user-defined setting as an example for configuration deviations.

5.8.1 User-defined language

Before Creo start, 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.

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:

1. System-wide: **Configuration** > **Group: Standard** > **Creo settings** > **Startup settings** > **Language**
2. Unit: **Configuration** > **Select unit** > **Creo settings** > **Startup settings** > **Language**
3. Group: **Configuration** > **Select group** > **Creo settings** > **Startup settings** > **Language**

© 2020 INNEO Solutions GmbH

4. Project: **Projects** > **Select project** > **Creo tab** > **Startup settings** > **Language**

The following example procedure refers to group settings.

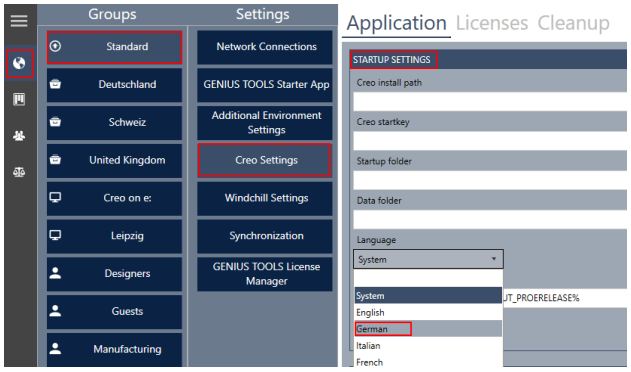
Example: Setting the UI language for a user via a user group

Starting situation:

– A company is located in Germany.
– A British designer is tasked with working on a project with the company in Germany for a time of four weeks.

Procedure:

1. The system-wide setting for the Creo language is German. This is defined under **Configuration** > **Standard group** > **Creo settings** > **Startup settings** in the **Language** drop-down menu.



2. Go to the **Resources** page, select **Users** and configure a new user with the Windows user name for the British colleague.
3. Go to the **Configuration** page and create a new user group, calling it, for example, **Guests**.
4. Select the new user group, go to the settings item **Name/Members** > **Add user**. Add the user you have configured to the new user group.
5. Select the new user group, go to the settings item **Creo settings** and, under **Startup settings** > **Language**, select **English**.

5.8.2 Group specific license packages

You can grant different license packages to different groups by assigning the appropriate Creo startkey in **Configuration** > **Groups** > **Creo settings.** (For more information on startkeys see also chapter %TARGETTITLE% 51.)

In the dialog Startup Settings enter the name of the Creo startkey or, if users are to choose between several keys, check several Creo startkeys in the Licenses tab. If you provide several startkeys to users, the input in the Startup Settings dialog defines the startkey selected by default in GENIUS TOOLS Starter App.

In addition you can clean up Creo startkeys in the dialog **Configuration** > **Groups** > **Creo settings** > **Synchronize Creo startkeys. This deletes all startkeys (i.e. PSF files) in the bin directory of PTC., except cocreatesim.psf** and **gts.psf.** This allows you to use startkeys with different license servers. Only startkeys for projects that a user has access to are deleted in the bin directory.

© 2020 INNEO Solutions GmbH

5.9 Creating projects

Use GENIUS TOOLS Project Configurator to define configuration settings for Creo projects with only a few clicks. You can distribute a company-specific or commercially available environment to all workstations where it is needed. The projects you define are listed for the Creo users in GENIUS TOOLS Starter app. The user can select and start a project from the list.
A project consists of the following components
– a defined Creo release or weekly version
– interface and functional configuration files for Creo (**config.pro, config.ui**)
– start object templates
– project libraries
– drawing frames
– ModelCheck configurations
– additional applications (Toolkit)
– and many other settings relevant to working with Creo
Projects can also be used to assign Creo licenses to defined application computers or users, see Assigning Creo licenses to projects 82.
Each project can have an individually defined directory structure to house its component files. Additional applications or scripts can also be integrated into a project.

5.9.1 Defining Creo project configurations

A **project environment** consists of the following information:
– Creo Parameteric release and version to be used
– licenses to be used (startkeys, PSF files)
– configuration settings in configuration files
– user interface settings in UI files
– additional applications
– settings and link-ups for additional applications (batch files)
– Windchill availability in the Creo Parametric session
– plot settings
– additional required data:
– data referenced in the configuration files (colors, materials, templates etc. in the data directory)
– data for other tasks (information documents, additional tools)
A project configuration consists of Creo object data – filed in the data directoy – and Creo configuration files, which can be filed in any of the project-relevant directories **standard, unit, project** and **user**. 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.

© 2020 INNEO Solutions GmbH

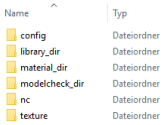
Settings for a project environment come from the following directories **standard, unit, project** and **user**. (See also chapter on the call hierarchy. 13)

1. Data directory:
   <GTS-operatingenvironment>\data
2. Project directory:
   <GTS-operatingenvironment>\configuration\projects\%GTS_PROJECT_DIR%
3. Unit directory:
   <GTS-operatingenvironment>\configuration\units\%GTS_UNIT_DIR_NAME%
4. User directory:
   <GTS-operatingenvironment>\configuration\user\%USERNAME%

Data directory

The data directory is the main directory for data specific to an operating environment. All Creo object data is stored in subdirectories for each operating environment, for example **<GTS_ROOT_DIR>\data\sut_int_de_creo6.**

The Creo data is stored in the following directory structure within the data directory:



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 a **config_*.pro** file 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>\standard**.

Warning: Starting with GENIUS TOOLS Starter 6.0.1, a new configuration mechanism is in use. When you update from version 6.0.0.0 or migrate from Startup TOOLS 20xx, the files in the **projects** directory, that is, the general configuration files, will be moved to a new directory named **standard**. Project-specific configuration files located in subdirectories under **projects** will not be moved.

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_c6p_dir_file.pro** in the project directory **project_creo6p_de** reads

```
pro_library_dir $GTS_DATA\library_dir
```

This reference points to the directory **library_dir** within the data directory.

© 2020 INNEO Solutions GmbH

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 13.

Project directory

The project directory defines which Creo operating environment is loaded. The project directory houses all relevant Creo configuration files, i.e., **config_*.pro, config_*.sup, customization_*_.ui** and **config_*.val.**
The configuration files can be placed in the standard directory for all projects (**<GTS-OperatingEnv>configuration\standard**), or in the project-specific directories that are created automatically with each new project, e.g., **<GTS-OperatingEnv>configuration\projects\project_creo5p_en**. When you configure a project, you can point to a project-specific directory for the configuration files. If you do not configure a project-specific directory, the global configuration settings from the standard directory will be used.
You can also place batch files both in the standard directory and in the project-specific directory. The batch files will be run before starting the software. For more information on batch files, please refer to Configuring an operating environment with batch files 94.

Warning: Starting with GENIUS TOOLS Starter 6.0.1, a new configuration mechanism is in use. When you update from version 6.0.0.0 or migrate from Startup TOOLS 20xx, verify references to configuration files in your batch files. References to **..\configuration\projects** have to be changed to **..\configuration\standard**.
Batch files in the project-specific subdirectories under **projects** do not have to be changed.

Unit directory

The unit directory defines which Creo operating environment is loaded. The unit directory houses all relevant Creo configuration files, i.e., **config_*.pro, config_*.sup, customization_*_.ui** and **config_*.val.**
You can place batch files in the unit-specific directory. The batch files will be run before starting the software. For more information on batch files, please refer to Configuring an operating environment with batch files 94.

Specifying the Creo installation directory

There are three different ways of configuring the Creo installation directory and start command:

1. On the Project Configurator **Configuration** page for the standard group or another group or unit: **Configuration** > **Select group** > **Creo settings** > **Creo install path**
2. In the GENIUS TOOLS Starter project: **Projects** > **Select project** > **Creo** > **Release** > **Given path**
3. Via the local Windows registry on the application computer: **Projects** > **Select project** > **Creo** > **Release** > **Select Creo version**

© 2020 INNEO Solutions GmbH

Depending on your requirements, each way of defining the installation directory can make sense.

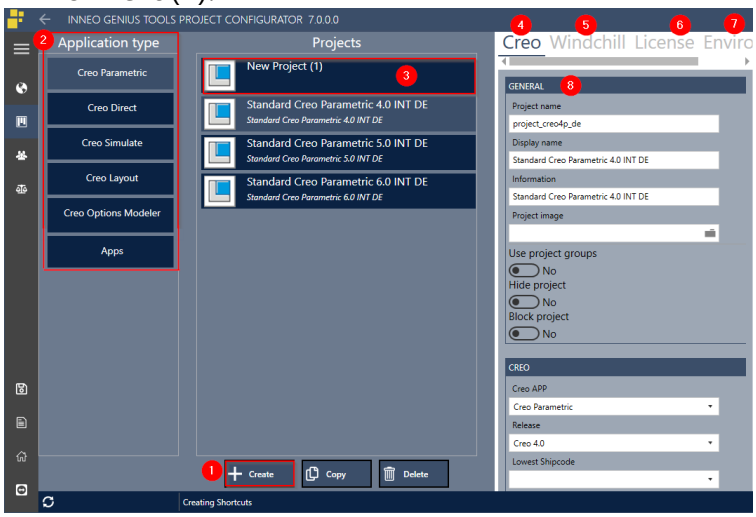
Please note: In general, it is recommenden to determine the installation path via the local Windows registry.

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 via the **Configuration** page. In this way, you will not have to specify it for each project.
2. If a variety of versions or weekly versions is in use, for example because you are providing services for different customers, configure the Creo installation directory in each project.
3. If local installations are inconsistent or not known in detail, fall back on the local Windows registry to determine the Creo installation directory. You can specify which Creo version to look for, the highest weekly version for which will be used.

5.9.2 Creating a new project

To create a new project, go to the **Projects** page and click **Create** (1). A new project (3) is shown in the list with the name **New Project** and a number if there already is a project of the same name. The new project becomes visible to the users as soon as you save your changes to the database.
You can create projects for all applications listed under **Application type**. Applications are: **Creo Parametric, Creo Direct, Creo Simulate, Creo Layout** and **Creo Options Modeler**. In **Apps** you can create projects that run with other programs. (See chapter %TARGETTITLE%.) 102
Click on a project in the projects list to edit the project details in the right pane. Note that there are three tabs with project details: **Creo** (4), **Windchill** (5), **Licences** 82 **(6)** and **Environment** (7).



Some input fields are preset, others come with a browse button to define directory paths. Optional fields are given in brackets in the following description. If you do not specify the optional settings, the general settings for the standard group or the settings you may have made for the unit, computer group, or user group, will be inherited by the project.

© 2020 INNEO Solutions GmbH

5.9.3 Displaying projects to users

Projects are displayed to users in GENIUS TOOLS Starter App like this:

User interface of GENIUS TOOLS Starter App

Settings for project display, such as the project image and info text, are entered in **Projects > Application > (Select) project > Tab: Creo > General (8)**.

▶ General

Project name
A unique name without space characters that identifies a project, e.g. project_creo6p_en. The default setting **New Project** can be overwritten. The project name can be changed at any time.

Display name
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 name**.

Information (optional)
Short text describing the project. The information text will be shown below the **display name**.

Project image (optional)
A picture that is displayed for the project in GENIUS TOOLS Starter App. Use PNG or JPEG files.

Sort projects

The order of projects displayed in GENIUS TOOLS Starter App can be changed here by dragging and dropping projects in the *Projects* list. You can also sort the projects alphabetically by project name in the user menu in **Sort projects alphabetically.** This menu item is only displayed when navigating in the **Projects** main menu.

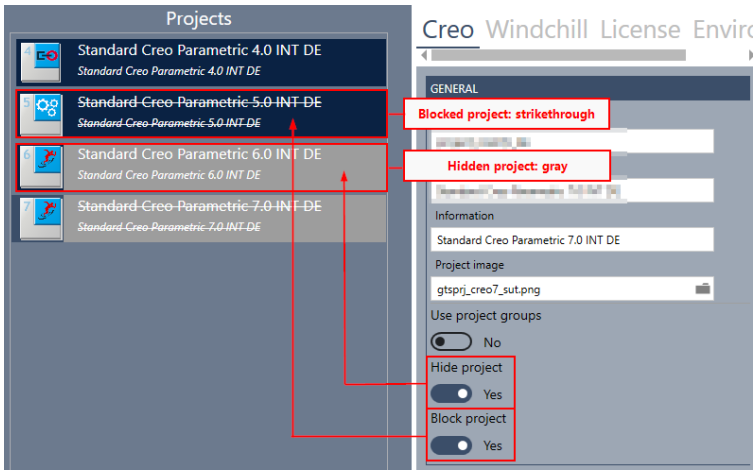
Use project access groups

Projects can be restricted to users who belong to a defined project access group with specific access rights. Members of a project group can only view in GENIUS TOOLS Starter App the projects they have access to. See chapter Using project access groups. 88

5.9.4 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 > Tab: Creo > Block: General**.

© 2020 INNEO Solutions GmbH



Blocked projects are displayed in gray in GENIUS TOOLS Project Configurator. Hidden projects are stroked through.
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 UI.
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.

5.9.5 Settings for Creo projects

After you have created a new project, specify the following settings in the **Creo** tab.
Note on Creo APP: Starting with Creo 1, different applications in the Creo family access the same information, which is placed in a common directory structure on installation. The basic libraries for Creo Parametric and Creo Direct are identical. This also holds for other applications, called APPs for short. When you configure a new Creo project, set the Creo APP option to determine which application to start.

▶ Creo

Creo APP
Defines the Creo APP, e.g. Creo Parametric, Direct, Simulate or Layout.

Release
Defines the Creo version to be used. A Creo path can be configured, or determined automatically from the registry of the application computer.
Fixed path: Enter the Creo directory, which may differ from the Creo directory for the standard group as defined on the **Configuration** page. If you do not specify a Creo directory, the settings for the standard group will be used (see **Configuration** > **Standard** > **Creo settings**

© 2020 INNEO Solutions GmbH

> **Startup settings)**.

Creo versions: Select a Creo version. If you select Creo 6, for example, the installation directory for the latest Creo 6 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 shipcode (optional)
Lowest usable weekly 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 like **6.0.1.0**.

Highest shipcode (optional)
Highest usable weekly 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 like **6.0.1.0**.

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.

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.

▶ Startup settings

Creo startkey
The start command (PSF file) of the respective Creo installation. The directory of the Creo installation is defined above under **Release**. You can also overwrite the default setting (e.g. parametric.psf) and specify a path here, such as `D:\PTC\Creo6\bin\proel.psf`

Warning: If several keys are permitted for a project (in the **Licences** tab), the startkey will become the default setting for the selection field in GENIUS TOOLS Starter App, i. e. users will be able to choose another startkey.

Please note: If a defined startkey is not available on the client computer, you can choose to display the project in GENIUS TOOLS Starter App as follow (Go to **Configuration** > **Groups** > **GENIUS TOOLS Starter App** > **Projects** > **Display invalid projects**):
– Display with error warning: Project without a valid license is displayed with a red background and cannot be started. (Select **Yes, as error**)
– Project is not displayed. (Select **No**)

© 2020 INNEO Solutions GmbH

Synchronize Creo startkey
Yes: The start key (PSF) is copied from the project folder to the Creo BIN directory.
No: The start key is not copied, even if system-wide synchronization has been set up.

Please note: For this option, write permissions are required on the application computer in the Creo BIN directory.
Please note: Take care when synchronizing startkeys. A configuration error may lead to erroneous distribution of startkeys to application computers that should not have defined licenses available.

Language (See chapter Language of a Creo project. 85)
<not defined / empty>: The Creo language is defined by a language variable (LANG or PROLANG) set on the application computer.
System: The local settings of the operating system are used. Any language variable (LANG or PROLANG) set on the application computer is ignored.
<language>: The selectected language is used, and the language variable (LANG or PROLANG) on the application computer is set to that language.

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 following directories in the **configuration** directory: **plot, standard, units, projects** and **users.**

5.9.6 Assigning Creo licenses to projects

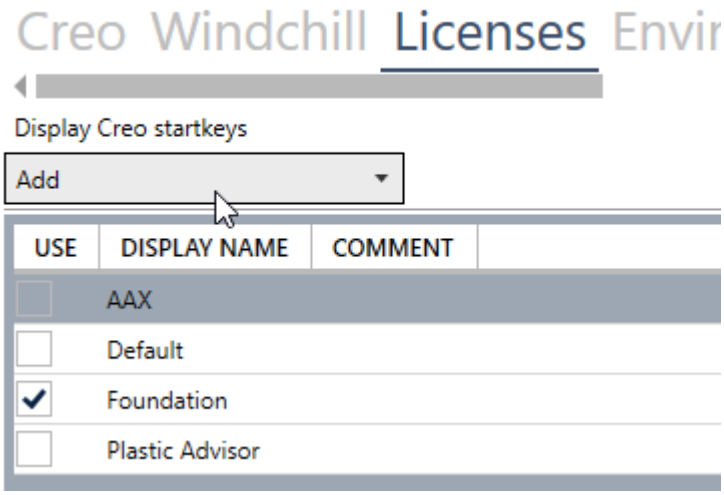
A project can be started with a Creo license packages by assigning one or several Creo startkey to it. A startkey is a configured start command that opens Creo with one or several defined licenses or license extensions. Startkeys are PSF files located in PTC's bin directory.
In **Projects** > **Application** > **Select project** > **Tab: Creo** all startkeys that have been created as a resource are listed. (See chapter %TARGETTITLE% 51.) Startkeys checked in this dialog will be those that users can select in GENIUS TOOLS Starter App. If users are provided with several keys to choose from, the number of projects can be 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.
Also, a project can receive additional startkeys from directories of higher order.

© 2020 INNEO Solutions GmbH

1. Projects with one startkey

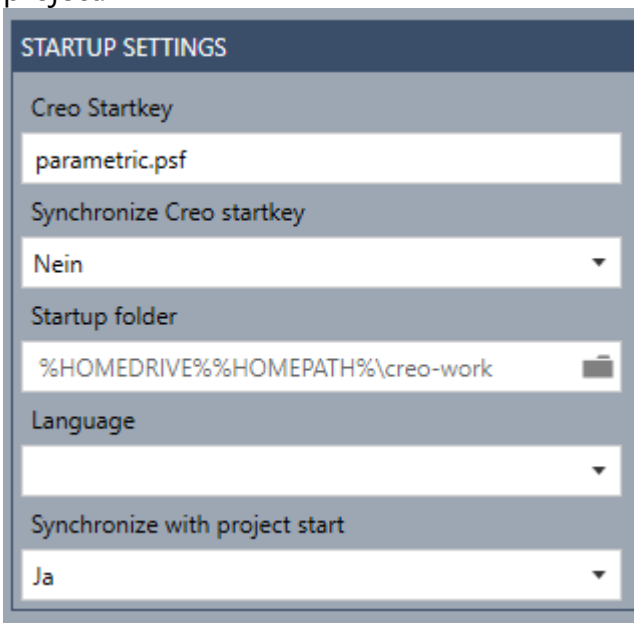
Select a startkey from the list in **Licenses** tab.



Projects > Licenses tab

Select **Overwrite** in the input field **Display Creo startkey**. This means the startkey from set for this this project is the only one available. If you choose *Overwrite* instead, startkeys in group settings of higher-order (group, unit, standard) will also be made available, i. e. the project may then have several startkeys to select from.

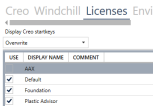
You can enter the startkey also in the Dialog **Startup Settings. (Projects > Tab: Creo)**, but it is not necessary. If you do, take care to enter the same PSF file. If the two entries are not identical, users have to first chose the one available keys before being able to start a project.



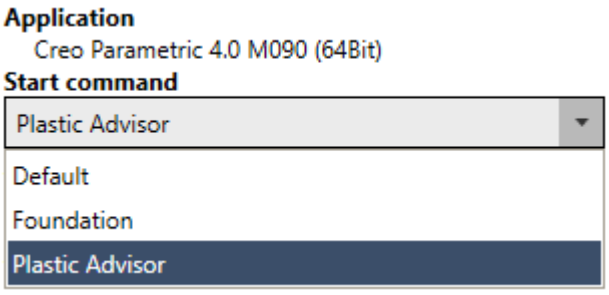
2. Projects with several startkeys to choose from

If several startkeys are permitted for a project in the **Licenses** tab, users can select one of them in GENIUS TOOLS Starter App:

© 2020 INNEO Solutions GmbH



Mehrere Startkeys in der Registerkart Lizenzen



Auswahl eines Startkeys im Info-Bereich von GENIUS TOOLS Starter App

- Check the Creo startkeys that are to be permitted for the project in **Projects > Select Project > Tab: Licenses.**
- Decide whether to additionally assign to the project startkeys from directories of higher order (groups, units, standard).

Startkeys available for selection for a project can either be only the startkeys set for this project or include startkeys set for higher-ranking groups or units. The search hierarchy for Creo startkeys is that of the general hierarchy: standard > unit > computer group > user group > project.)

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

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

Decide whether or not to fill in the field **Creo startkey** in the section **Startup Settings** (**Projects > Select Project > Tab: Creo).** This gives you the following possibilities:

2.1. Projects with several startkeys and a default startkey

In the **Startup Settings** enter the Creo startkey that should be the standard in the selection field in GENIUS TOOLS Starter App. Users then do not have to select a startkey before being able to start a project. If users need another startkey, they have to activate it in t he selection dialog.

If this field is left empty and there are multiple startkeys permitted for a project, there is no default startkey set for selection.

2.2. Projects with several startkeys and without a default startkey

If there is no startkey inputted in the section **Startup Settings,** GENIUS TOOLS Starter App will start Creo with the startkey that was last selected by the user for this project.

5.9.7 Default settings for license borrowing

You can define the maximum duration of borrowing PTC and GENIUS TOOLS licences in **Projects > (Select) Project > Tab: Creo > Dialog: 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

© 2020 INNEO Solutions GmbH

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.

5.9.8 Language of a Creo project

The language, in which Creo runs, can be set in **Projects** main page under **Application type > Projects > Creo (tab) > Startup settings.**
The following languages are available: English, German, Italian, French, Spanish, Japanese, Chinese (simplified), Chinese (traditional), Korean, Russian, Brazilian Portugese. Choose one of the following setting:

Language
Specify the language in which Creo should run.

<not defined / empty>: The Creo language is defined by a language variable (LANG or PROLANG) set on the application computer.
System: The locale of the operating system is used. Any language variable (LANG or PROLANG) set on the application computer is ignored.
<language>: The selectected language is used, and the language variable (LANG or PROLANG) on the application computer is set to that language.

5.9.9 Workspace for Windchill

Set workspace directories for Windchill and Creo under **Workspace** in the **Creo** tab.

▶ Workspace

Windchill user root directory
Enter the PTC_WF_ROOT directory to which the workspace and user-defined settings can be saved.

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 automated server registration, the Windchill cache directory has to be under the Windchill user root directory, see Automatic Windchill server registration 96.

Please note: Try not to modify this option. To change the storage location of the cache, rather change the setting **Windchill user root directory**.

© 2020 INNEO Solutions GmbH

Creo Agent home directory
Directory in which data relevant for Creo Agent, such as server information, is saved. We recommend setting Creo Agent Home to `%PTC_WF_ROOT%`.

> **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.

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, schould 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 `%`

© 2020 INNEO Solutions GmbH

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.
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.

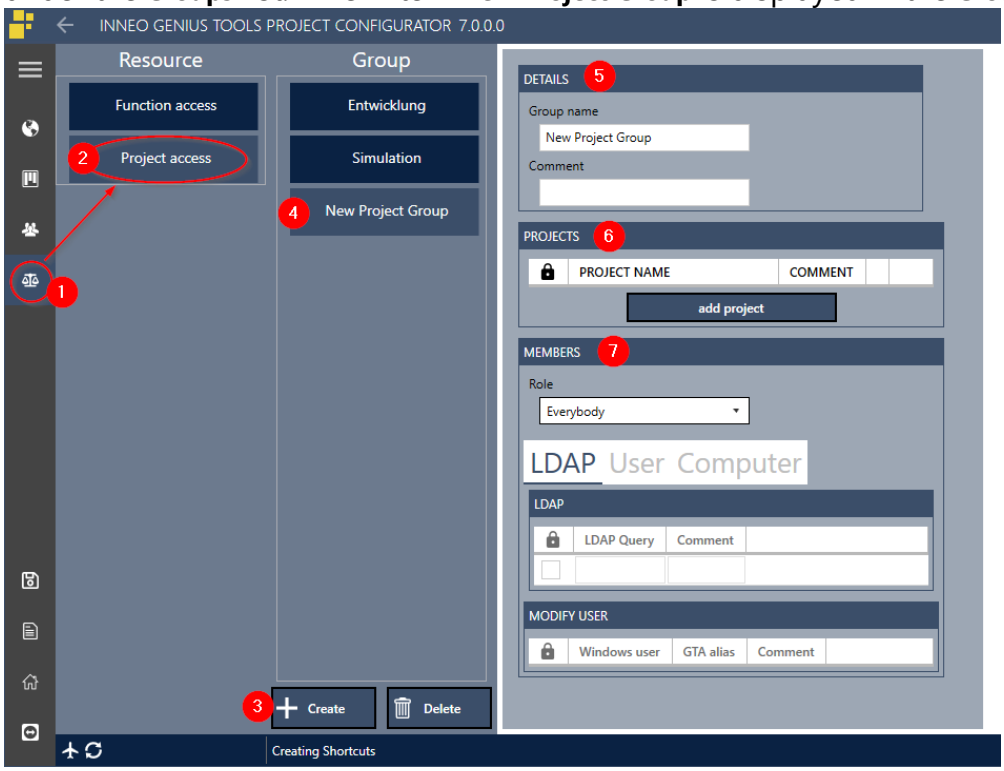
5.10 Working with project access groups

Project access groups limit access to configured projects to a defined group of users. Projects that are not assigned to any project access group are accessible for all users.
A user can be a member of any number of project access groups. The user will be able to access all projects assigned to a project access group of which they are a member.

Please note: Each user can only see the projects they are permitted to access. 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.

5.10.1 Creating project access groups

To limit access to projects to defined groups of users, you first have to create a project access group. Go to the **Access rights** page (1), then click **Project access** (2). Click **Create** (3) under the **Groups** list. A new item **New Project Group** is displayed in the **Groups** list (4).



© 2020 INNEO Solutions GmbH

A newly created project access group does not have any users or projects assigned. Enter the settings for the new project access group.

▶ Project access group details (5)

Group name
Enter a name for the project access group.

Comment
Optionally, enter a comment to describe the project access group.

▶ Projects (6)

Add project
Assign projects to the project access group. Note that assigning a project automatically sets the option **Use project groups** for the project (**Projects** page, > **Creo** tab > **General**).

Please note: The option **Use project groups** is set automatically when you assign a project to a project access group. However, if you want to change the project back to general access without project access groups, you have to change the setting to **No** manually under **Projects** page > **Creo** tab > **General.**

▶ Members (7)

Role
Select the role.

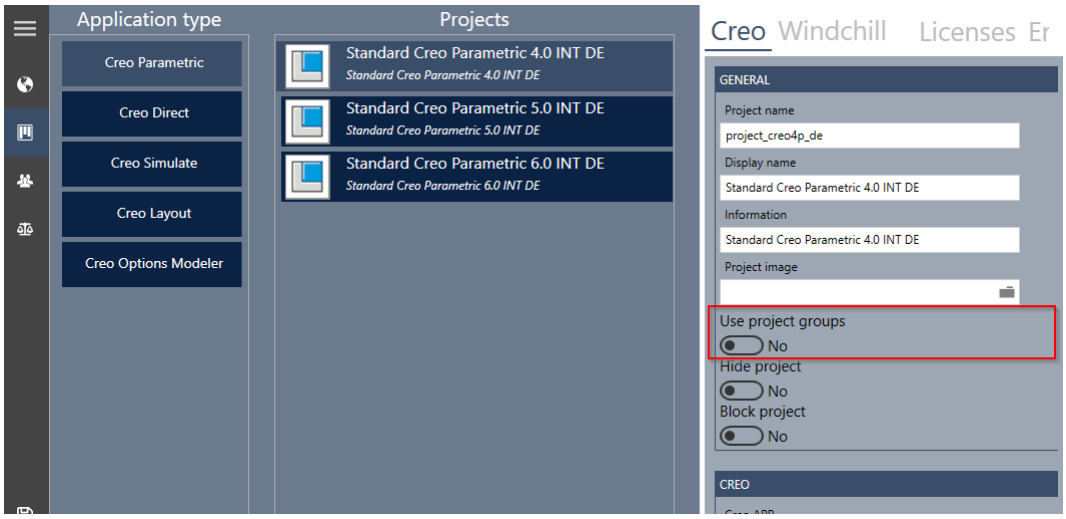
▶ LDAP – User – Computer

This section shows the users and computers assigned to the role. To assign elements to a role, go to **Resources** > **Roles** > **Select role.**
If the checkbox before the user or computer name is set, the corresponding user or computer is locked. To make changes to the lock status, go to **Resources** > **Users** > **Create or edit user**, or to **Resources** > **Roles** > **Select role** > **LDAP.** (See also Block users or computers 72.)

5.10.2 Using project access groups

When you assign a project to a project access group, the option **Use project groups** under **Projects** page > **Creo** tab > **General** is set automatically to change the project access mode to group access.

© 2020 INNEO Solutions GmbH



Project access mode (Projects > Creo > General)

Use project groups
Projects can be restricted to users who belong to a defined project access group.
No (Default): The project is available to all users.
Yes: Shows whether the project is assigned to at least one project access group. **Use project groups** is set to **Yes** automatically when a project is assigned to a project access group.

Please note: If you manually set the **Use project groups** option to **Yes** without assigning the project to a project access group, the project will not be visible for any user because it cannot be linked to any project access group.

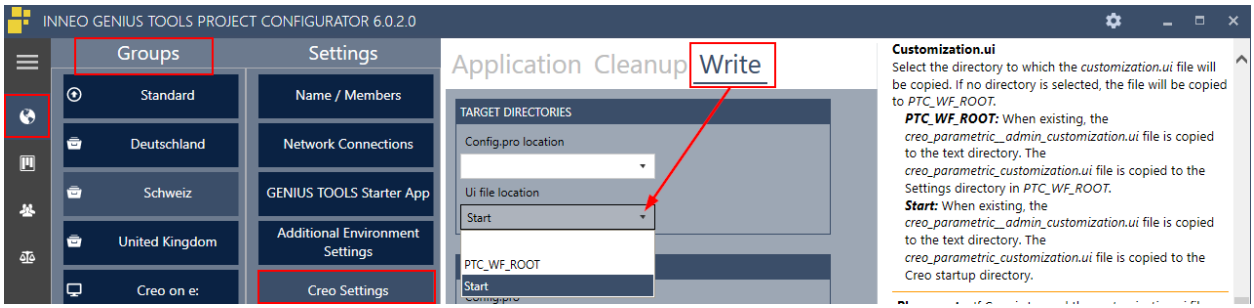
5.10.3 General project access

If you want to change a project back to general access without project access groups, you have to change the **Use project groups** option to **No (Projects** page > **Creo** tab > **General).**
To make a project accessible to all users, it is not sufficient to remove it from all project access groups. To switch back to general access, you have to go to the project settings and change the **Use project groups** option to **No** manually.

5.11 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.**

© 2020 INNEO Solutions GmbH



5.11.1 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**.
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. 11) In a subdirectory of **unit,** the UI file would, for example, determine the Creo user interface for the named unit.

There is only one customization.ui file. Hence, GENIUS TOOLS Starter does not write several separate files as it does for the config.pro-file (such as e. g. **config_mapkey.pro** which would be written into one final config.pro-file). This is important because it means 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

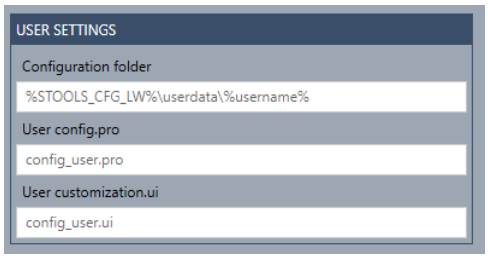
The administrator can set up a configuration that is valid for the whole company or for specific users, projects or units. To do so, change the name of the ui-file that is automatically saved by Creo from **creo_parametric_customization.ui** to **creo_parametric_admin_customization** and save it to one 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.

© 2020 INNEO Solutions GmbH

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** and **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 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 14.)
The administrator can determine the storage location of the **userdata** directory in **Configuration > (select) group > Creo Settings > Application > User Settings > Configuration folder.**



▶ User settings

Configuration folder
The configuration files of each user can be stored in the directory **userdata.**

User config.pro
Name of a user-defined **config.pro** file. It is appended to the **config_*.pro** files in the **users, projects, units** and/or **standard** directories.

User customization.ui
Name of a user-defined **customization.ui** file. It replaces any **customization.ui** file in the **users, projects, units** and/or **standard** directories.

Security mechanism with GENIUS TOOLS Starter App

You can create a backup file (BAK file) from **creo_parametric_admin_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.

1. In the info pane of GENIUS TOOLS Starter App go to the Config tab and click **backup user customization.ui**

2. If a backup file already exists, confirm that it should be replaced.

© 2020 INNEO Solutions GmbH

3. In the following dialog box select whether **creo_parametric_customization.ui** should be deleted.

Result: The file will be saved as **creo_parametric_customization.ui.bak** in the directory %PTC_WF_ROOT%\.Settings.

In order to restore the user-specific UI file:

1. Click on **restore user customization.ui**
2. In the following dialog box select whether the backup file should be deleted.

Result: The file **creo_parametric_customization.ui.bak** in the directory %PTC_WF_ROOT%\.Settings is changed to **creo_parametric_customization.ui.**

5.12 Working with configuration and batch files

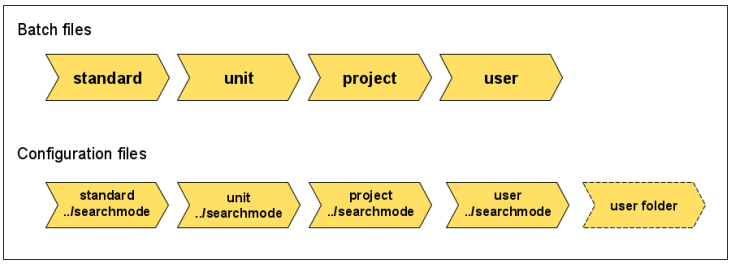
The following section explains how configuration files and supported batch files are used. It is especially important to know in which sequence the files are processed, as this has a huge impact on the resulting configuration settings.

Configuration files are files defining settings for a Creo application. There are four types of configuration files: **config.pro, customization.ui, config.sup** and **config.val** (see also Configuration files 12.)

Batch files are files that are used to carry out configuration instructions at different moments (see also Configuring an operating environment with batch files 94).

5.12.1 Call hierarchy

Configuration files and batch files are subject to the same call hierarchy. Unlike configuration files, batch files cannot be saved in the searchmode directory.



Call hierarchy for batch and configuration files in a started project

The following search and call sequence applies to configuration files.

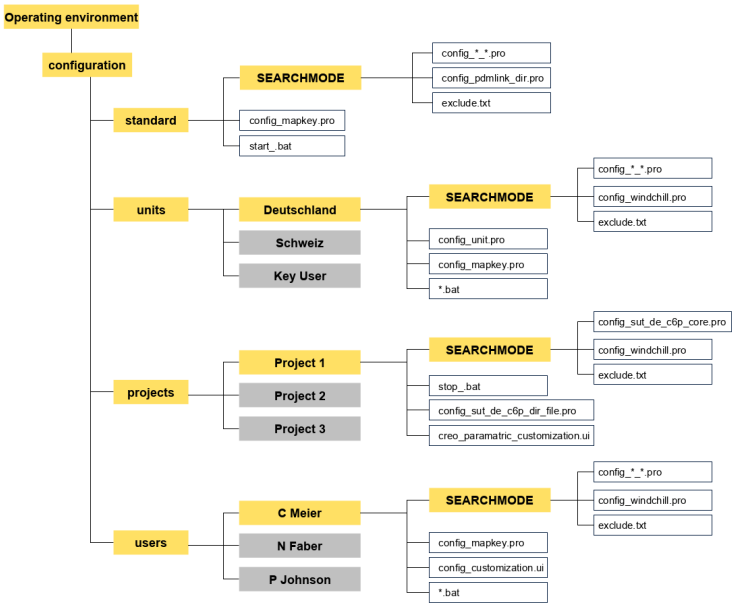
1. Standard (global directory)
2. Standard searchmode, if Windchill is active
3. Unit (individual unit subdirectory
4. Unit searchmode, if Windchill is active
5. Project (individual project subdirectory)
6. Project searchmode, if Windchill is active
7. User (individual user subdirectory)
8. User searchmode, if Windchill is active
9. Userdata (configurable)

© 2020 INNEO Solutions GmbH

Warning: Starting with GENIUS TOOLS Starter 6.0.1, a new configuration mechanism is in use. When you update from version 6.0.0.0 or migrate from Startup TOOLS 20xx, the files in the **projects** directory, that is, the general configuration files, will be moved to a new directory named **standard**. Project-specific configuration files located in subdirectories under **projects** will not be moved.

Example project configuration

The following graphic illustrates the call hierarchy for user **C Meier** starting **Project 1** in the unit **Deutschland**.



5.12.2 Searchmode directory

The searchmode directory is part of the calll hierarchy when you are working with Windchill. It contains additional settings that are defined on starting Windchill, as well as commented-out settings for Creo projects. Commenten-out settings are located in the file **exclude.txt**.

As soon as Windchill is activated, the searchmode directories within all configuration directories relevant to a project will also be included into the configuration call hierarchy. All configuration files within the searchmode directories will be used.

Please note: It can be useful to add a special directory under a project directory. If you create a special directory called SEARCHMODE within a project directory, this directory will also be used in determining the configuration settings.

Searchmode directories are used according to the same hierarchy as configuration files:

1. in the standard directory
2. in the unit directory
3. in the project directories
4. in the user directory

© 2020 INNEO Solutions GmbH

5.12.3 Configuring an operating environment with batch files

If you want to execute additional instructions before Creo is started or when Creo is stopped, you can place project-specific batch files in the directory **..\configuration\projects\<PROJECT>**. The batch files names have to start with one of the prefixes `prestart_`, `start_` or `stop_`. You can use batch files to set additional environment variables or copy additional data.

Warning: Starting with GENIUS TOOLS Starter 6.0.1, a new configuration mechanism is in use. When you update from version 6.0.0.0 or migrate from Startup TOOLS 20xx, verify references to configuration files in your batch files. References to **..\configuration\projects** have to be changed to **..\configuration\standard**.
Batch files in the project-specific subdirectories under **projects** do not have to be changed.

Types of batch files

Prefix	Start time	Comment
prestart_	Started before the Creo Parametric configuration in created	When a project is started, GENIUS TOOLS Starter calls the **prestart_** batch files before the **config.pro** files for the project are assembled.
start_	Started before Creo Parametric 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 Creo Parametric is closed	Please note that **Enable stop batches** has to be set to **Yes** in the Project Configurator under **Configuration** > **(Select group)** > **Creo Settings** > **Startup Settings.**

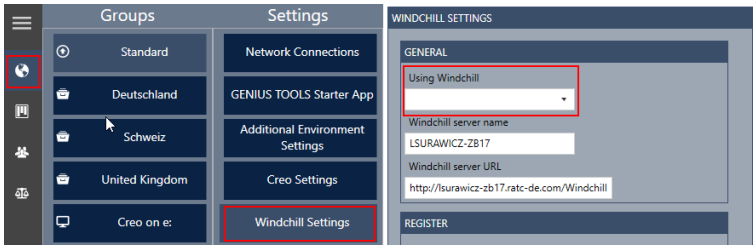
Warning: The batch file types **runonce_** and **env_** are not supported any longer. If you want to keep using your batch files, rename them to **start_**, e.g., **env_inneo.bat** to **start_inneo.bat**

5.13 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**

© 2020 INNEO Solutions GmbH

Windchill. To do so, go to **Configuration** > **Standard** > **Windchill settings** > **General** > **Using Windchill** > **Yes**.



You also need to set search paths for all library directories and load them when Windchill is used, as long as not all Creo data has been transferred from disk storage to Windchill. There is a template **config_searchpath.pro** file in the **SEARCHMODE** directory under the project directory:
<GTS-OperatingEnv>\configuration\projects\<ProjectDir>\SEARCHMODE. You can adapt this template file to your setup.

5.13.1 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.)

5.13.2 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

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.

© 2020 INNEO Solutions GmbH

5.13.3 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.

5.13.4 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.
– 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.

Automatic server registration is configured under **configuration** > **(Select group)** > **Windchill settings**. The Windchill settings are expanded once you set **Use Windchill** to **Yes**.

▶ General

Use Windchill
Activate/deactivate the Windchill server.
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.

© 2020 INNEO Solutions GmbH

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.

Windchill context
Context of the workspace.

5.13.5 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 project and make the project-specific Windchill settings in the **Windchill** tab.
See also Workspace for Windchill 85.

5.14 Access rights

The following access rights for software functionality can be assigned to users or groups
1. GENIUS TOOLS Starter App:
– Can enter Project Configurator

© 2020 INNEO Solutions GmbH

– Can pause synchronization
– Prevent switch to local installation
– Can see licenses
– Can borrow licenses
– Can disable Creo config files
– Can see auto projects
For users that do not have a function access right, the corresponding control is not displayed in the UI of GENIUS TOOLS Starter App. For more information on the GENIUS TOOLS Starter App UI, please refer to User interface 112.
2. GENIUS TOOLS FOR CREO
– Is GTfC admin
– Prevent switch to local installation

Please note: Not every functionality can be controlled using access rights. GENIUS TOOLS Starter can be started without an express permission, and a project that is visible to a user can always be started by that user

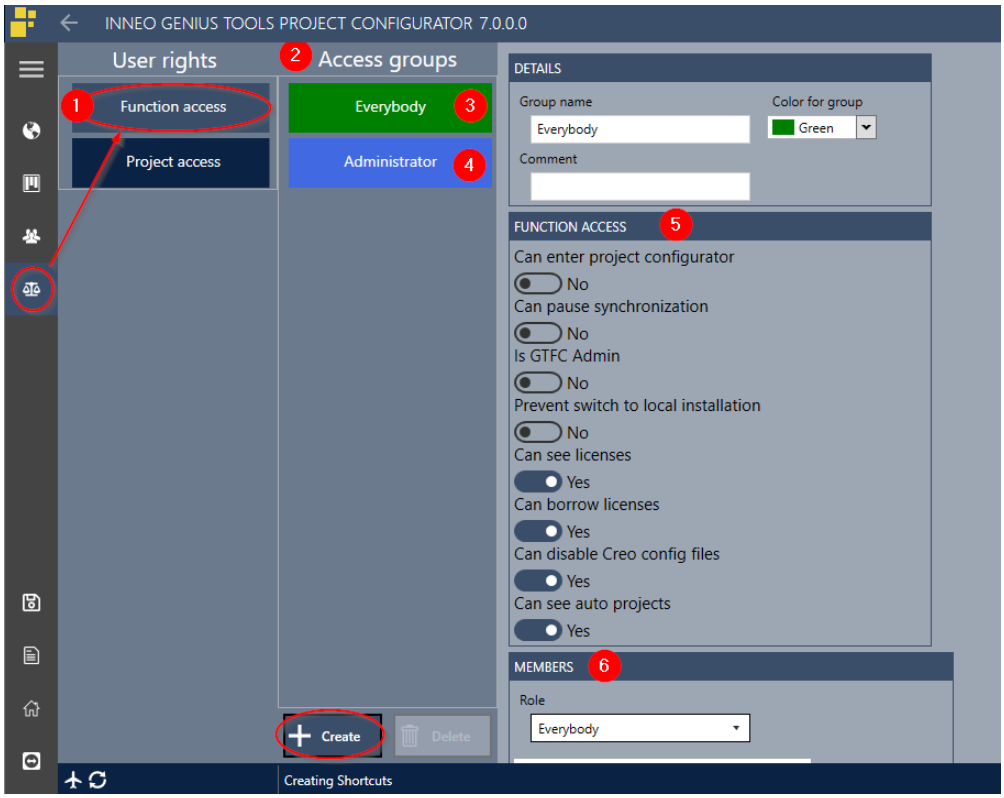
For a description of the individual rights, please refer to Assigning access rights 100.

5.14.1 Creating function access groups

Use function access groups to manage access rights for individual users or for groups. The function access groups **Everyone (3)** and **Administrator (4)** are pre-configured defaults. **Everyone** contains all Windows users known to the system, even if they have not yet been configured in Project Configurator. This groups is created automatically to avoid having to manually enter every user in Project Configurator.
Anyone who starts GENIUS TOOLS Starter from the Caddepot can use the function access group **Administrator**.

Please note: The function access groups **Everyone** and **Administrator** have to be considered separately when updating to GENIUS TOOLS Starter 6.0.1 or migrating from a Startup TOOLS environment. Please refer to the release information.

© 2020 INNEO Solutions GmbH



To create a new function access group, select **Function access** (1), then click **Create**. Under **Details**, enter a name and, optionally, a comment for the new group. For visualization of group assignment in the user view (**Resources** > **Users**), you can specify a color for the group.
Each function access group has to have an assigned role (6). You can give the function access group the same name as the role for an easy grasp.
A role groups users or computers. To create a role, got to **Resources** > **Roles**. By default, the role **Everyone** is assigned to the function access group **Everyone**, and the role **Administrator** to the function access group **Administrator**.

Please note: A user can be assigned to multiple groups or roles. In this case, the user will have all rights granted by their groups or roles, meaning that a right will not be revoked by an assignment to another group that does not have this right.

▶ Members

Role

Assign a role. To create new roles, go to **Resources** > **Roles.**

▶ LDAP – User – Computer

This section shows the users and computers assigned to the role. To assign elements to a role, go to **Resources** > **Roles** > **Select role.**
If the checkbox before the user or computer name is set, the corresponding user or computer is locked. To make changes to the lock status, go to **Resources** > **Users** > **Create or edit user**, or to **Resources** > **Roles** > **Select role** > **LDAP.** (See also Block users or computers 72.)

© 2020 INNEO Solutions GmbH

Add user
Add users to the group to give the group's rights to them.

5.14.2 Assigning access rights

To assign access rights to a function access group, select the group under **Access right > Function access**. Edit the settings under **Function access**.

▶ Function access

Can enter Project Configurator
The user may 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 confirm the message.
Default for group Administrator: Yes
Default for group Everyone: No

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 uesers.

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 group Administrator: Yes
Default for group 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 from the Cadpool directory.

Is GTfC admin
The user can access the editors in the GENIUS TOOLS for Creo (GTfC).
Default for group Administrator: Yes
Default for group Everyone: No

Prevent switch to local installation
By default, if the GENIUS TOOLS Starter App is started from the Caddepot directory on the administration computer, GENIUS TOOLS Starter App will switch automatically to the local Cadpool. If **Prevent switch to local installation** is set to **Yes**, there is no automatic switch and

© 2020 INNEO Solutions GmbH

the user can work on the data in the Caddepot.
Default for all groups: 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.

Can see licenses
The user can see the license statistics in GENIUS TOOLS Starter App. To use this option, you also have to set **Show licenses** under **Configuration** > **GENIUS TOOLS Starter App** > **Licenses** > **Show licenses** to **Yes**.
Default for group Administrator: No
Default for group Everyone: Yes

Can borrow licenses
The user can access the functionality for borrowing licenses in GENIUS TOOLS Starter App. To use this option, also set **Can see licenses** to **Yes**.
GENIUS TOOLS Starter App will borrow the Startup TOOLS license, then start the borrowing process for PTC. The PTC borrowing process will borrow the Creo and GENIUS TOOLS for Creo licenses.
Default for group Administrator: No
Default for group Everyone: Yes

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

Can disable Creo config files
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.
Default for group Administrator: No
Default for group 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 see auto projects
GENIUS TOOLS Starter will search for other supported applications on the local application computer, for example Keyshot or Creo Elements / Creo Direct. The applications can be started from GENIUS TOOLS Starter App. However, it is not possible to configure the auto projects.
Default for group Administrator: No
Default for group Everyone: Yes

Please note: Licenses for auto projects cannot be checked by GENIUS TOOLS Starter.

© 2020 INNEO Solutions GmbH

5.15 Creating projects from other applications

GENIUS TOOLS Starter allows you to also create projects that run on any other program. An administrator can set up all needed programs and files and thus make GENIUS TOOLS Starter App the central access point for users.
Projects that run on other programs are created and managed in the project lists in the menu item **Apps.** This opens a dialog with the following, simplified settings:
– general project settings
– complete start command
– startup directory
– project and data directory
The project directory can contain project-specific batch files which are executed at program start or after the program ends. Note that for an Apps project only batch files that are stored in the project directory are used and not, as with Creo projects, also those in directories of higher order.

Types of batch files

Prefix	Start time	Comment
prestart_	Started before the Creo Parametric configuration in created	When a project is started, GENIUS TOOLS Starter calls the **prestart_** batch files before the **config.pro** files for the project are assembled.
start_	Started before Creo Parametric 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 Creo Parametric is closed	Please note that **Enable stop batches** has to be set to **Yes** in the Project Configurator under **Configuration** > **(Select group)** > **Creo Settings** > **Startup Settings.**

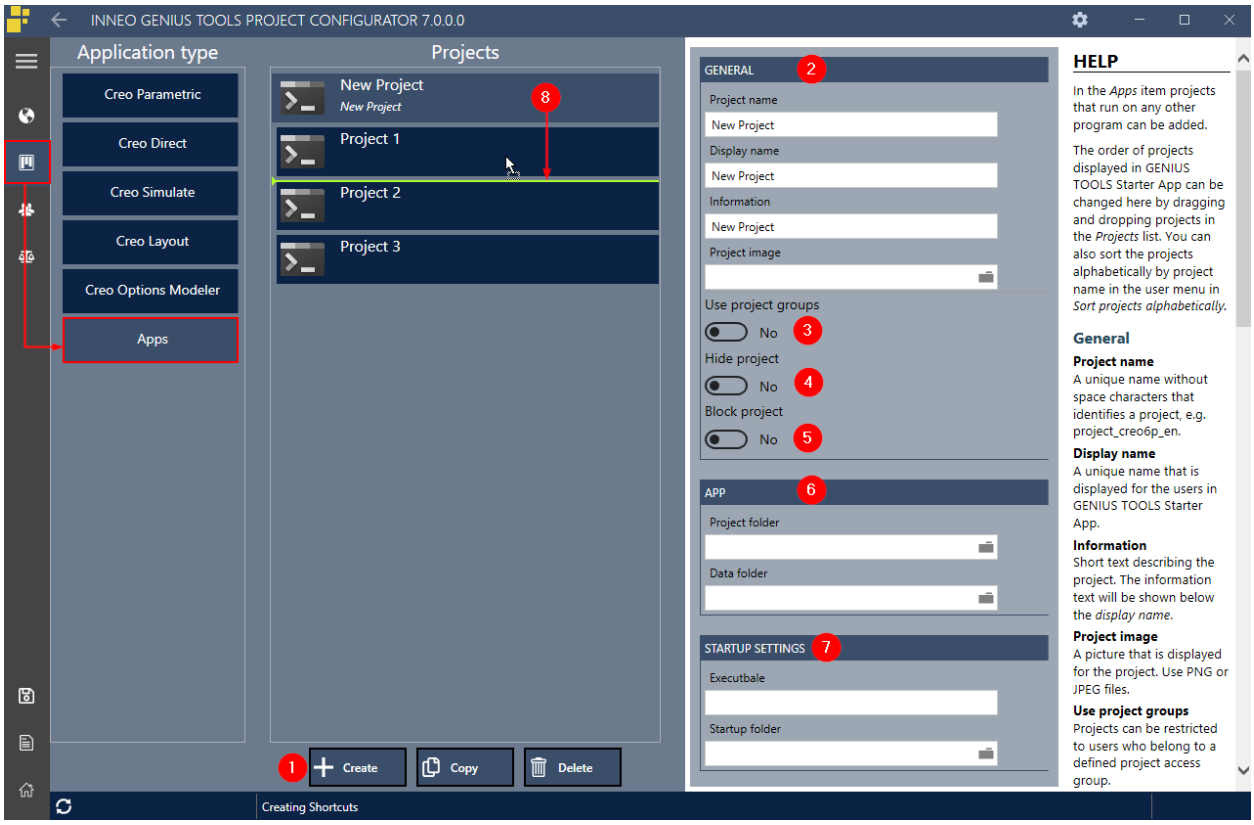
Warning: The batch file types **runonce_** and **env_** are not supported any longer. If you want to keep using your batch files, rename them to **start_**, e.g., **env_inneo.bat** to **start_inneo.bat**

Setting up Apps projects

To set up projects that run on other applications than Creo, follow these steps:

1. Add a new Apps project
Create a new project in the main menu **Projects** > **Apps** > **Create.** See also the chapter Creating a new project 78.

© 2020 INNEO Solutions GmbH



Dialog box for Apps projects

2. In the right dialog specify how the project is to be displayed in GENIUS TOOLS Starter App

▶ General

Project name

A unique name without space characters that identifies a project, e.g. project_creo6p_en. The default setting **New Project** can be overwritten. The project name can be changed at any time.

Display name

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 name**.

Information (optional)

Short text describing the project. The information text will be shown below the **display name**.

Project image (optional)

A picture that is displayed for the project in GENIUS TOOLS Starter App. Use PNG or JPEG files.

3. Use project groups or not

Projects can be restricted to users who belong to a defined project group. Members of a project group can only view in GENIUS TOOLS Starter App the projects available to them. See also chapter. %TARGETTITLE%. 88

© 2020 INNEO Solutions GmbH

4. Hide project or not
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. See also chapter %TARGETTITLE% 79.

5. Block projects or not
A blocked project is neither displayed nor can it be opened.

6. Specify folders for app

▶ App

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.

4. Specify startup settings

▶ 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 computer (such as *.docx, *.html).

5. Define display order
The order of projects displayed in GENIUS TOOLS Starter App can be changed here by dragging and dropping projects in the *Projects* list. You can also sort the projects alphabetically by project name in the user menu in **Sort projects alphabetically.** This menu item is only displayed when navigating in the **Projects** main menu.

5.16 Settings for GENIUS TOOLS Starter App

This section explains how to configure GENIUS TOOLS Starter App for the users. Settings for GENIUS TOOLS Starter App are made from Project Configurator. In addition, as an administrator, you can send messages to the users that will be displayed via the message symbol in the GENIUS TOOLS Starter App sidebar.

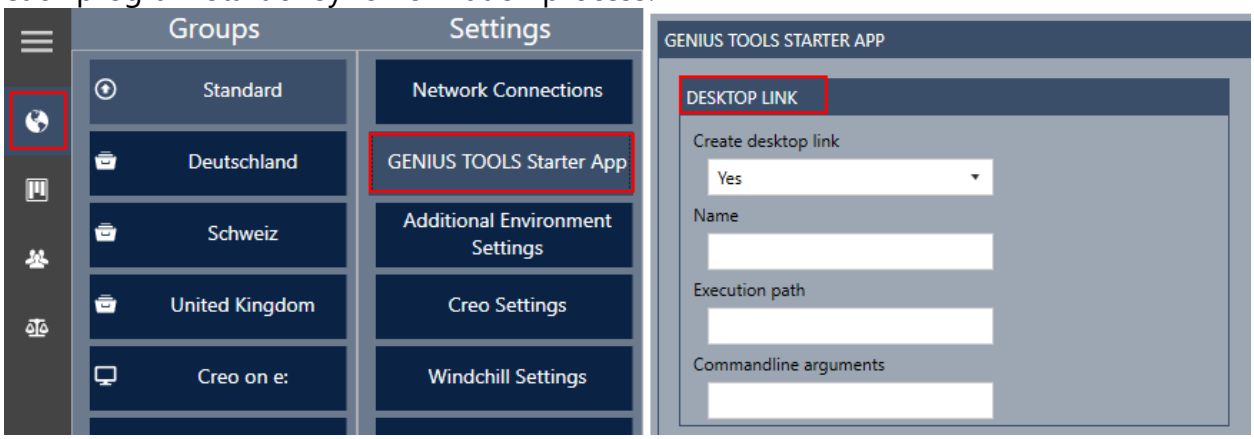
5.16.1 Configuring the desktop link

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

© 2020 INNEO Solutions GmbH

determines that the desktop link is created or updated according to the configuration with each program start or synchronization process.



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.

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!

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 the image file in the **_Images** directory of the operating environment using the file name **<operating_environment_name>.ico**.

Example result

© 2020 INNEO Solutions GmbH

5.16.2 Support link and logging

Under **GENIUS TOOLS Starter App** > **General**, you can define whether users should have access to the online support function (TeamViewer). This setting displays or hides the TeamViewer symbol in the sidebar of GENIUS TOOLS Starter App.

▶ General

Hide support
Hides the **TeamViewer** icon in the GENIUS TOOLS Starter App.
Yes: The user sees the TeamViewer icon.
No: The TeamViewer icon is not visible.

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.
No (Default): Projects are not included in the log file.

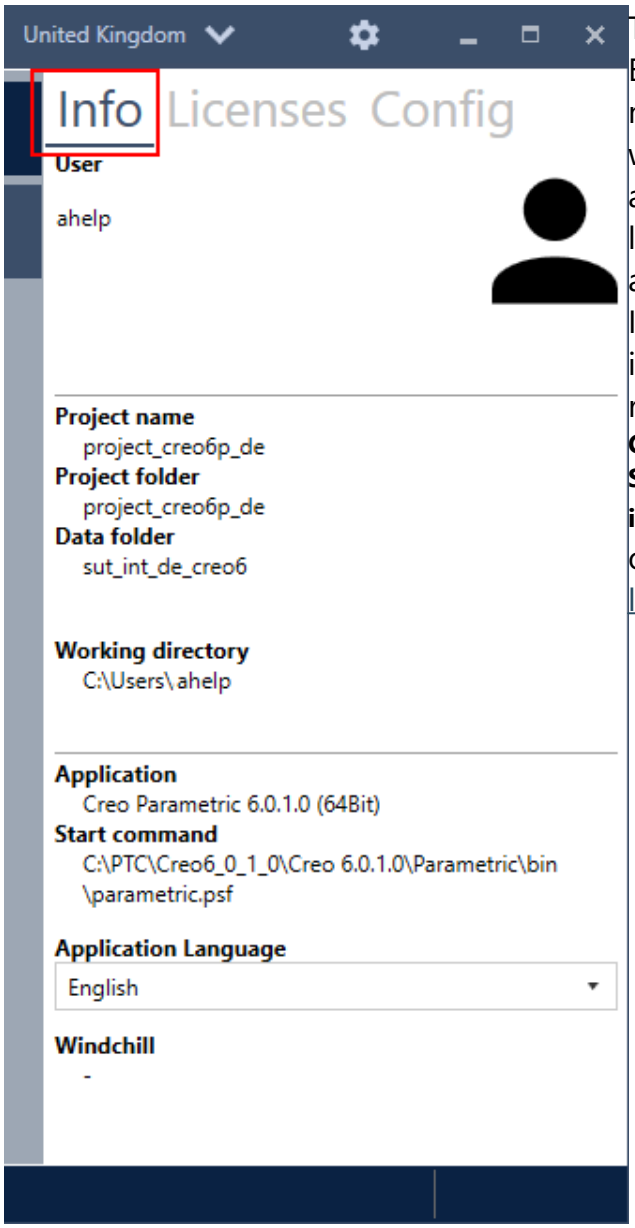
Write crash report to Caddepot directory
Unexpected errors are written to a log file by GENIUS TOOLS Starter App (**gts_error.log**). The file can also be copied to the server and is saved there as **serveronly_ErrorLog\<Computer_name>.log.**
Yes: The client will copy its log file if an unexpected error occurs.
No (Default): The log file is only available on the client computer.

5.16.3 Information pane

The information pane is on the right of the user interface of GENIUS TOOLS Starter App. It contains the tabs **Info, Licences** and **Config**. A fourth tab, **Error**, is displayed if an error has occurred and shows error log information. (See also chapter GENIUS TOOLS Starter App > Information pane. 113)
As for some of the information in these tabs, the administrator can choose to display or hide them to users. This is configured in GENIUS TOOS Project Configurator and will be explained in the following chapters.

© 2020 INNEO Solutions GmbH

5.16.3.1 Info tab



The Info tab contains the following: Benutzerinformationen: user name, project name, project directory, data directory, working directory, the desktop application and the PSF key used for this project, the language in which Creo starts the project, and the use of Windchill.
In the info tab a user can select the language in which the project start, if he has an access right. This is granted by the administrator in **Configuration > (select) group > GENIUS TOOLS Starter App > Projects > Creo language selectable in GENIUS TOOLS Starter App**. (See also chapter on Project settings: warnings and language 109.)

5.16.3.2 Licenses tab

Under **GENIUS TOOLS Starter App > Licenses**, you can define which license information will be displayed to users in the GENIUS TOOLS Starter App Information panel 113 under the **Licenses** tab.

▶ Licenses

Show licenses
Specifies whether the number of available licenses is displayed in GENIUS TOOLS Starter App.
Yes: The client obtains the license status for Creo projects. This can prolong the

© 2020 INNEO Solutions GmbH

validation of a project, depending on the response time of the PTC license server.
No: The license status for Creo projects is not established. The settings **Get extensions**, **Calculate licenses by extension** and **Identify license users** will not be used.

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 Windows user name is replaced by the GENIUS TOOLS Starter alias.
No: No user names are obtained or displayed.

Please note: If the alias should be displayed, the users have to be configured under **Resources** > **Users**. Otherwise, the Windows user name will be displayed.

Timeout for FlexNET server

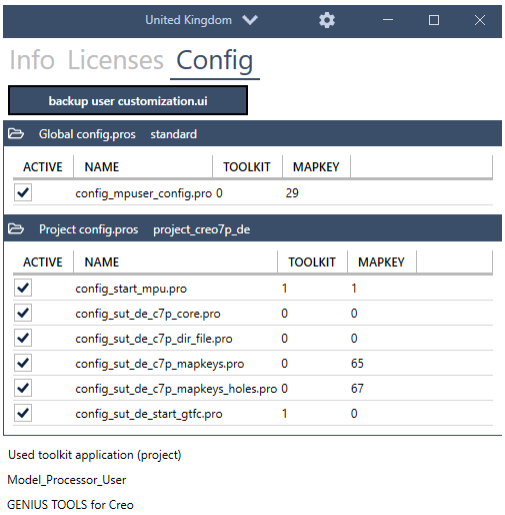
Enter a maximum duration for the license query in seconds. The license servers are pinged before the license query is started. If a server does not react within the specified time, is is not considered in license calculation.
The duration you enter is also used as a maximum time for the license query.
If you expect licenses to be unavailable form time to time, set the timeout to 0, which

© 2020 INNEO Solutions GmbH

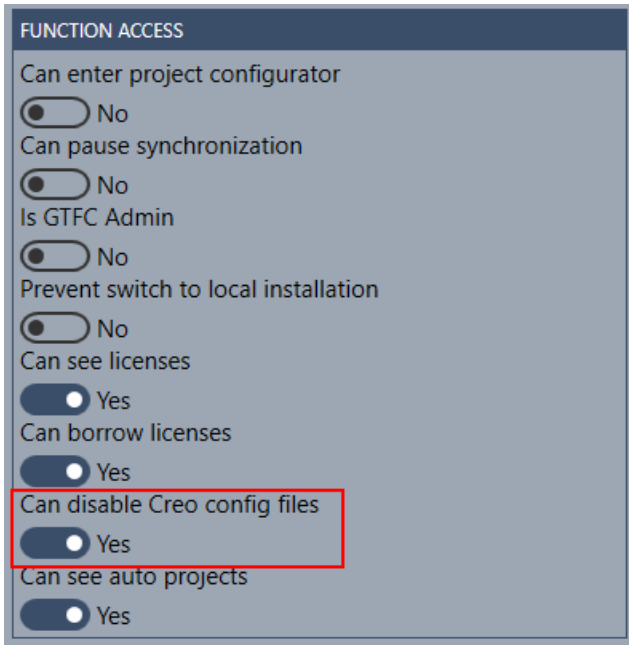
means that there is no timeout specified.
Default: 0 (no timeout specified)

5.16.3.3 Config tab

The **Config** tab shows the user which configuration files are used for configuring the project and in which directories these files are stored. There is also the button **backup customization.ui,** which creates a backup copy of the user-specific file **customization.ui,** which contains settings for the user interface of Creo. (More information in Security mechanism with GENIUS TOOLS Starter App.) 91
User can deactivate any of the listed configuration files, if they are granted the right to do so by the administrator. This right can be granted by switching the radio button **Can disable Creo config files** to **Yes** in **Access rights > Function access > (select) access group > Function access.**



Der Konfig-Tab in GENIUS TOOLS Starter App



Settings in GENIUS TOOLS Project Configurator

5.16.4 Project settings: warnings and language

Under **Configuration > Group (select) > GENIUS TOOLS Starter App > Projects**, you can configure how projects should be displayed in the project list if there is no license available or if there are license extensions missing. Also, you can define whether users can change a project's Creo language.

© 2020 INNEO Solutions GmbH

▶ Projects

Display invalid projects
Specifies how projects with missing licenses are displayed to the user. To use this setting, **Show licenses** has to be set to **Yes**.

No: Projects without a valid license are hidden.
Yes, as warning: Projects without a valid license are displayed with a yellow background and can be started regardless.
Yes, as error (Default): Projects without a valid license are displayed with a red background and cannot be started.
Yes, deactivated: Projects without a valid license are displayed with a gray background and cannot be started or selected.

Please note: Projects for which no corresponding Creo version can be found are never displayed. In case the Creo version is found, but no PSF key, you can choose between not displaying the project and displaying it as warning, see Assigning Creo licenses to projects. 82

Creo language selectable in GENIUS TOOLS Starter App
Specify whether users are allowed to change the language of Creo. If this option is set, GENIUS TOOLS Starter App displays a language selection control to the users.

Please note: This option will only have an effect if the language is not set explicitly for the project. Also, the selected language has to be available in the Creo installation used. This is not checked by GENIUS TOOLS Starter.

Yes: The user has the possibility to change the language of a project.
No: The user cannot change the default language.

5.16.5 Operating environment clean-up

Under **GENIUS TOOLS Starter App** > **Cleanup of working environment**, 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.

5.16.6 Sending messages to the users

GENIUS TOOLS Starter includes a functionality for administrators to send messages to the users. The messages are displayed to the users as a text document on starting GENIUS TOOLS Starter App or on synchronization.

Sending a message to the users

Step 1: Go to the operating environment's **_Information** directory.

© 2020 INNEO Solutions GmbH

Step 2: Create a simple text (TXT) file with your message. The name of the text file has to start with the prefix **alert_**, e.g., **alert_message.txt**.
You can also use a PDF file with the file name prefix **alert_**.
All documents marked with the **alert_** prefix will be displayed once automatically on synchronization. Afterwards, users can access the documents by clicking on the message symbol in the GENIUS TOOLS Starter App sidebar 118.
Whenever you make a change to a message document, it will automatically be displayed to the users again.

© 2020 INNEO Solutions GmbH

6 GENIUS TOOLS Starter App

GENIUS TOOLS Starter App lists the projects defined in GENIUS TOOLS Project Configurator and lets the users start them.
If changes are made to the central configuration, these changes are taken up by GENIUS TOOLS Starter App with the next synchronization.

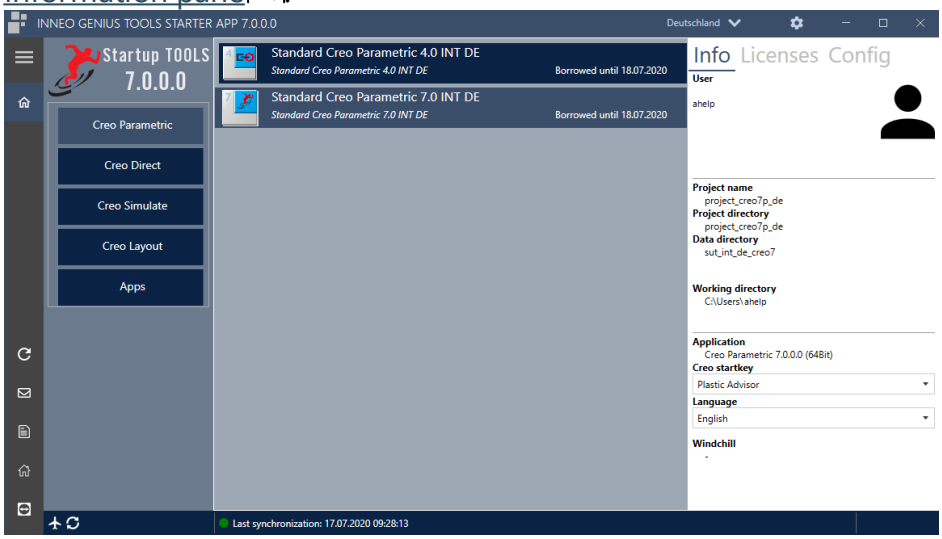
6.1 Starting GENIUS TOOLS Starter App

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 User interface

GENIUS TOOLS Starter App comes with a clearly structured user interface. Depending on the configuration, for example, license information on the PTC products configured for each project is listed in the UI.
For a description of the information displayed in the right pane, please refer to Information pane 113.



Project selection in GENIUS TOOLS Starter App

Project selection

The left pane shows the available desktop applications.

© 2020 INNEO Solutions GmbH

Select the desired application, e.g., **Creo Parametric**. The projects configured for the selected application are displayed in the middle pane.
Double-click to start the desired project. The desktop application is started using the configuration defined for the selected project.

License check for projects

In GENIUS TOOLS Project Configurator, your administrator can define whether GENIUS TOOLS Starter App should check for available Creo licenses on start, and how projects should be displayed if there is no license available for them. Projects without a license can be treated as follows:
– do not display: The projects are not visible for the user.
– display: The projects are marked with a red background and cannot be started.
– display as inactive: The projects are marked with a gray background and cannot be started.
– display with warnings. The projects are marked with a yellow background and can be started.

6.3 Information pane

The rightmost pane in GENIUS TOOLS Starter App contains general information on the user, the configured projects and the licenses used. The information is presented in the tabs described below.

Error

The **Error** tab is only displayed if an error has occurred and shows error log information.

Info

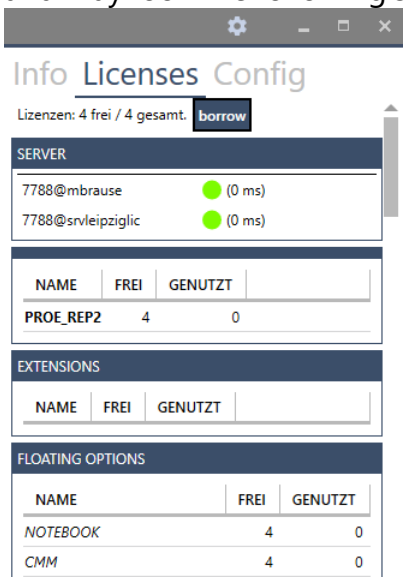
The **Info** tab contains information on the current user and on the selected project.
User information:
– The user is identified by their GTS alias. If no GTS alias has been specified, the Windows user name is displayed.
– The user image sized 100 x 130 px has to be located in the directory **\userdata\%USERNAME%** under the file name **%USERNAME%.png**.
Project information:
– Project name
– Project folder
– Data folder
– Working directory
– Application: the desktop applications used for this project
– Start command: the PSF key used for this project

© 2020 INNEO Solutions GmbH

– Application language: the language in which Creo starts this project. The administrator can give a user the right to choose the language. (See Project settings: warnings and language 109.)
– Windchill

Licenses

The **Licenses** tab contains information on the license servers used and on available licenses and may look like following screenshot:



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.

Please note: If you are running Creo Parametric 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 hint **Multiple usage** is displayed. This type of listing is meant to show that you can start additional instances of Creo because doing so does not require additional licenses.

The administrator defines which information on licenses is displayed to the user. (See chapter Settings for GENIUS TOOLS Starter App > Licenses tab 107.)
If a user is permitted to borrow licenses, the button **Borrow** is displayed.

Borrowing licenses

1. In the **Licenses** tab, click **Borrow**. 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 and the Creo license borrowing dialog is displayed.
3. In the Creo license borrowing dialog, select the required startkey and the borrowing term in days and click **Start**. Creo is started with the borrowed licenses.

Returning licenses

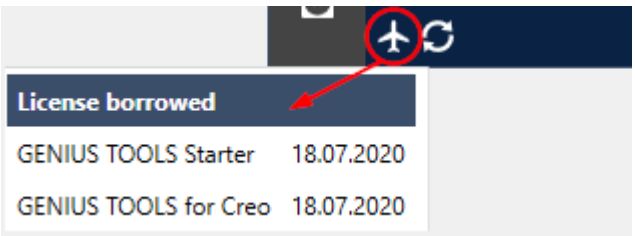
To return borrowed Startup TOOLS licenses, select **Return borrowed licenses** in the user menu ⚙.

© 2020 INNEO Solutions GmbH

Display of borrowed licenses

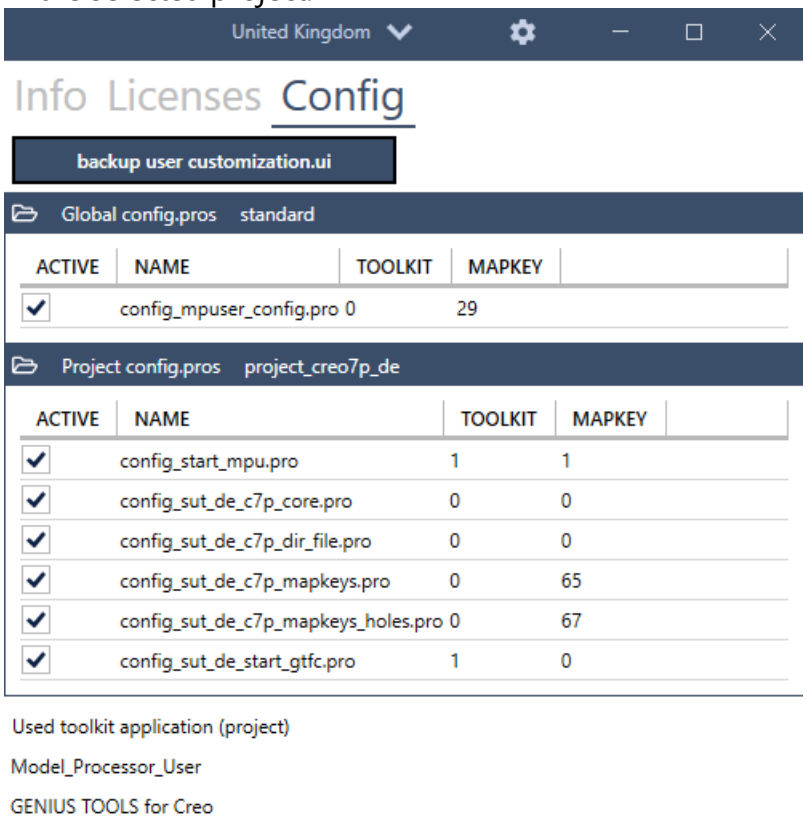
For projects: projects with borrowed licenses can be recognized quickly in the main window by the note on the right.

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



Config

The **Config** tab contains information on the **config.pro** files and additional applications used in the selected project.



Your administrator defines whether you can deactivate the use of individual configuration files in the **Config** tab. (See chapter Settings for GENIUS TOOLS Starter App > Config tab 109.) To deactivate a configuration file, remove the check mark from the check box for the desired file.

You can create a backup copy of the user-specific file **customization.ui,** which contains settings for the user interface of Creo. To do so, click **Backup customization.ui**. To restore the

© 2020 INNEO Solutions GmbH

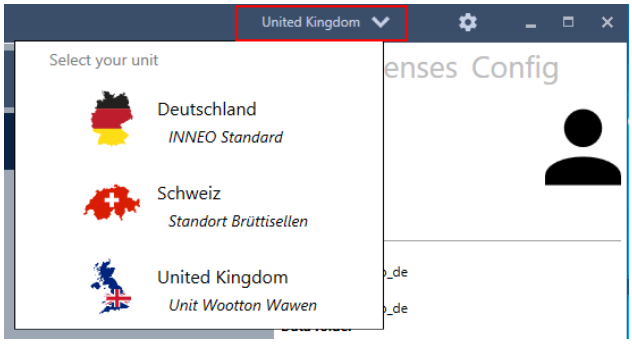
customization.ui from a backup copy, click **Restore customization.ui**. For more information consult Security mechanism with GENIUS TOOLS Starter App. 91

6.4 Working with units

When you are using a subscription license, **units** can be defined as an additional configuration layer to reflect different company branches or divisions. (See chapter Configuring heterogeneous environments. 64)
If units are used in your environment, the current unit is displayed in the header of GENIUS TOOLS Starter App.

Unit information in the header

If a user account is assigned to multiple units, the user can switch between units via the header.



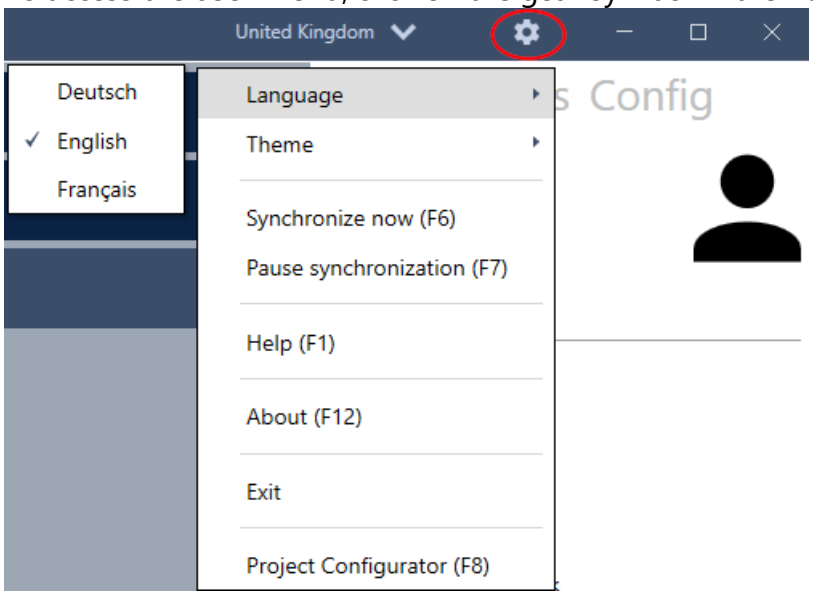
Unit selection

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. 67)

© 2020 INNEO Solutions GmbH

6.5 User menu

To access the user menu, 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. 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 from the central Caddepot, regardless of the specified synchronization interval, and loads any updated files into the Cadpool.

Pause synchronization (F7)

GENIUS TOOLS Starter stops synchronization until it is re-started by the user. 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.
Pause synchronization if you want to prevent local changes from being overwritten until they have been added to the Caddepot by your administrator.

© 2020 INNEO Solutions GmbH

Please note: Your administrator defines whether you can pause the synchronization. If you are not allowed to pause the synchronization, the item **Pause synchronization** is not displayed in the menu.

Project Configurator (F8)

Opens GENIUS TOOLS Project Configurator.

Please note: Your administrator defines whether you can access GENIUS TOOLS Project Configurator via the access rights 97. If you are denied access, the item **GENIUS TOOLS Project Configurator** is not displayed in the menu.

6.6 Sidebar

The sidebar contains the functions **Refresh Projects**, **Message from Administrator**, **Open log file**, **Open Home** and **Online help**.

Refresh Projects (F5)

Refresh Projects reloads all project configurations from the administration computer in the same way as when you restart the application.

Message from Administrator (F4)

New messages from your administrator will be displayed once automatically after synchronization. If you want to reread a message later on, click on the letter symbol in the sidebar. Administrator messages are saved as text files in the **_Information** directory, see also Sending messages to the users 110.

Open log file

Opens the log file that is written on each project start. The log file is saved in the application computers user directory.

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 home

Opens the user directory in the file manager.

Online help

Online help opens an internet link to the INNEO Teamviewer software for remote support.

© 2020 INNEO Solutions GmbH

6.7 Footer

License mode

The GENIUS TOOLS Starter App footer shows the current license mode by displaying an icon.

– full version
– borrowed license
– failsafe mode
– educational or home use

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 9.

– 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.
– local operating environment without synchronization
– synchronization of toolkit applications is paused as long as Creo is running

The synchronization status with the date and time of the last synchronization is displayed in the middle area of the footer.

Application icon

As long as a supported desktop application is running, the application icon is displayed in the footer.

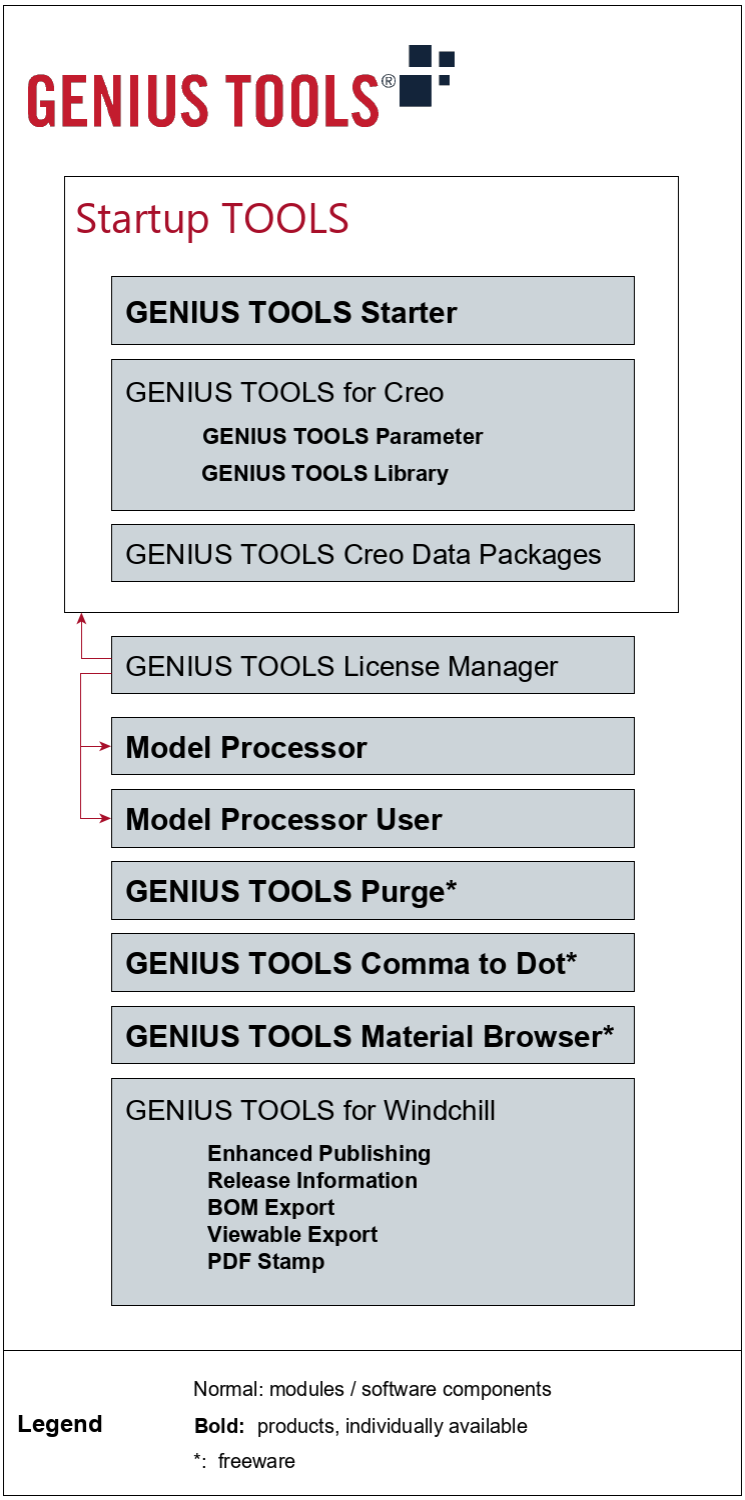
© 2020 INNEO Solutions GmbH

7 GENIUS TOOLS product overview

This chapter provides graphics showing the modules and products of the GENIUS TOOLS product family.

© 2020 INNEO Solutions GmbH

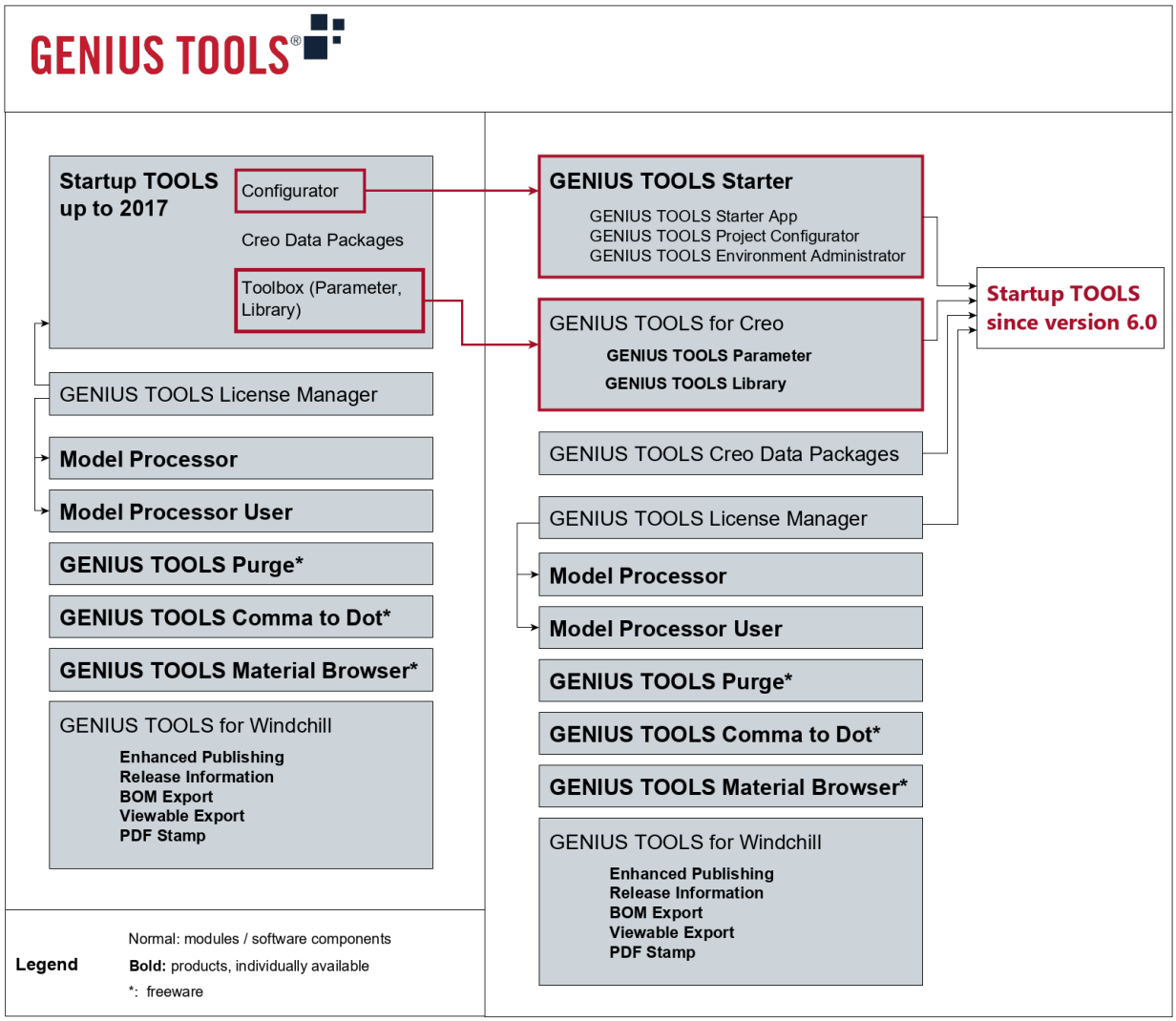
7.1 GENIUS TOOLS product family



GENIUS TOOLS products with Startup TOOLS 6.0. and later versions.

© 2020 INNEO Solutions GmbH

7.2 Startup TOOLS product development



Development of Startup TOOLS from an integrated to a modular product.

© 2020 INNEO Solutions GmbH

8 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.

Creo
CAD software by PTC with the applications Creo Parametric, Creo Elements, Creo Direct.

Creo startkey (also: PSF key, start command)
Configured start command that opens Creo with one or several defined licenses or license extensions. Stored as PSF file in PTC bin directory.

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
A defined group of configured Windows computers. Contains settings in which the computers' configuration differs from the general system-wide configuration.

Configuration file
File which determines settings for a Creo application. There are four types of configuration file: **config.pro**, **customization.ui**, **config.sup** and **config.val**.

config.pro file
Most important Creo configuration file, defines user settings.

config_*.pro files
Configuration files in GENIUS TOOLS Starter, e.g., **config_sut_de_c5p_mapkeys.pro**, that are assembled to form a **config.pro** file.

config.sup file
Creo configuration file which contains settings that cannot be changed by the users, e.g., to ensure drawing standards.

config.val file
Creo configuration file which contains validation settings for data import.

customization.ui file
Creo configuration file which contains user interface customizations for a user.

© 2020 INNEO Solutions GmbH

Data directory
Main directory for all data related to an operating environment at **<GTS-OperatingEnv>\data**.

Educational license
License for academic institutions.

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 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**.

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 Windows user name will be used.

GTS Alias Long
Long user alias. The long alias is available in Creo via the environment variable `%`

© 2020 INNEO Solutions GmbH

GTS_USERLONG%.

GTS Alias Short
Short user alias. The short alias is available in Creo via the environment variable %GTS_USERSHORT%.

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.

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.

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.

Perpetual license, permanent license
License that allows using a defined version of a software for an unlimited period of time.

PDMLink
Component of the Windchill software product family that is used for product data management.

© 2020 INNEO Solutions GmbH

PTC
The software company that develops Creo.

Project
Collection of configurable application properties such as project directory, data directory and license, e.g. for Creo Parametric.

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%**

Role
Group of users or computers that are assigned access rights to projects and GENIUS TOOLS Starter App functionality.

User group
A defined group of configured Windows users. Contains settings in which the users' configuration differs from the general system-wide configuration.

Searchmode directory
Subdirectory of the directory **Standard**, **Units**, **Projects** or **Users** which is included into the call hierarchy for configuration files and batch files if Windchill is active.

Startup TOOLS
Software product family that comprises the products GENIUS TOOLS Starter and GENIUS TOOLS for Creo (GENIUS TOOLS Library, GENIUS TOOLS Parameter, GENIUS TOOLS Quick Access), 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.

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.

Subscription license
License that allows using a software for a limited period of time.

© 2020 INNEO Solutions GmbH

TeamViewer
Third-party software used by INNEO Solutions GmbH to provide remote support.

UDF
Abbreviation for user-defined feature, a template for repeatedly required Creo features.

Unit
Group of users that belong to a company department defined either geographically or organizationally. Users can be dynamically assigned to units using LDAP queries.

Windchill
Software product by PTC for managing product data over the entire product life cycle.

© 2020 INNEO Solutions GmbH

9 Copyright

Copyright 2020 by:
INNEO Solutions GmbH
Rindelbacher Str. 42
73479 Ellwangen
Germany
This documentation is protected by copyright. All rights reserved.
Without prior written consent of an authorized representative of INNEO Solutions GmbH it must not be copied, photocopied, reproduced, translated, communicated or converted to electronic or machine readable form in whole or in part.
The unauthorized use of the documentation can lead to a claim for liquidated damages or legal prosecution. INNEO Solutions GmbH does not accept liability for possible faulty information in this documentation and the consequences resulting from such.

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

Registered trademarks and trade names of INNEO Solutions GmbH:
GENIUS TOOLS, Startup TOOLS, INNEO