**Start using Tekla Structures 2023**

The purpose of this document is to ensure that you as a Tekla Structures user can quickly and easily switch to Tekla Structures 2023.

When you switch to Tekla Structures 2023 as a Tekla Structures user, you can use the settings and files that you have customized in a previous Tekla Structures version. Tekla Structures will not copy them automatically, you have to do it manually. That is the reason for logbook.

We recommend that you look at the following ponts of attention regarding changes/customizations/settings you made in your previous Tekla Structures version. Compare them to your situation and, if necessary, take the steps that apply to you. This allows you to continue working with the new version quick and easily.

It is recommended to document you changes in this Word document as a logbook, possibly complemented with your personal points of attention to make sure that you always know what your changes are.

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| --- | --- |
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In the list above you will see an addition for some points of attention (not applicable for model templates). This indicates that the relevant settings can be saved in model templates. See point 13 for more information about model templates.

In addition, this document regularly refers to certain topics via links. If this link does not work immediately (because you have to log in to Tekla User Assistance), you can right-click on the link and select the **Copy hyperlink** option. Then paste the link into your internet browser and click **Enter**, the article will open.

1. **Installing Tekla Structures**

Make sure that the Tekla Structures version is installed in the correct folder:



For more information about installing Tekla Structures 2023, click [here](https://support.tekla.com/doc/tekla-structures/2023/ins_about_tekla_structures_installation).

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1. **License Administration Tool**

Check if the license server needs to be updated, you can find this in the article about installing Tekla Structures in the TUA. For more information about the license server version to use, click [here](https://support.tekla.com/doc/tekla-structures/2023/lic_which_license_server_to_use).

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1. **License Borrow Tool**

When you use the License Borrow Tool to borrow licenses, feel free to check whether the version of the tool is still up to date. For the most recent License Borrow Tool, click [here](https://download.tekla.com/download_manager/dist-download/software_download/TeklaLicenseBorrowTool_2020_0.exe).

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1. **Tekla Structures license**

Make sure you have an appropriate license for the relevant Tekla Structures version. Licenses are sent proactively by Construsoft; if you do not yet have the correct license, you can request it via administratie@construsoft.com

For more information about activating licenses, click [here](https://support.tekla.com/doc/tekla-structures/2023/ins_about_tekla_structures_installation).

For information on backing up activated licenses, click [here](https://support.tekla.com/article/backup-the-activated-licenses).

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1. **Personal settings and extensions**

You can use the Migration wizard to copy various personal settings and extensions to the new Tekla Structures version. The Migration wizard opens automatically the first time you start the new Tekla Structures version. If you want to copy the settings later, you can start the Migration Wizard manually by double-clicking the file *MigrationWizard.exe* in the folder ..:\TeklaStructures\2023.0\bin\applications\Tekla\Migrations.

You can also migrate extensions that you have added via Tekla Warehouse to your earlier Tekla Structures version to the new Tekla Structures version via **Applications and component catalog > Access advanced features > Manage extensions > Migrate extensions**. Next follow the steps in the Wizard.

**Tip**: It might happen that the content of the extensions you use changed and is refreshed/updated in Tekla Warehouse. It is therefore preferable to set up so-called [alerts](https://support.tekla.com/doc/tekla-structures/not-version-specific/twh_subscribing_to_alerts_about_content_updates) in Tekla Warehouse to be informed about changes to the content.

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1. **New TS folder**

Per Tekla Structures version you use a TS folder. This folder can be stored locally, on a server, or in a cloud service:

|  |  |
| --- | --- |
| Local | Afbeelding met diagram  Automatisch gegenereerde beschrijving |
| Server |  |
| Cloud service | Afbeelding met tekening, teken  Automatisch gegenereerde beschrijving |

**Local**: The local TS folder is created automatically when you install Tekla Structures. You can copy the files from the TS folder of your previous version to the TS folder of your new version.

**Server**: When using a TS folder on a server, create a new TS folder on this server for the new Tekla Structures version. Next change the reference to the TS folder in Tekla Structures. For more information on this, click [here](https://dl.construsoft.com/files/en/TUA_TS_folder.pdf#G3.3389369).

**Cloud service**: Using a TS folder from a cloud service ensures that all Tekla Structures users always use the same correct settings and that updates are automatically shared with everyone. For more information on this, click [here](https://support.tekla.com/article/using-trimble-connect-files-in-tekla-structures). For an (English) instructional video, click [here](https://teklastructures.support.tekla.com/video-tutorials/en/how_to_use_tc_as_project_or_firm_folder).

Copy the files from the TS folder from your earlier Tekla Structures version to the new TS folder, see also the next point of attention.

If you store images and symbols (which appear in templates in drawings) in the new TS folder on the server, you must also add the new location of the TS folder to a line in the files *user.ini* and *tpled.ini* so that they are displayed. For more detailed information on this, click [here](https://dl.construsoft.com/files/en/TUA_TS_folder.pdf#G3.3389429).

Note: Never use one TS folder that refers to all Tekla Structures versions but create a TS folder per version. For detailed information about the TS map, click [here](https://dl.construsoft.com/files/en/TUA_TS_folder.pdf#G3.3389369).

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1. **Copying files to the TS folder and checking the files**

You can save your personal files in the TS folder so that they are available in all models. When you copy files from a TS folder of an earlier Tekla Structures version to the new TS folder, it would be good to check what you are actually copying, especially if the files are already copied several versions. Think, for example, of files that you use to create NC files (possibly with pop-marks). You may need to update these files for the new version because settings can differ per version, for example because new functionalities or user-defined attributes that have been added. Also sort the files by date to see how old the settings are.

Since Tekla Structures 2019i, you can also use subfolders in the TS folder and store your personal files in these subfolders. This allows you to organize the settings in a structured way and therefore manage them more easily.

Click [here](https://support.tekla.com/article/updating-settings) for detailed information about updating files.

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1. **Backup various folders**

By using a new TS folder, either locally or on a server, it is important to check whether this new TS folder is already being backed up. It is advisable to also include other folders in which you copy personal files in the backup. (For files in a cloud service this is not necessary because these files are always backed up).

For example, consider the folder where you store your custom components (see point 12), the folder where you store your model templates (see point 13) or a possible new location for your models.

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1. **Copying macros**

By default, Tekla Structures includes a large number of so-called macros (scripts), such as macro *Write Numbering Results to UDA (ML006)* to change the numbering of parts.

If you have recorded one or more macros or if you have manually created macro files, it is good to know where they are stored.

By default, they are stored in the global folder *..:\Environments\common\macros\modeling* or *..:\Environments\common\macros\drawings* depending on the mode (modeling or drawing) you were working in when you created the macro.

You may have added your personal local folder to the existing default location (use a semicolon (;) as a separator between the two locations) by defining the location of this folder in the advanced option XS\_MACRO\_DIRECTORY in **File > Settings > Advanced options > File Locations**.

For general information and detailed information about the location of macros, click [here](https://support.tekla.com/doc/tekla-structures/2023/xs_macro_directory).

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1. **Configuration file for unfoldings (n.a. for model templates)**

Configuration file *unfold\_corner\_ratios.inp* contains settings with which can affect unfoldings. The file is saved in the folder *.\ ConstrusoftEuropean\General\ModelSettings* by default in Tekla Structures but can also be stored in the model folder (in the model template) or in the TS folder.

The parameters in this file define the position of the neutral line when unfolding a profile, for example when displaying unfolded plates in single-part drawings.

For detailed information about unfolding plates and profiles, click [here](https://support.tekla.com/article/using-unfold-corner-ratios-inp).

1. **Data file for sinkholes (n.a. for model templates)**

Since Tekla Structures 2021, several system components have new options to use and define sinkholes using data file sinkholes.dat.

For detailed information about these system components, click [here](https://support.tekla.com/article/release-info-tekla-structures-2021) (section *System components > New options for sinkholes in system components*).

If you have made settings for the relevant system components in earlier Tekla Structures versions, check these settings and update them if necessary so that they are up-to-date again in Tekla Structures 2023.

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1. **Copying customized advanced options**

Tekla Structures includes a lot of advanced options that you can customize. The available advanced option types are:

* Model-/drawing specific (**MODEL/DRAWINGS**). This type of advanced option can be used in model templates.
* User specific (**USER**).
* System specific (**SYSTEM**).
* Role specific (**SYSTEM(ROLE)**).



For example, using advanced options you can set the reference to the TS folder or the background color in model views and drawings. When you customize an advanced option, the type of advanced option determines the level at which Tekla Structures makes the change.

|  |
| --- |
| Examples |
| Advanced options [XS\_BACKGROUND\_COLOR1 till XS\_BACKGROUND\_COLOR4](https://support.tekla.com/doc/tekla-structures/2023/xs_background_color1) to control the color of each corner separately in a model view. |
| Advanced option [XS\_BLACK\_DRAWING\_BACKGROUND](https://support.tekla.com/doc/tekla-structures/2023/xs_black_drawing_background) to set the background color in drawings. |
| Advanced option [XS\_USE\_ASSEMBLY\_NUMBER\_FOR](https://support.tekla.com/doc/tekla-structures/2023/xs_use_assembly_number_for) to set the assembly/cast unit number to be also the main part number for the corresponding assembly/cast unit. Several options for the advanced option available. |
| Advanced option [XS\_DSTV\_NUMBER\_OF\_PARTS\_BY\_SELECTION](https://support.tekla.com/doc/tekla-structures/2023/xs_dstv_number_of_parts_by_selection) to add the number of parts in the header of an NC file by the parts that have been selected in the model. |

For detailed information about the different types of advanced options and how to customize advanced options, click [here](https://support.tekla.com/doc/tekla-structures/2023/sys_app_environment_variables#GUID-1A5EAE2F-E874-4897-94D1-1822D47C537A).

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1. **Copying custom components (n.a. for model templates)**

To copy custom components from an earlier Tekla Structures version, you need to know where the so-called *\*.uel* files are stored. The location of these files is defined via the advanced option XS\_UEL\_IMPORT\_FOLDER and is stored in the "role" file you are working with in the folder *..:\TeklaStructures\<version>\Environments\ConstrusoftEuropean*, for example the file *role\_Steel\_Detailer.ini*.

Here you can save your personal custom components (*\*.uel* files) so that they are automatically read into Tekla Structures.

For more information about copying custom components, click [here](https://support.tekla.com/doc/tekla-structures/2023/det_import_export_custom_components).

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1. **Copying and updating model templates**

You can define model templates to use as a basis when you create new models. They contain predefined settings: for example, you can create a model template per client in which specific settings are stored, such as a company logo in drawings, customized databases such as a profile catalog or a bolt catalog or customized component settings.

The main advantage of using model templates is that, when you have created a model based on a model template and reopen it later, all settings are still available so that the model is displayed correctly. After all, there are no missing profiles, bolts, templates, etc. because this is all stored in the model folder.

In case you have created your own model templates, update these model templates to use them smoothly in the new Tekla Structures version.



For detailed information about updating model templates, click [here](https://support.tekla.com/doc/tekla-structures/2023/admin_rel_model_templates_in_version_update).

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1. **Merging catalogs**

You may have modified catalogs such as the profile catalog (profdb.bin), material catalog (matdb.bin), bolt catalog (screwdb.db) and/or the bolt assembly catalog (assdb.db) in your earlier Tekla Structures version.

You can copy these custom catalogs from your previous one to your new Tekla Structures version, but you can also merge the previous customizations you made in the catalogs with the new catalogs in the new Tekla Structures version.

For information about merging the profile catalog, click [here](https://support.tekla.com/doc/tekla-structures/2023/mod_catalogs_exporting_and_importing_profiles).

For information about merging the material catalog, click [here](https://support.tekla.com/doc/tekla-structures/2023/mod_catalogs_material_catalog).

For information about merging the bolt and bolt assembly catalog, click [here](https://support.tekla.com/doc/tekla-structures/2023/mod_importing_and_exporting_bolts).

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1. **Copying customized or added user-defined attributes**

You can use the file *objects.inp* to add user fields that appear in the existing tabs in the dialog boxes. You save the file *objects.inp* in the TS folder, the model folder or in the model template.

For more information about adding user-defined attributes, click [here](https://support.tekla.com/doc/tekla-structures/2023/sys_customizing_uda).

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1. **Copying and/or comparing the customized ribbon**

You can copy the customized ribbon to the new Tekla Structures version (but also from one PC to another PC). These settings are saved per Tekla Structures version in the Windows user profile.

You can also choose to first compare the customized ribbon with the new "default" ribbon in Tekla Structures 2023.

For more information about copying or comparing the customized ribbon, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > The customized ribbon and shortcuts*).

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1. **Copying customized shortcuts**

You can copy customized shortcuts from the old to the new Tekla Structures version (as well as from one PC to another). These settings are saved per Tekla Structures version in the Windows user profile.

For more information about copying customized shortcuts, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > The customized ribbon and shortcuts*).

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1. **NC files: Settings modified and removed**

Several settings have been modified or removed in Tekla Structures 2023.

In case you have created settings for NC files in earlier Tekla Structures versions, you must save these settings once again.

For more information about modified and removed NC file settings, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *General > NC files: Settings modified* and chapter *General > NC files: Settings removed)*.

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1. **Page numbering in reports**

Tekla Structures 2023 includes the ability to use new page numbers in reports that also displays the total number of pages in the report.

Construsoft has customized all available reports so that both page and total number of pages appear on the reports.

In case you have personal or custom reports, you can also customize these to display the total number of pages.

For more information about page numbering in reports, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > Page numbering in reports*).

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1. **Saved settings for automatic view-level dimensions**

In Tekla Structures, you can define settings for objects in drawing views. You should think about how parts are displayed or dimensioned in different views.

In Tekla Structures 2023, the dimensioning method **Filter** has a new **Only objects on the selected sides** check box in rule creation allowing you to only dimension objects that are on a certain side of the main part, for example, **Front** side.

To ensure that your personal saved settings are appropriate for Tekla Structures 2023, you must update these settings.

For more information about the settings of parts, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > Saved settings for automatic view-level dimensions*).

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1. **Filters in dimension lines**

You have the option in Tekla Structures in the Drawing Editor in the dimension line properties to add tags when you open the properties dialog box of horizontal or vertical dimension lines, for example.

To ensure that your personal saved dimension line settings have appropriate filters, you must update these settings.

For more information about filters in dimension lines, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > Filters in dimension lines*).

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1. **Advanced options for the clash check removed**

In Tekla Structures 2023 the advanced options XS\_CLASH\_CHECK\_BETWEEN\_REFERENCES, XS\_CLASH\_CHECK\_INSIDE\_REFERENCE\_MODELS and XS\_CLASH\_CHECK\_BETWEEN\_PARTS, which controlled clash check content, have been removed.

If you have copied and modified any of these variables in an ini file, you can delete from the file.

For more information about the advanced options for the clash check, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > Advanced options for the clash check removed*).

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1. **Advanced option for hatching overlapping surfaces and dashed line for hidden line deleted**

Since several Tekla Structures versions, you have the options **Hatching of overlapping surfaces** and **Dashes line for hidden line** (via *File > Settings > Switches*).

The option **Hatching of overlapping surfaces** controls whether hatching is shown for overlapping surfaces in the DirectX rendering views.

The option **Dashes line for hidden line** controls whether the part hidden lines are visible in the DirectX rendered model views.

These options replace the previously used advanced options XS\_HATCH\_OVERLAPPING\_FACES\_IN\_DX and XS\_USE\_DASHED\_HIDDEN\_LINES which now have been removed from the **Advanced options**.

If you have copied and modified any of these advanced options in a \*.ini file, you can remove them from it.

For more information about these advanced options, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files >* *Advanced option for hatching overlapping surfaces and dashed line for hidden line deleted*).

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1. **Copying standard Project properties (n.a. for model templates)**

In Tekla Structures, you can set the fields in the Project properties and make them available as a new default. You may have modified these files (standard.prf and standard.prf.more) in your earlier Tekla Structures version and saved them in the TS folder. You can copy these files to the TS folder of the new version.

For more information about editing project properties, click [here](https://support.tekla.com/doc/tekla-structures/2023/dra_setting_up_project_information).

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1. **Copying standard parts**

In Tekla Structures you can use standard parts (for example, base plates, purlin lips). This gives these parts the same number for each project. This is especially useful if you want to stock up on certain parts. When you want to include standard parts to the new Tekla Structures version, the advanced option XS\_STD\_PART\_MODEL must be set, and the relevant model must be copied with the standard parts.

For more information about creating a standard part model, click [here](https://support.tekla.com/doc/tekla-structures/2023/mod_creating_a_standard_part_model).

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1. **Copying customized Applications and components catalog**

When you have customizations in the Applications and component catalog, you can copy these to the new Tekla Structures version. The customizations are saved in the file *ComponentCatalog\_<username>.xml*.

Before making changes, you can set the Applications and components catalog to save the changes in the TS folder. To do this, in the Applications & components catalog, go to **Access advanced features > Catalog management > Edit mode** and select the folder where you want to save the customizations.

For more information about copying customized Applications and component catalog, click [here](https://support.tekla.com/article/release-info-tekla-structures-2023) (Chapter *Localization: Update personal settings/files > Customized Applications and component catalog*).

For more information, click [here](https://support.tekla.com/doc/tekla-structures/not-version-specific/det_applications_components_catalog_for_administrators) and [here](https://support.tekla.com/doc/tekla-structures/2023/det_getting_started_component_catalog).

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**Notes**