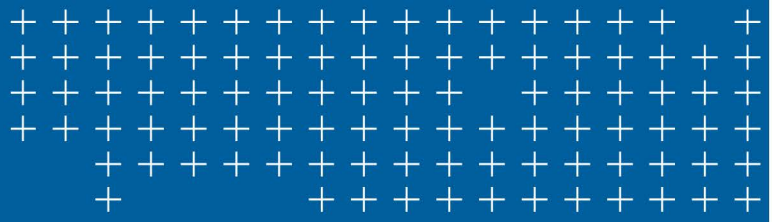


Tekla Structures 2022

Get familiar with Tekla Structures

March 2022

Contents

1 Tekla Structures configurations

Tekla Structures online licenses are purchased as a recurring or fixed-term subscription. The license details, including renewal information, can be viewed in the Tekla Online Admin Tool. The licenses unlock the **Tekla Structures Carbon**, **Tekla Structures Graphite**, or **Tekla Structures Diamond** configurations, which progressively enable more product features. Also special student and developer configurations are available. Note that legacy configurations are still used with on-premises licensing.

- **Tekla Structures Diamond** is for detailing & production information.
- **Tekla Structures Graphite** is for modeling & design documentation.
- **Tekla Structures Carbon** is for viewing & collaboration.

Our documentation covers the content of the **Tekla Structures Diamond** configuration, so you may not have access to all the described features. If your organization has licenses for different configurations, you can select between them when you start Tekla Structures.

Feature map for online licenses

	Carbon	Graphite	Diamond
Modeling			
Opening and viewing models	✔	✔	✔
Modeling of parts, steel assemblies, precast cast units, concrete pour units		✔	✔
Creating steel and concrete components		✔1	✔
Creating unique part marking (numbering)		✔2	✔

	Carbon	Graphite	Diamond
Intelligent batch editing tools			✔
Planning tools			
Logistics planning, sequencing, scheduling, classifying, status visualization	✔	✔	✔
Drawings and reports			
Creating reports & print drawings	✔	✔	✔
Creating general arrangement, rebar and anchor bolt drawings (plan, section, erection)		✔	✔
Creating steel and concrete production drawings (part, assembly, cast units)			✔
Interoperability			
Exports for steel CNC & MIS systems	✔	✔	✔
Exports to rebar manufacturing systems	✔	✔	✔
Exports for precast concrete ERP & MES systems	✔	✔	✔
Work with reference models (such as DWG, DXF, IFC formats)	✔	✔	✔
Analyzing			
Create analysis models and analysis loads		✔	✔

	Carbon	Graphite	Diamond
Analysis and design interfaces		✔	✔
Other			
Open API capabilities	✔	✔	✔

✔1 = Conceptual components only.

✔2 = Numbering is not available for steel or precast assemblies, reinforcement is still numbered.

Feature map for on-premises licenses

	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	EPM Modeler	Primary	Production Planner for Concrete	Project Viewer	Drafter
Viewing	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Grids, construction lines, points	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Building elements	✔	✔	✔	✔	✔	✔	✔	✔1			
Assemblies	✔	✔	✔	✔	✔	✔	✔	✔			
Precast cast units	✔		✔			✔	✔	✔			
Batch editing	✔	✔	✔	✔				✔			
Pour modeling	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2			
Pour viewing	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2
Cast in Place cast units	✔		✔	✔		✔	✔	✔			
Numbering	✔	✔6	✔	✔3				✔			
Assigning control numbers	✔	✔	✔					✔			
Steel components	✔	✔		✔8	✔8	✔8	✔8	✔			

	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	EPM Modeler	Primary	Production Planner for Concrete	Project Viewer	Drafter
Concrete components	✔		✔	✔5, 8	✔8	✔8	✔8	✔			
User-defined attributes	✔	✔	✔	✔	✔	✔	✔	✔	✔9	✔9	✔7
Locking	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Multi-user	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Clash check manager	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Planning tools											
Lotting	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Precast planning tools (such as Palletizer and Stacker)	✔	✔10	✔						✔		
Sequencer	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Project status visualization (4D)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Task manager	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Organizer	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔4
External editors											
Symbol Editor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Template Editor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Drawings, plans and reports											
Drawing layout editor	✔	✔	✔	✔	✔	✔		✔			✔
Creating general arrangement drawings (plan, section, erection)	✔	✔	✔	✔	✔	✔		✔			✔
Modifying general arrangement	✔	✔	✔	✔	✔	✔		✔			✔

	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	EPM Modeler	Primary	Production Planner for Concrete	Project Viewer	Drafter
drawings (plan, section, erection)											
Creating steel fabrication drawings (single-part drawings)	✔	✔						✔			✔
Modifying steel fabrication drawings (single-part drawings)	✔	✔						✔			✔
Creating steel fabrication drawings (assembly drawings)	✔	✔						✔			✔
Modifying steel fabrication drawings (assembly drawings)	✔	✔						✔			✔
Creating precast concrete drawings (cast unit drawings)	✔		✔					✔			✔
Modifying precast concrete drawings (cast unit drawings)	✔		✔					✔			✔
Creating cast-in-place concrete drawings (cast unit drawings)	✔		✔	✔				✔			✔
Modifying cast-in-place concrete	✔		✔	✔				✔			✔

	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	EPM Modeler	Primary	Production Planner for Concrete	Project Viewer	Drafter
drawings (cast unit drawings)											
Anchor bolt plans	✔	✔	✔	✔	✔	✔		✔			✔
Reports	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Printing and plotting	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Interoperability											
Export CNC, DSTV	✔	✔				✔	✔	✔		✔	
Steel MIS links	✔	✔				✔	✔	✔		✔	
Import 2D and 3D DWG, DXF	✔	✔	✔	✔	✔	✔	✔	✔			
Export 3D DWG, DXF, DGN	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Export drawings (DXF, DWG)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Import and export CAD and FEM packages	✔	✔	✔	✔	✔	✔	✔	✔		✔	
IFC export	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
CIS/2 import and export	✔	✔	✔	✔	✔	✔	✔	✔		✔	
ELiPLAN import and export	✔		✔					✔	✔		
BVBS export	✔		✔	✔				✔	✔		
HMS export	✔		✔					✔	✔		
Unitechnik export	✔		✔					✔	✔		
View reference models	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Insert reference models (DXF,	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	

	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	EPM Modeler	Primary	Production Planner for Concrete	Project Viewer	Drafter
DWG, DGN, IFC, XML, PDF)											
Layout manager	✔	✔	✔	✔	✔	✔	✔	✔			
Analyzing											
Create analysis model	✔	✔	✔	✔	✔			✔			
Analysis and Design interface	✔	✔	✔	✔	✔			✔			
Loads	✔	✔	✔	✔	✔			✔			
Open API											
Open API capabilities	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔4

✔1 = Limitation: 2500 parts, 5000 reinforcement objects, unlimited number of bolts.

✔2 = Pours are enabled by an advanced option.

✔3 = Numbering is limited to cast-in-place parts, cast units and reinforcement.

✔4 = View only.

✔5 = Cast in Place concrete components only.

✔6 = Numbering is limited to steel parts and cast units.

✔7 = User-defined attributes in drawing properties can be edited, others view only.

✔8 = Conceptual components only.

✔9 = User-defined attributes that affect numbering cannot be edited.

✔10 = Availability depends on the extension, check the Tekla Warehouse page for details.

2 Start Tekla Structures

With Tekla Structures, you can create information-rich 3D models of all structures and materials, and the 3D model is also the single source of information for drawings and other outputs, such as reports and NC data files.

When you start Tekla Structures, you are asked to choose your Tekla Structures setup. The setup consists of an environment, role, and configuration.

- *Environment* means region-specific settings and information. It defines, for example, which profiles, material grades, default values, drawing settings, component settings, reports, and templates are available and used for the specific region.
- *Role* is a user group profile that limits the availability of files and settings in an environment. The user interface has been customized for each role, meaning that some of the settings that are not relevant for the specific role are hidden to make the user interface clearer and easier to use.
- *Configuration* consists of a set of features that the user is entitled to based on the license agreement.

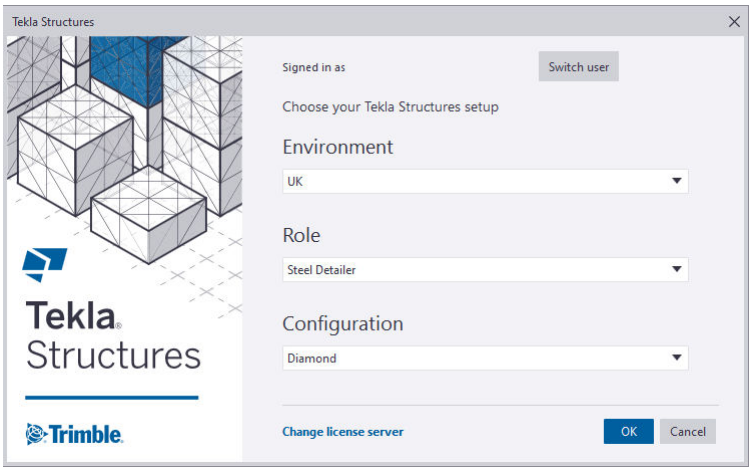
If you are a company administrator, see Overview of environments, roles and licenses.

2.1 Choose your Tekla Structures setup

1. Start Tekla Structures by selecting it from the Windows Start menu or by double-clicking the desktop icon.
2. Sign in using your Trimble Identity when prompted.

   A dialog box where you choose your Tekla Structures setup and the type of license appears. Proceed with the default online license option.

   However, if you have an on-premises license, click **Change license server** --> **Use your on-premises license server**.



3. Select an environment that fits the region where your project is done.

   If you cannot find the desired environment from the list, see Install and license Tekla Structures.

   You can also select blank project and use it as a basis for a customized environment.

4. Select a role.

   The availability of roles depends on your environment, but typically the following roles are available:

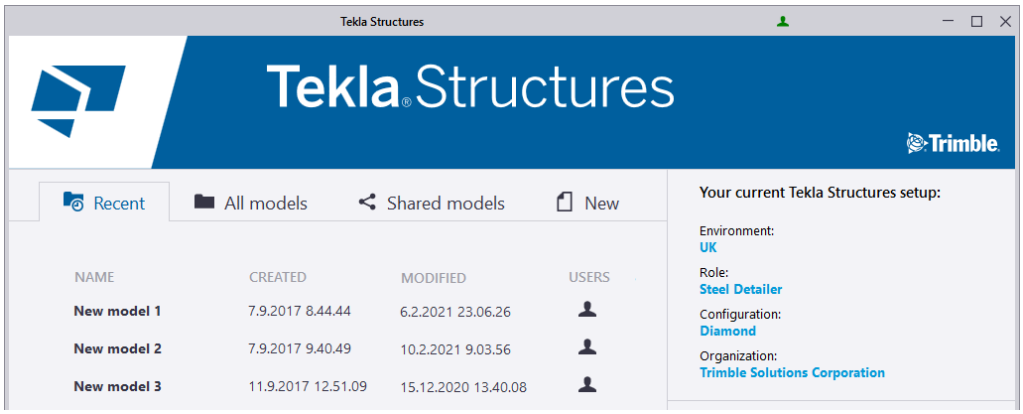
   - Concrete Contractor
   - Engineer
   - General Contractor
   - Precast Concrete Detailer
   - Production Planner for Concrete
   - Rebar Detailer
   - Steel Detailer

5. Select a configuration.

   The configuration you are using may not contain all the features described in the Tekla Structures product guides. For more information on the features available in each configuration, see Tekla Structures configurations (page 5).

6. Click **OK**.

Tekla Structures start screen appears.



7. Select what you want to do:
   - On the **Recent** tab, you can open a recently used model (page 16).

     If the **Recent** tab is empty, then the **All models** tab is shown.
   - On the **All models** tab, you can open any existing model (page 16).

     If the **All models** tab is empty, then the **New** tab is shown.

     On the **Recent** and **All models** tabs, you can sort each of the columns. Additionally, you can change the order and size of the columns by dragging them.

     You can search models by name just by starting to type the name of the model. For example, when you type N, Tekla Structures selects the first model starting with the letter N.

     To open the selected model, double-click the selected model, or select the model and click the **Open** button.
   - On the **Shared models** tab, you can open a model that has been shared by using Tekla Model Sharing.
   - On the **New** tab, you can create a new model (page 17).

2.2 Create your own environment: blank project

Blank project is a Tekla Structures environment that includes only generic content, such as parametric profiles, undefined bolt, material and rebar grades, and basic drawing layouts. It can be used for gathering region-, company-, or project-specific settings, tools, and information. The blank project is always included in the Tekla Structures installation.

Download and install content to the blank project

You can use Tekla Warehouse to download and install content to the blank project. For example, you can download profiles, material grades, bolts, reinforcement, components, applications, and templates from Tekla

Warehouse across all environment- and manufacturer-specific collections, and make combinations that suit your needs.

You can download and install content from Tekla Warehouse both before and during a project. Before starting a project, you can install content to your project and firm folders. During a project, you can install content to the model folder.

2.3 Check or change your Tekla Structures setup

You can check your current Tekla Structures setup (environment, role, and configuration) at any time without having to close the model.

1. On the **File** menu, click **Settings** and scroll down to the **License** area.

   You current setup is displayed.

2. Change the setup if needed.

   You may be required to restart Tekla Structures after the changes.

2.4 Tekla Structures usage data

Tekla Structures collects usage data on how you use the software. This information helps to improve Tekla Structures, and it is an easy way to influence the future development of Tekla Structures. Your data is combined with other people's data to make a statistical analysis.

Tekla Structures collects usage patterns and trends of how you use the commands and tools in the software. The program collects this information automatically while you use Tekla Structures. You can view the log file to check the collected data.

1. On the **File** menu, click **Logs** --> **Usage data log** to view the log file.

   Note that the `UserFeedbackLog.txt` log file is always opened with the default text editor, unlike other log files which can be opened through the Tekla Structures log viewer. The option to switch between the viewers does not work for the `UserFeedbackLog.txt` file.

   The `UserFeedbackLog.txt` log file is located in the `Logs` folder under the path defined with **XSUSERDATADIR** in `teklastructures.ini` file.

2. To fine-tune the data saving interval or the data sending interval, use the advanced options XS_AUTOMATIC_USER_FEEDBACK_SAVING_INTERVAL and XS_AUTOMATIC_USER_FEEDBACK_SENDING_INTERVAL.

2.5 Open a model

You can have one model open at a time. If you open a model and already have one open, Tekla Structures prompts you to save the first model.

Open a recently used model

1. On the **File** menu, click **Open**.
2. Click **Recent**.
3. Select a model in the list.

   Tekla Structures shows the thumbnail image (page 18) of the model, if you have added a one, and some basic creation information of the model.
4. To open the selected model, click **Open** or double-click the model.

   If no views are visible in the model, Tekla Structures prompts you to select one.

NOTE If you want to remove a model from the **Recent** models list, right-click a model and select one of the options.

- **Delete the selected item**: delete the selected model from the list
- **Clear all**: remove all the models from the list
- **Clear invalid entries**: remove all invalid models from the list, such as deleted models that cannot be opened anymore

---

Open any existing model

1. On the **File** menu, click **Open**.
2. Click **All models**.

   If you want to search for models in another folder, click **Browse...**.

   If you want to sort the models based on name or the modification date, use the **Order by** sorting.
3. Select a model in the list.

   Tekla Structures shows the thumbnail image (page 18) of the model, if you have added a one, and some basic creation information of the model.

4. To open the selected model, click **Open** or double-click the model.

   If no views are visible in the model, Tekla Structures prompts you to select one.

Open a shared model

If you want to open a model that has been shared by using Tekla Model Sharing, you need to be logged in with your Trimble Identity.

1. On the **File** menu, click **Open**.
2. Click **Browse shared models**.

   Tekla Structures prompts you to log in with your Trimble Identity, if not already done so.
3. Select the shared model in the **Shared models** dialog box.

2.6 Create a new model

Create a separate model for each Tekla Structures project. Each model is stored in its own folder under the `TeklaStructuresModels` folder.

1. On the **File** menu, click **New**.
2. In the **Name** box, enter a name for the new model.

   The maximum length of the name is 40 characters.

   Do not use special characters (`/ \ ; : |`). We recommend that you try to decide on a permanent name at this point. The name of the model can be changed afterward, but it involves changing several file names.
3. Define where to save the new model.

   By default, the model is saved in the `TeklaStructuresModels` folder that was created during installation. You can change the default folder by clicking **Browse**. You can also select a recently used folder in the **Place in** list.
4. Select whether to run Tekla Structures in single-user or multi-user mode.
   - Single-user: the model will be used by one person at a time.
   - Multi-user: the model is stored on a server and may be used by several people simultaneously. Enter the name of the server in the **Server** box.
5. If you want to use a model template, select one.

   You can mark the important model templates as favorites, or hide the templates that you do not need.

   a. Select a model template in the list.

b. Right-click and select **Favorite** or **Hidden**.

   If you marked a template as **Favorite**, it is placed on top of the template list. Alternatively, use the star icon on the template to mark it as **Favorite**, or to remove the marking.

   If you marked a template as **Hidden**, it is removed from the template list. Select the **Show hidden items** check box to show it again.

6. If you want to link the model to a Trimble Connect project, select the **Start Trimble Connect collaboration** check box.

   Linking the model to a Trimble Connect project happens after the model has been created. For further instructions, see Link a Tekla Structures model to a Trimble Connect project.

7. Click **Create**.

   Tekla Structures creates the model and opens the default model view. The contents of the model view may differ based on the model template you chose in step 5.

See also

Create a thumbnail image of a model (page 18)

Edit project properties (page 19)

2.7 Create a thumbnail image of a model

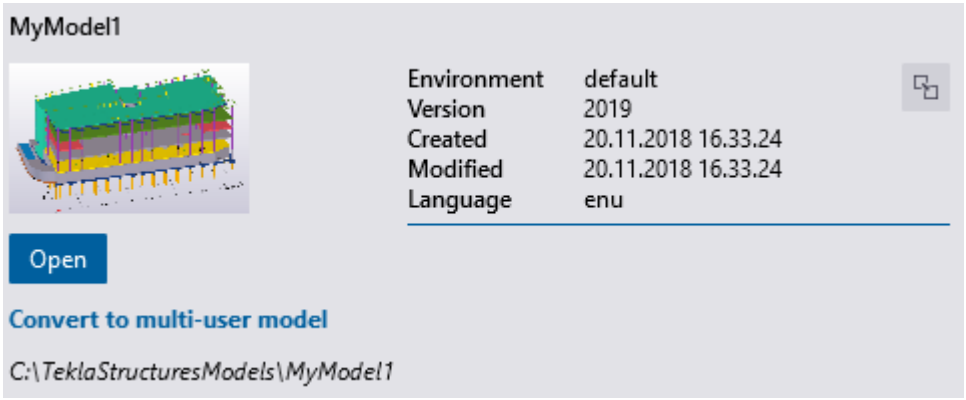
You can add a thumbnail image to make it easier to recognize your project even when you do not remember the exact name of the model. The thumbnail image is displayed when you browse for existing models.

1. On the **View** tab, click  **Screenshot** --> **Project thumbnail**.
2. Select a view.

   Tekla Structures creates the image and saves it in the model folder with the name `thumbnail.png`.

3. To check the thumbnail, go to the **File** menu, click **Open**, and select the model you created the thumbnail for in the **Recent** or in the **All models** list.

The image is now displayed with other model information. For example:



4. If you are unhappy with the thumbnail image, you can repeat steps 1–2 as many times as you need.

   For example, you can zoom the model in and out to adjust what is shown in the thumbnail image. When you create a new thumbnail, Tekla Structures overrides the existing thumbnail image with the new one.

TIP Alternatively, if you want to use a custom image, you can add the image directly to the model folder with the name `thumbnail.png`. The preferred size of the image is 120 x 74 pixels.

2.8 Edit project properties

You will need project information, such as project number and name, many times during a project. Update the project properties at the beginning of each project to make reports and drawings display the correct information automatically. All of the fields are optional.

1. On the **File** menu, click **Project properties**.
2. Edit the general project properties, and enter a description that helps you identify the model when you next need to open it.

   The description is listed with the other model information when you select a model in the **Recent** or in the **All models** list.

   The limit for the length of the description is 78 characters.

   When you edit the properties, Tekla Structures highlights the modified properties in yellow. When you are ready with the modifications, click **Modify** to apply the changes.
3. If you want to use another coordinate system for interoperability and collaboration, click **Base points** to define a new base point.

   Once a base point has been defined, you can select it from the **Location by** list.

4. To define project-specific user-defined attributes, click **User-defined attributes**.

   By default, you can define:

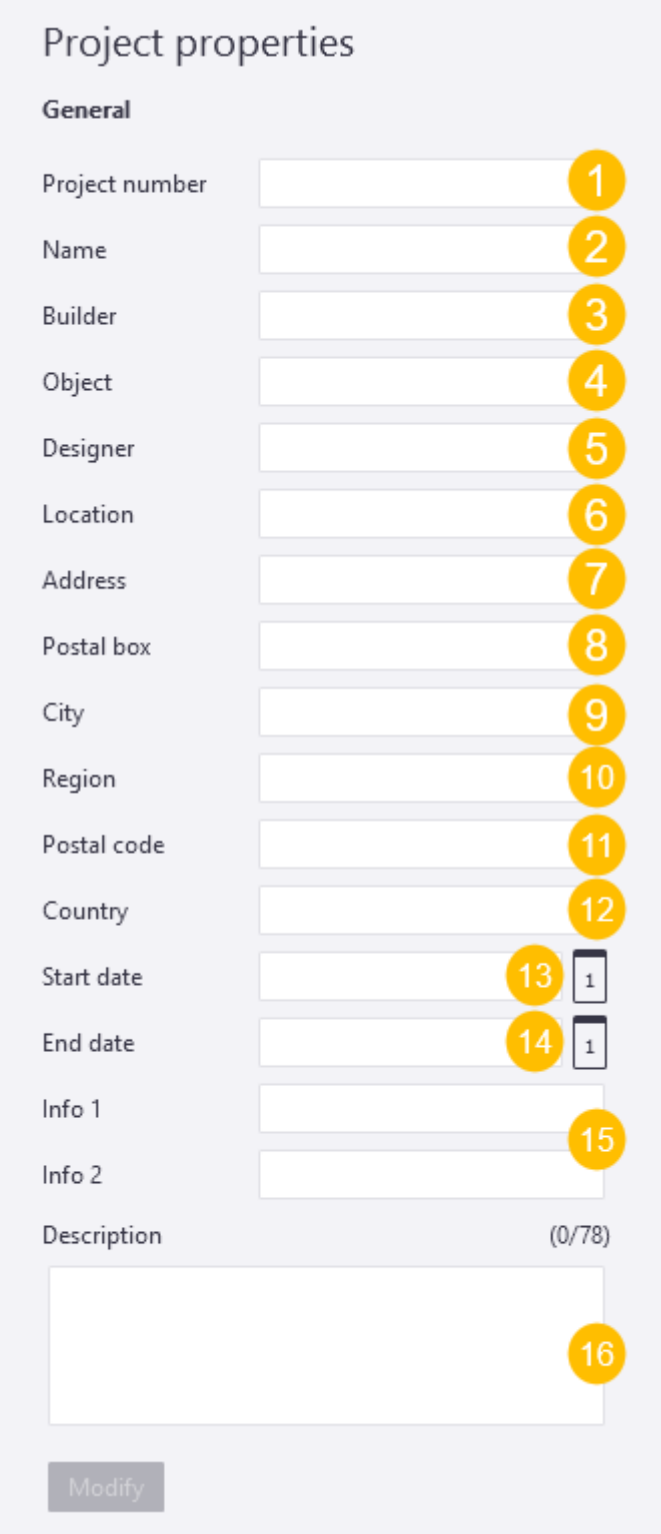
   - Project comment
   - User fields
   - Execution class
   - Classification system
   - IFC export attributes
   - GEO coordinates
   - Status attributes
   - Unitechnik factory location

   The availability of the various user-defined attributes depends on your environment (page 12), role and configuration (page 5).

Once you are finished with editing the project properties, as a result, you will get updated project properties in drawings and reports.

Displaying project information in templates and reports

The fields in the image below refer to template attributes, which you can use when designing your own reports and templates. To display project information, add the corresponding template attributes in the templates and reports.



(1) NUMBER#2

(2) NAME

(3) BUILDER

(4) OBJECT

(5) DESIGNER

(6) LOCATION

(7) ADDRESS

(8) POSTAL_BOX

(9) TOWN

(10) REGION

(11) POSTAL_CODE

(12) COUNTRY

(13) DATE_START

(14) DATE_END

(15) INFO1, INFO2

(16) DESCRIPTION

2.9 Save a model

You should save your model regularly to avoid losing any work. Tekla Structures also automatically saves your work at regular intervals.

NOTE Tekla Structures versions are not backwards compatible. When you save a model, you cannot open it in older versions of Tekla Structures due to database differences.

Save the current model

To save changes to the current model file, do one of the following:

- On the top left corner of the screen, click **Save**  .
- On the **File** menu, click **Save as** --> **Save**.
- Press **Ctrl+S**.

Save a copy with different name or location

You can create a copy of the model with a different name or in a different folder. The original version of the model remains intact.

NOTE When you save the model with a different name, all the GUIDs (globally unique identifiers) of the saved model will change and be different than in the original model. This means that the saved model has no relation to the original model, and the saved model cannot be used as backup.

1. On the **File** menu, click **Save as** --> **Save as**.
2. In the **Model name** box, enter a new name.
3. To save in a different location, click **Browse** and define where you want to save the model.
4. Click **OK**.

   Tekla Structures creates a new copy with a different name, but the original version of the model remains intact.

Save a backup copy

You can create a backup copy of the model with the same GUIDs (globally unique identifiers) as the original model.

1. On the **File** menu, click **Save as** --> **Save and create backup copy**.

   Tekla Structures saves a copy of the model in the `..\TeklaStructuresModels\backup\<model_name>\<date-time>` folder.
2. If you need to take the backup copy into use in place of the current model, move the backup copy from the chosen date to your model folder.

   You can either replace all contents of the current model folder with the content of the chosen backup folder, or you can rename the backup folder (`<date-time>`) to match the original model name.
3. If you want to change the location of the backup folder, use the advanced option XS_MODEL_BACKUP_DIRECTORY.

NOTE To save disk space, you can compress the `XS_MODEL_BACKUP_DIRECTORY` folder.

Save as a model template

You can save a model with the desired settings and use the model as a template when you create new models.

Define autosave settings

Use **Autosave** to automatically back up and save your work at set intervals. You can set the autosave interval separately for the model and drawings. Autosave files have the extension `.db1_<user>`.

1. On the **File** menu, click **Settings** --> **Options**, and go to the **General** settings.
2. Under **Autosave**, set the autosave interval.
   a. In the first box, enter the number of minutes after which Tekla Structures saves the model. The default value is 15 minutes.

      Note that if there are no changes in the model during the autosave interval, the autosave is not triggered.

   b. In the second box, enter the number of drawings after which Tekla Structures saves your work.

   NOTE The smallest accepted value for the autosave interval is 2, both for modeling and for drawings.

   If you try to enter a value smaller than 2, Tekla Structures automatically changes the value to 2.

3. Click **OK**.
4. Define where to store the **Autosave** files.

   By default, Tekla Structures stores the autosave files in the `..\TeklaStructuresModels\autosave` folder. To change the folder, use the advanced option XS_AUTOSAVE_DIRECTORY.
5. Define whether to keep old autosave files.

   By default, Tekla Structures deletes the autosave files when you close a model, to save disk space. To keep autosave files even if you exit Tekla Structures without saving the model, use the advanced option XS_KEEP_AUTOSAVE_FILES_ON_EXIT_WHEN_NOT_SAVING.

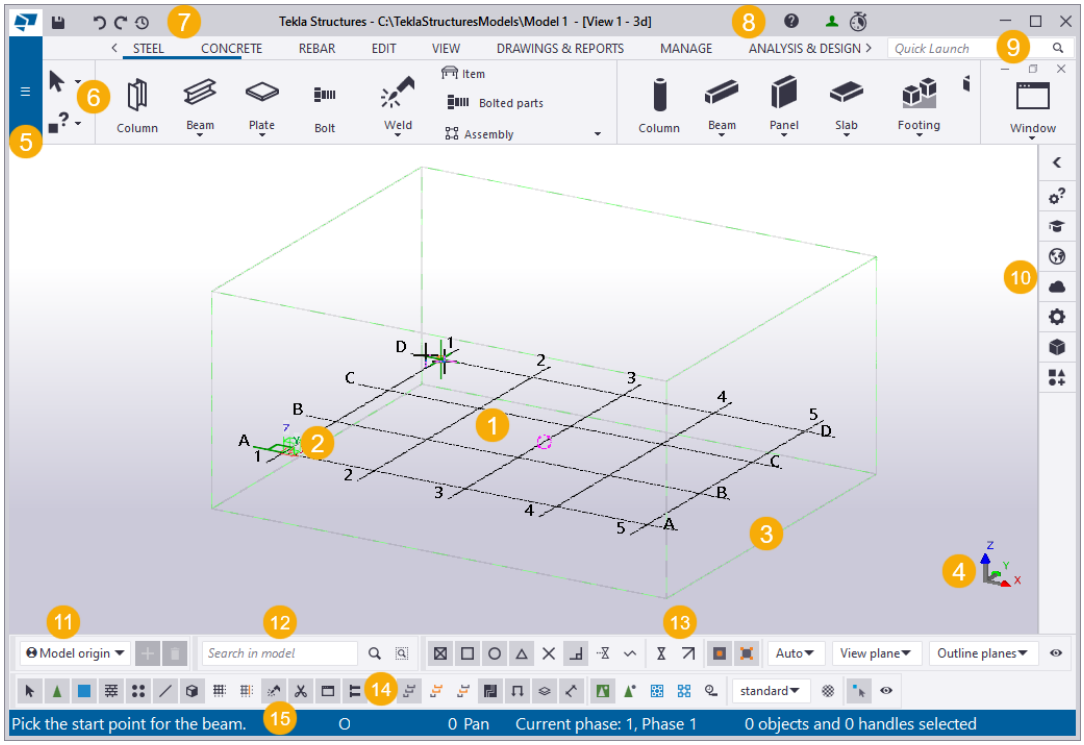
When to use an autosaved model

You can use the autosaved model if there are errors when trying to open a model (page 16). When you open a model, Tekla Structures automatically checks if the previous session ended normally. If it did not, Tekla Structures asks whether you want to continue by using the autosaved model or the original model.

If Tekla Structures displays the warning **Fatal: Model memory corrupted by read**, it means that hardware problems have damaged the model database. Your hard disk may be damaged. Use autosave or system backup files to restore the model.

3 Introduction to Tekla Structures user interface

When you open a Tekla Structures model, a new window appears. By default, the user interface will look something like this:



(1) This is your Tekla Structures model. If you are starting a completely new project, you will only see the default model view and an empty grid at this point.

(2) The green cube symbol represents the global coordinate system and it lies at the global origin (x=0, y=0, z=0).

(3) The box around the grid represents the work area. In a view, you can only see the parts that are within this area. Objects that are outside the work area

exist in the model, but they are not visible. You can shrink and expand the work area to suit your needs. You can also hide the work area box.

(4) The coordinate symbol with the three axes x, y, and z represents the local coordinate system. It also indicates the direction of the model.

(5) The **File** menu is where you manage your models. You can save models (page 22), print drawings, and import and export models, among other things.

(6) The ribbon contains all the commands and other functions you will use when building your model. You can customize the ribbon according to your needs.

(7) By default, the Quick Access Toolbar (page 44) contains the **Save**, **Undo**, **Redo**, and **Undo history** shortcuts icons. You can customize the **Quick Access Toolbar** according to your needs.

(8) The upper right corner shows your user-name and a green symbol indicating that you are logged in and your license is working as expected. If a clock symbol is shown instead of the green symbol, the clock indicates that you are disconnected from online licensing.

(9) If you cannot find the command or dialog box you are looking for, search with Quick Launch (page 30).

(10) Use the side pane (page 31) on the right side of the screen to check instructions for the currently active ribbon command, view model objects properties, add reference models and components, attach point clouds, use custom inquiry, or to find direct access to Tekla Online services.

(11) The work plane handler toolbar controls which work plane you currently have in use in the model.

(12) The model search toolbar enables a quick search for objects in the entire model or within the selected model objects.

(13) The snap switches control which positions you can pick when creating objects.

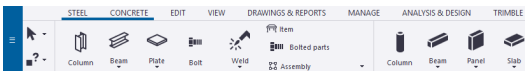
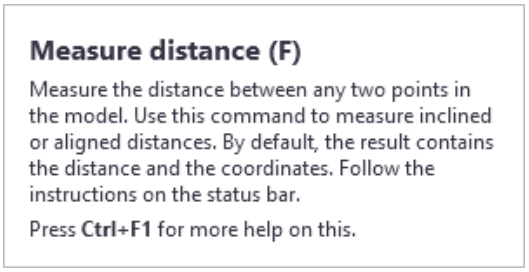
(14) The selection switches control which objects you can select.

(15) When you create objects, the status bar (page 36) will tell you how to proceed and when to pick points.

3.1 How to use the ribbon and the commands on the ribbon

All the essential commands in Tekla Structures are available on the ribbon. The commands are grouped according to their use. You can modify the appearance of the ribbon, and customize the content of the ribbon, if needed. All commands throughout Tekla Structures work in the same manner.

How to use commands on the ribbon

To	Do this
Find commands	Slide the ribbon right or left with your mouse, or scroll with your mouse wheel.  Some commands have more options under them. The options become available when you click the command's name: 
Activate the command you want to use	On the ribbon, click the command. The command runs until you end it or use another command.
Check which command you need for your current task, if you are unsure	Rest the mouse pointer on a command. A small window called tooltip appears. Tooltips provide more information about commands and also give examples, hints, and tips. For example: 

To	Do this
	Press **Ctrl+F1** when a tooltip is open to find more help on the command. To switch the tooltips on or off, click **File menu** --> **Settings** --> **Switches** , and then select or clear the **Tooltips** check box.
View more detailed instructions on how to use the currently active ribbon command	In the side pane, click  to open the **Instructor** side pane window. On the ribbon, click a command. The **Instructor** side pane window shows short videos, steps and other information on how to use the active command.
End command	Right-click and select **Interrupt**. You can also press **Esc**.
Re-activate the last command	Press **Enter**.

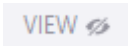
NOTE You can complete many commands by using the **Enter** or the **space** key as a shortcut, or by using the middle mouse button.

To use the **Enter** key as a shortcut for completing commands, set the advanced option `XS_ENTER_FINALIZES_COMMANDS` to `TRUE`.

Change the appearance of the ribbon

You can change the order of ribbon tabs, choose how they are aligned, and even hide some parts of the ribbon if you do not need them in your current project. For example, if you are only modeling steel parts, you can temporarily hide the **Concrete** tab.

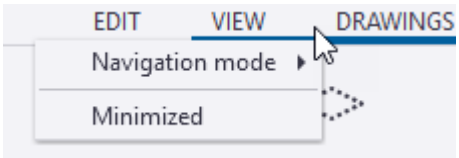
To	Do this
Change the order of tabs on the ribbon	Drag and drop the tab titles.
Change how the tabs are aligned	Right-click on the top bar of the ribbon, select **Navigation mode**, and then select one of the options. • **Scroll visible**: the ribbon movement is minimal when you switch between the tabs • **Align to left**: the icons start from the left side of the ribbon

To	Do this
	• **Align to tab**: the icons start from the left side of the current tab
Hide the tabs that you do not need in your current project	1. Rest the mouse pointer on a tab title. A small eye symbol appears next to the tab title:  2. Click the eye symbol  . The eye symbol changes and the tab title becomes gray:  The **View** tab is now hidden from the ribbon. If you slide the ribbon, hidden tabs appear as:  3. To re-display the hidden tab, click the eye symbol again.

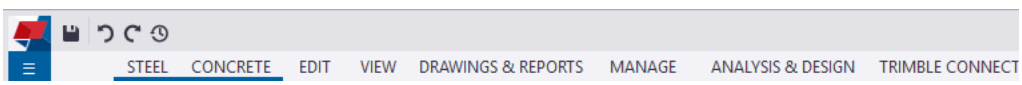
Minimize the ribbon

You can minimize the ribbon to save space on your screen. When the ribbon is minimized, the command buttons are hidden but the tabs are visible.

1. Right-click on the top bar of the ribbon, and select **Minimized**.



The ribbon is now minimized to save space on the screen:



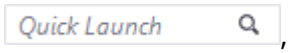
2. To access the commands when the ribbon is minimized, click a tab title.

   The ribbon becomes visible so that you can select a command.

3. To restore the ribbon, right-click on the top bar of the ribbon, and select **Minimized** again.

3.2 How to use Quick Launch to find commands, dialog boxes, and toolbars

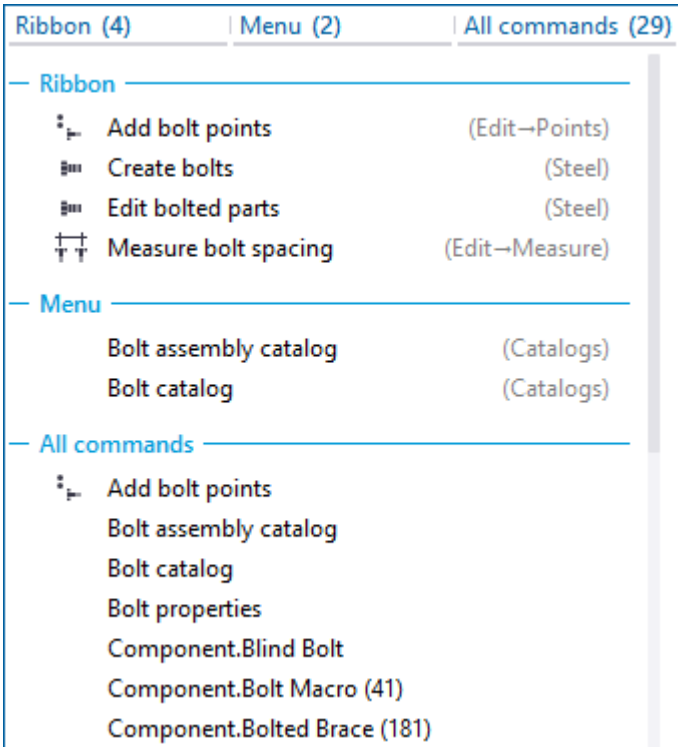
Use the **Quick Launch** box in the upper-right corner of the screen to find commands, dialog boxes, toolbars, and other functions. The shortcut key for **Quick Launch** is **Ctrl+Q**.

1. In the **Quick Launch** box 

, enter a search term.

   For example, type `bolt` if you are looking for bolt commands.

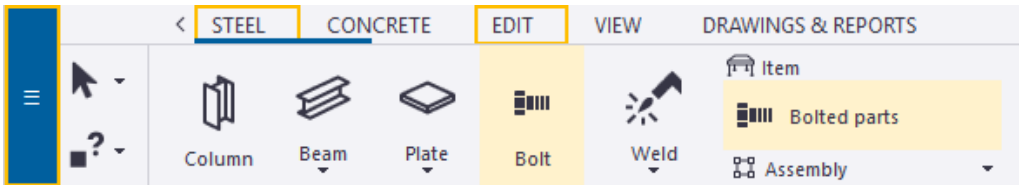
2. Wait for a list of search results to appear. For example:



   The search results show the location of the command. You can navigate in the list by clicking the **Recent**, **Ribbon**, **Menu**, and **All commands** tabs. The **Recent** tab lists 10 most recently started commands from the search results.

   Alternatively, you can navigate in the search results by using the up and down arrow keys on the keyboard. Start the selected command by clicking **Enter**.

   Tekla Structures highlights the commands on the ribbon or on the **File** menu. For example:

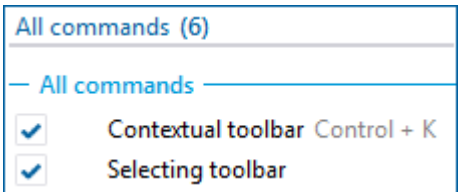


If the command you have searched is in the side pane, Tekla Structures opens the side pane window.

3. To run a command, click its name on the search results list.

   Or press the **Enter** key to instantly run the first command on the list.

4. For some basic settings (page 37) and toolbars a check box appears in front them on the search results list. Click the command to activate the setting, or to have the toolbar visible.



5. If you want to open the list of search results again, click the **Quick Launch** box and the list opens automatically.

   To clear the **Quick Launch** box, click the ✕ button or press the **Esc** key.

See also

How to use the ribbon and the commands on the ribbon (page 26)

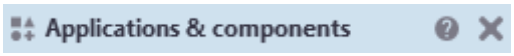
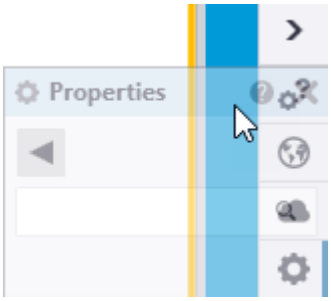
How to use the side pane (page 31)

3.3 How to use the side pane

Use the side pane on the right side of the screen, for example, to view model object properties, and to add reference models and components.

To	Do this
Open a side pane window	Click a side pane button to open a side pane window. • Click  to view model object properties using Custom inquiry. • Click  to open **Instructor** and to view instructions for the currently active ribbon command.

To	Do this
	• Click  to find shortcut access to the different Tekla Online services. • Click  to attach point clouds to a model. • Click  to show the properties of model objects. • Click  to show the reference models list. • Click  to show the Applications & components catalog. When you click a side pane button, the side pane window opens and becomes active. Active side pane windows have blue buttons  .
Keep multiple side pane windows open at the same time	Tekla Structures opens only one side pane window at a time by default. You can keep multiple side pane windows open at the same time if needed. • Right-click a side pane button and select **Single pane** or **Stacked panes**. **Single pane**: Tekla Structures opens a new side pane window and closes all the other open side pane windows. **Stacked panes**: Tekla Structures opens a new side pane window and keeps the other open side pane windows stacked on top of each other. • Click **Ctrl+side pane button** to open the side pane windows stacked on top of each other. You can resize the side pane windows and change their order by dragging them.
Close a side pane window	You can close one active side pane window at a time, or several windows at one go if you have stacked them on top of each other. • Click another side pane button to close the active side pane window and to open a new window.

To	Do this
	• Click the button in the upper right corner of each side pane window. • Click the arrow in the side pane.
Move a side pane window	When you position the mouse pointer on the upper part of the side pane window, the upper part is shown in light blue. Grab the upper part of the side pane window and drag the window to a new location. 
Float and dock a side pane window	You can float or dock the side pane windows. • To float a side pane window: right-click a side pane button and select **Float**. • To dock a side pane window: right-click the side pane button of a floating window and select **Attach to side pane**. Alternatively, you can drag the side pane window back to the docking area on the right or at the bottom of the screen. The docking area is marked with blue color.  If you float a side pane window and close Tekla Structures, the side pane window will be opened in its floating position when you start Tekla Structures the next time.
Adjust the size of a side pane window	Resize a floating side pane window by dragging its borders.
Find more help on the content of a side pane window	Click the button.

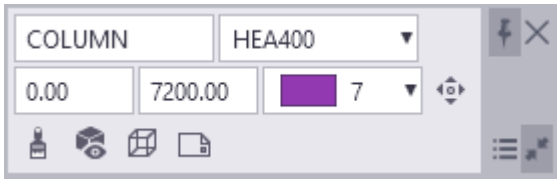
TIP Sometimes a side pane window opens on a second display that is not connected to your computer at the moment. To return the side pane window to the main display, right-click the side pane button and select **Attach to side pane**.

See also

Introduction to Tekla Structures user interface (page 25)

3.4 How to use the contextual toolbar

When you click an object in a model or drawing, a contextual toolbar symbol  appears next to the mouse pointer. Click the symbol to open the contextual toolbar. Use the contextual toolbar to quickly view and change some basic properties of an object, view, grid, and so on.



If multiple objects are being selected, the contextual toolbar displays the text `Varies` for any properties that differ.

How to change object properties using contextual toolbar

The changes that you make on the contextual toolbar are immediately applied to the model or drawing.

1. Click an object in a model or drawing.

   A contextual toolbar appears next to the mouse pointer.

2. Change the object properties on the contextual toolbar.

   The changes are applied immediately.

TIP Press the **Tab** key to move between the properties and command buttons on the contextual toolbar.

Drawing commands in contextual toolbar

In the model, the **Open or create drawings** command in the contextual toolbar opens a menu that lists the drawings created for the selected objects,

and contains the **Create fabrication drawing** command for creating single-part, assembly and cast unit drawings, and a command for showing the drawings created for the selected objects in **Document manager**, where you can then open the drawings.

In drawings, you can use the contextual toolbar to quickly view and change some basic properties of a drawing object, view, grid, and so on.

Show or hide contextual toolbar

You can define whether the contextual toolbar is visible in Tekla Structures.

1. On the **File** menu, click **Settings**.
2. Under **Toolbars**, select or clear the **Contextual toolbar** check box.

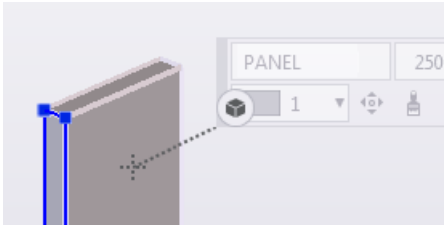
   Alternatively, use the keyboard shortcut **Ctrl+K** to show or hide the contextual toolbar.

Define contextual toolbar's position

You can define the position of the contextual toolbar, relative to an object's reference point.

1. Select an object.
2. Hold down the **Ctrl** key and click the contextual toolbar with the left mouse button.

   A dashed line appears between the contextual toolbar and the object.

3. Drag the contextual toolbar to a new position.

   For example, you can position the contextual toolbar on the left side of the selected object.

4. Release the left mouse button.

   The contextual toolbar now appears in the position you defined, for example on the left side of any object you select.

Pin contextual toolbar in place

You can pin the contextual toolbar to a specific location on the screen, so that the position is locked. For example, you could have it appear at the upper left corner of the screen. In the locked state, the position of the contextual toolbar is independent of the individual part's location.

1. Drag the contextual toolbar to a new location.
2. Click to pin the contextual toolbar to the new location.

   The pin icon changes when the position is locked.
3. To unlock the position, click .

Minimize contextual toolbar

You can minimize the contextual toolbar so that it takes less space on your screen.

1. On the contextual toolbar, click . The contextual toolbar now has the symbol .
2. To restore the contextual toolbar to its original size, click again.

3.5 View status bar messages

Status bar is the area located at the bottom of the Tekla Structures main window. Follow the instructions on the status bar when you use commands. For example, when you are creating a part, the status bar will tell you how to proceed and when to pick points.

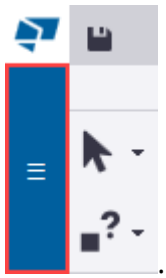
1. Instructions and error messages
2. The status of **Ortho** (**O**), **Smart select** (**S**) and coordinate locks (**X**, **Y**, **Z**).
3. The level in assembly or component hierarchy (0–9)
4. The middle mouse button mode (**Pan** or **Scroll**)
5. The current phase
6. The number of selected objects and handles

See also

Basic settings in the File menu (page 37)

3.6 Basic settings in the File menu

Use the toolbar settings and the switches in **File menu** --> **Settings** to control some basic modeling and drawing settings.



1. Click **File** in the upper-left corner of the screen .
2. Go to **Settings**.
3. Under **User interface**, **Switches**, or **Toolbars**, switch the options either **on** or **off**.

   In drawings, under **Color mode**, click one of the options to change the color mode to **Black and white**, **Grayscale**, or **Color**.

Alternatively, you can use Quick Launch (page 30) box 

to control the toolbars and the switches. Start typing the name of the toolbar or the switch, for example, `smart`, in the **Quick Launch** box and select the toolbar or the switch on the search results list to activate the setting.

User interface

- **Toolbars**: Use the option buttons to adjust the size of the icons on the toolbars at the bottom of the screen, and at the same time the toolbar size.
- **Font size (Ribbon)**: Use the slider to adjust the ribbon font size. The default font size is 11p.

Switches

Option	Description
Smart select	Change how drag-and-drop works for object handles. When the option is **on**, you can drag from object handles without selecting them first. When the option is **off**, you must select the handles before dragging.

Option	Description
Drag & drop	Activate or inactivate the drag-and-drop command. When the option is **on**, you can use drag-and-drop when copying or moving objects. When the option is **off**, drag-and-drop cannot be used.
Middle button pan	Change the panning mode. When the option is **on**, you can move the model or drawing using the middle mouse button. When the option is **off**, you can move the model using the left mouse button.
Centered zooms	Change the zooming mode. When the option is **on**, the center point of zooming is kept in the middle of the view, regardless of the mouse pointer position. When the option is **off**, the mouse pointer position determines the center point of zooming.
Basic view auto rotation	Activate or inactivate the auto rotation of part and component 3D views. When the option is **on**, Tekla Structures rotates the view once whenever you create a new 3D view of a part or component. When the option is **off**, Tekla Structures does not rotate the view.
Crossing selection	Change how area selection works. When the option is **on**, all objects that fall at least partially inside the rectangular area are selected, regardless of the dragging direction. When the option is **off**, the dragging direction affects the selection of objects.

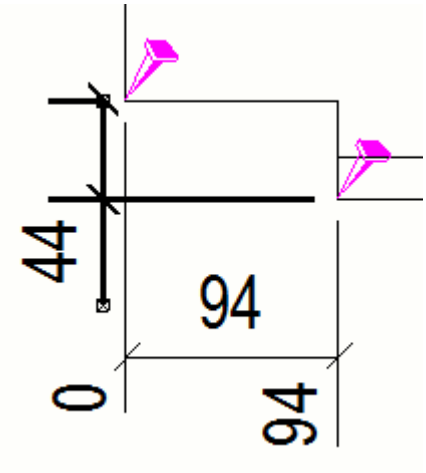
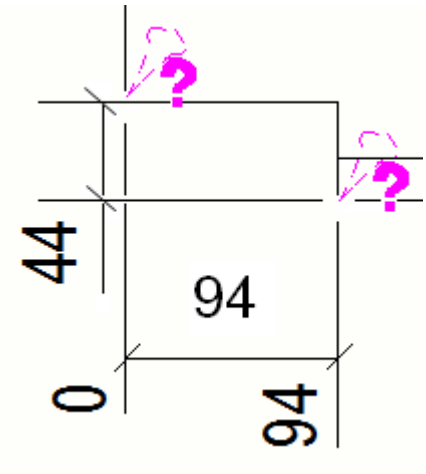
Option	Description
Rollover highlight	Switch the highlighting of objects on or off. Depending on the rendering engine you are using, OpenGL or DirectX, Tekla Structures highlights the objects differently when rollover highlight is on. When the option is **on**, Tekla Structures highlights selectable objects when you move the mouse pointer on them. When the option is **off**, selectable objects are not highlighted.
Select on right-click	Change how objects can be selected. When the option is **on**, you can select objects also with the right mouse button. Also the related context menu is displayed immediately. When the option is **off**, you can select objects with the left mouse button.
Automatic rotation center	Define how the view point is set. When the option is **on**, the view point changes whenever you click the middle mouse button. When the option is **off**, the view point stays in a set position.
Ortho	Activate or inactivate orthogonal snapping. Orthogonal snapping also works in drawings. When the option is **on**, Tekla Structures snaps to the closest orthogonal point on the plane (0, 45, 90, 135, 180 degrees, and so on). The mouse pointer automatically snaps to positions at even distances in the given direction. When the option is **off**, orthogonal snapping is not used.
Use legacy rendering	Activate or inactivate the DirectX rendering. When the option is **on**, the legacy OpenGL rendering is used.

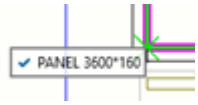
Option	Description
	When the option is **off**, the DirectX rendering is used. DirectX rendering is better optimized for modern graphics cards. The rendering setting is model view specific, which means that you can use a different rendering options in different model views. If you switch between the rendering options, you need to reopen the model view to activate the new value.
Hatching of overlapping surfaces	In the DirectX rendered model views, switch the hatching of overlapping surfaces on the same plane on or off. When the option is **on**, the overlapping surfaces are visualized with a hatch, and you can detect duplicate objects or any overlapping parts. When the option is **off**, the overlapping surfaces are not visualized. Hatching is shown in views whose rendering option is **Parts rendered** / **Components rendered** (**Ctrl/Shift +4**). If you switch the option on or off, you need to reopen the view to activate the new value.
Dashed line for hidden line	In the DirectX rendered model views, show or hide dashed lines for part edge lines when the part edge lines are hidden behind another part. When the option is **on**, the dashed lines are shown, making it easier to see, for example, if the part flange is facing towards or away from the web, or, in more complex 3D views, which part is on top of which. Using the dashed lines also increases Tekla Structures performance in the transparent views.

Option	Description
	When the option is **off**, the dashed lines are not shown and the performance effect is removed. Dashed lines can be shown in all views whose rendering option is one of the following: • **Parts wireframe** / **Components wireframe** (**Ctrl/Shift+1**) • **Parts shaded wireframe** / **Components shaded wireframe** (**Ctrl/Shift+2**) • **Parts grayscale** / **Components grayscale** (**Ctrl/Shift+3**) • **Show only selected part** / **Show only selected component** (**Ctrl/Shift+5**). If you switch the option on or off, you need to restart Tekla Structures to activate the new value.
Tooltips	Show or hide the tooltips (page 26). When the option is **on**, a small window with examples, hints, and tips appears when you rest the mouse pointer on a command. When the option is **off**, no tooltips appear.
Snap tooltips	Show or hide the snap tooltips. When the option is **on** and you start a command that requires picking points, Tekla Structures displays a snap tooltip that shows the name of the snap point. When the option is **off**, no snap tooltips appear.

The following settings are available only in the drawing mode:

Option	Description
Printer line widths	Show on the screen the drawing lines with the defined line thickness in color and grayscale color modes. The black and white color mode always shows the printer line thicknesses on the screen, whereas the color and grayscale color modes only show the printer line thicknesses on the screen if the **Printer line widths** switch is enabled. When the option is **on**, the lines in color and grayscale modes are shown with defined thickness. When the option is **off**, the lines in color and grayscale modes are shown with default thickness.
Printer line colors	Show line colors in the drawing.
Ghost outline	Show hidden objects in drawings as ghost outlines in color drawings. In grayscale and black and white drawings, hidden objects are not shown even if **Ghost outline** is selected. When the option is **on**, hidden lines are shown as ghost outlines. When the option is **off**, hidden lines are not shown.
Associativity symbol	Shows which drawing objects are associative and automatically updated. Associativity symbols are shown only when you select a

Option	Description
	drawing object, for example a dimension.  Objects that do not have valid association get a ghost associativity symbol and a question mark.  When the option is **on**, associativity symbols are shown. When the option is **off**, associativity symbols are not shown.
Dimension creation associativity	Activate the dimension creation associativity functionality, which displays and allows you to change the dimension associativity rule for each dimension point separately during

Option	Description
	the manual dimensioning of the drawing objects. 
Drawing drag & drop	Activate or inactivate the drag-and-drop command in drawings. When the option is **on**, you can use drag-and-drop when moving objects such as annotations, sketch objects and grid lines without selecting the objects or handles first. When the option is **off**, you need to select the objects or handles first before you can drag.

Toolbars

Use the toolbar switches to switch the selected toolbars on and off:

- **Snapping toolbar**
- **Snap override toolbar**
- **Selecting toolbar**
- **Work plane handler toolbar**
- **Model search toolbar**
- **Contextual toolbar**

By default, the toolbars are located at the bottom of the screen.

See also

How to use the contextual toolbar (page 34)

How to use the ribbon and the commands on the ribbon (page 26)

How to use Quick Launch to find commands, dialog boxes, and toolbars (page 30)

3.7 Icons on the Quick Access Toolbar

Quick Access Toolbar provides shortcut icons to the commonly used commands. The toolbar is located on top left corner of the screen.

If needed, you can customize the **Quick Access Toolbar** and add the commands of your choice to it.

Icon	Description
	Save (page 22) changes to the current model file.
	Undo the last action.
	Redo the actions previously undone.
	Open the Undo history dialog box. The dialog box lists the commands you have run and the modifications you have done. Use the list to undo or redo several commands or modifications at one go.
	This icon is visible if you use Tekla Model Sharing. Read in other users' model changes from the sharing service. Only the changed data is read in.
	This icon is visible if you use Tekla Model Sharing. Write out your model changes to the sharing service. Only new or changed data is written out.
	The icon is visible if you use Tekla Model Sharing. Show read in changes. After you have read in, a list of model changes is displayed.

See also

Introduction to Tekla Structures user interface (page 25)

3.8 Default keyboard shortcuts

Tekla Structures contains a large number of keyboard shortcuts that you can use to speed up your work.

If you want to assign new shortcuts or change the default shortcuts, you can customize the keyboard shortcuts.

Common commands

Command	Keyboard shortcut
Help	**F1**
Help: when tooltip is open	**Ctrl+F1**
Open **Recent** models list	**Ctrl+O**

Command	Keyboard shortcut
Create new model	**Ctrl+N**
Save model	**Ctrl+S**
Delete	**Del**
Open properties When an object is selected, the properties are opened either in the property pane or in a dialog box.	**Alt+Enter**
Undo	**Ctrl+Z**
Redo	**Ctrl+Y**
Interrupt	**Esc**
Repeat last command	**Enter**
Show/hide contextual toolbar	**Ctrl+K**
Switch direct modification on/off	**D**
Quick Launch	**Ctrl+Q**
Open **Advanced options** dialog box	**Ctrl+E**
Open **Applications & components catalog** side pane	**Ctrl+F**
Open **Keyboard shortcuts** dialog box	**Ctrl+Shift+C**

Rendering options

Command	Keyboard shortcut
Parts wireframe	**Ctrl+1**
Parts shaded wireframe	**Ctrl+2**
Parts grayscale	**Ctrl+3**
Parts rendered	**Ctrl+4**
Show only selected part	**Ctrl+5**
Components wireframe	**Shift+1**
Components shaded wireframe	**Shift+2**
Components grayscale	**Shift+3**
Components rendered	**Shift+4**
Show only selected component	**Shift+5**
References wireframe	**Ctrl+Shift+1**
References shaded wireframe	**Ctrl+Shift+2**
References grayscale	**Ctrl+Shift+3**
References rendered	**Ctrl+Shift+4**

Command	Keyboard shortcut
Show only selected reference	**Ctrl+Shift+5**

Selecting objects

Command	Keyboard shortcut
Switch rollover highlight on/off	**H**
Select all selection switch	**F2**
Select parts selection switch	**F3**
Select rebar sets selection switch	**Alt+Q**
Select rebar groups selection switch	**Alt+W**
Select single rebars selection switch	**Alt+E**
Select all objects in the model	**Ctrl+A**
Select previous objects	**Alt+P**
Select assembly	**Alt+object**
Add to selection	**Shift**
Toggle selection	**Ctrl**
Selection filters	**Ctrl+G**
Hide object	**Shift+H**

Snapping

Command	Keyboard shortcut
Snap to reference lines/points	**F4**
Snap to geometry lines/points	**F5**
Snap to nearest points	**F6**
Snap to any position	**F7**
Switch **Ortho** on/off	**O**
Relative coordinate input	**R**
Absolute coordinate input	**A**
Global coordinate input	**G**
Cycle forward through the available snap points	**Tab**
Cycle backwards through the available snap points	**Shift+Tab**
Switch coordinate lock X, Y or Z on/off	**X**, **Y** or **Z**

Copying and moving objects

Command	Keyboard shortcut
Copy	**Ctrl+C**
Move	**Ctrl+M**
Switch smart select on/off	**S**

Viewing the model

Command	Keyboard shortcut
Open the **Views** list	**Ctrl+I**
Switch between 3D/plane view	**Ctrl+P**
Switch between views	**Ctrl+Tab**
Updated window	**Ctrl+U**
Zoom original	**Home**
Zoom previous	**End**
Zoom in	**Page Up**
Zoom out	**Page Down**
Zoom selected	**Shift+Space**
Rotate using mouse	**Ctrl+R**
Rotate using keyboard	**Ctrl+arrow keys** **Shift+arrow keys**
Set view rotation point	**V**
Rotate once Rotate continuously	**Shift+R** **Shift+T**
Switch view rotation on/off	**F8**
Pan	**P**
Switch middle button pan on/off	**Shift+M**
Move right Move left Move down Move up	**arrow keys**
Center by cursor Use to center the model on a particular point.	**Insert**
Fly	**Shift+F**

Command	Keyboard shortcut
Create clip plane	**Shift+X**
Switch fullscreen on/off	**F11**

Checking the model

Command	Keyboard shortcut
Inquire object	**Shift+I**
Measure distance	**F**
Create report	**Ctrl+B**
Open **Phase manager**	**Ctrl+H**
Create AutoConnections	**Ctrl+J**

Rebar display options

Command	Keyboard shortcut
Leg face visibility	**Alt+1**
Guideline visibility	**Alt+2**
Property modifier visibility	**Alt+3**
Splitter visibility	**Alt+4**
End detail modifier visibility	**Alt+5**
Rebar dimension visibility	**Alt+6**
Color rebar groups	**Alt+7**

Part position options

These keyboard shortcuts work for both native Tekla Structures parts as well as for analysis parts.

Command	Keyboard shortcut
Part position up	**Alt+arrow up**
Part position down	**Alt+arrow down**
Part position left	**Alt+arrow left**
Part position right	**Alt+arrow right**
Part rotation clockwise 90 degrees Note that this command is not available for analysis parts.	**Alt+space**

Drawings

Command	Keyboard shortcut
Open **Document manager** in model	**Ctrl+L**
Open **Document manager** in drawing mode	**Ctrl+O**
Print drawings	**Shift+P**
Open next drawing	**Ctrl+Page Down**
Open previous drawing	**Ctrl+Page Up**
Associativity symbol	**Shift+A**
Set next drawing color mode	**B**
Ghost outline	**Shift+G**
Add orthogonal dimension	**G**
Add free dimension	**F**
Open any drawing after creating the drawing	**Ctrl+Shift**
In **Document manager**: Open user-defined attributes	**Alt+U**
In **Document manager**: Add to **Master Drawing Catalog**	**Ctrl+M**
In **Document manager**: Revision handling	**Ctrl+R**
In **Master Drawing Catalog**: Select all	**Ctrl+A**
In **Master Drawing Catalog**: Create drawings for all parts	**Alt+A**
In **Master Drawing Catalog**: Create drawings	**Alt+C**
Set UCS origin	**U**
Set UCS by two points	**Shift+U**
Toggle orientation	**Ctrl+T**
Reset current	**Ctrl+1**
Reset all	**Ctrl+0**

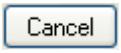
3.9 How to use dialog boxes

You can use dialog boxes to view and modify the properties of various objects in Tekla Structures. Typically dialog boxes open when you double-click an object in the model or in the drawing.

NOTE Model object properties, such as part properties, are modified with the property pane, not with dialog boxes.

Learn the common dialog box buttons

The following table lists some common buttons that can be found in the Tekla Structures dialog boxes.

Button	Description
	Saves the properties and closes the dialog box. Tekla Structures uses these properties the next time you create an object of this type.
	Saves the properties without closing the dialog box. Tekla Structures uses these properties the next time you create an object of this type.
	Modifies the selected objects using the current properties of the dialog box.
	Fills the dialog box with the properties of the selected object. If several objects are being selected, Tekla Structures takes the properties randomly from one of them.
	Switches all check boxes in the dialog box on and off.
	Closes the dialog box without saving the properties or modifying objects.
	Saves the properties in the file shown in the list.
	Loads the previously saved properties to the dialog box. Tekla Structures also loads the properties of sub-dialog boxes, even if they are not open. Select the name of the properties file you want to use.
	Saves the properties with the name given in the box. The **Save as** button also updates the **Load** list. This is important if you add or delete files manually. Tekla Structures stores the properties files in the model folder, also including the properties of sub-dialog boxes.

Modify object properties by using dialog boxes

1. Double-click an object to open the properties dialog box.
2. To indicate which properties should be changed, select or clear the desired check boxes.

   For example, if you want some part marks to share the same name but do not want to change any of their other individual properties, ensure that only the **Name** check box is selected.

TIP Click  to switch all check boxes on or off.

3. Modify the properties as needed.
4. Select the objects you want to modify.
5. Click **Modify**.

   Tekla Structures changes the properties whose check boxes you selected.

3.10 Change the language

You can change the language of the Tekla Structures user interface at any time.

1. On the **File** menu, click **Settings** --> **Change language**.
2. Select a language from the list.

   You have the following options. The three-letter language codes that are given in parentheses are used in some language-dependent file and folder names.

   - Chinese – simplified (chs)
   - Chinese – traditional (cht)
   - Czech (csy)
   - Dutch (nld)
   - English (enu)
   - French (fra)
   - German (deu)
   - Hungarian (hun)
   - Italian (ita)
   - Japanese (jpn)
   - Korean (kor)
   - Polish (plk)
   - Portuguese (ptg)
   - Portuguese – Brazilian (ptb)
   - Russian (rus)
   - Spanish (esp)
3. Click **OK**.
4. Restart Tekla Structures for the change to take effect.

3.11 Take screenshots

A screenshot is an image of a model or drawing view. You can use screenshots in posters, brochures, or other material to show projects carried out using Tekla Structures.

By default, the screenshots are saved in the `\screenshots` folder under the current model folder with the name `snap_xx.png`.

Take a screenshot of a model

You can take screenshots of model views.

1. Open a model and adjust the model view according to your needs.

   For example, hide the work area box if you do not want to show it.

2. On the **View** tab, click  **Screenshot** --> **Screenshot**.
3. If you have multiple views of the model, click **Pick view** and select the view to take the screenshot from.
4. To modify the settings, click **Options**.
   a. Define the width, height, and DPI of the screenshot.
   b. Click **OK** to save the changes.
5. Define a name and location for the screenshot.
   a. Select **Print to file** and enter a descriptive name for the screenshot in the **File name** box.

      You can also change the whole path. If you do not want to do this, you can keep the default values for the path and the file name.
6. Click **Show with associated viewer** to show the screenshot in an application that is by default associated with this file type.
7. Click **Capture**.

Take a screenshot of a drawing

A drawing screenshot is an image of an open drawing with or without borders.

1. Open a drawing and adjust the drawing view according to your needs.

   For example, delete unnecessary marks or dimensions, and hide unnecessary parts.

2. On the **Views** tab, click  **Screenshot** --> **Screenshot**.
3. Do one of the following:
   - Select **View** to take a screenshot of the open drawing with window borders
   - Select **View without borders** to take a screenshot of the open drawing without window borders.
4. Under the preselected **Print to file** option enter a descriptive name for the screenshot in the **File name** box.

   You can also change the whole path. If you do not want to do this, you can keep the default values for the path and the file name.
5. Click **Show with associated viewer** to show the screenshot in an application that is by default associated with this file type.
6. Click **Capture**.

Save a screenshot in bitmap format

By default, screenshots are created as Portable Network Graphics (`.png`) files. You can also save a screenshot in bitmap (`.bmp`) format to use it, for example, as a custom component thumbnail. Note that the bitmap file size is much larger than when saving as PNG.

1. On the **Views** tab, click  **Screenshot** --> **Screenshot**.
2. Select **Place on clipboard**.
3. Click **Capture**.
4. Paste the screenshot in your graphics editor and save it in `.bmp` format.

NOTE The software that you use to open the screenshot may have a limit for the number of pixels.

Screenshot settings

Use the **Screenshot** dialog box to view and modify the screenshot settings.

The following options are available in model views and in drawings.

Option	Description
View name	Shows the selected view name.

Option	Description
View	Includes the view content and window borders in the screenshot. Not available in model views.
View without borders	Includes only the view content in the screenshot. Not available in model views.
Rendered view	For high resolution screenshots from model views. The **Options** button displays the **Screenshot Options** dialog box. Not available in drawings.
Place on clipboard	Places the screenshot on the clipboard. Not available in drawings.
Print to file	Saves the screenshot to a file.

The following screenshot options are only available in model views:

Option	Description
Final width	The width of the screenshot. The units depend on the settings in **File menu** --> **Settings** --> **Options** --> **Units and decimals** .
Final height	The height of the screenshot. The units depend on the settings in **File menu** --> **Settings** --> **Options** --> **Units and decimals** .
DPI	The pixel density (DPI) of the screenshot. There are limitations to pixel density. You can change the DPI using a graphics editor.
White background	Uses white background.
Smooth lines	Uses smooth lines to decrease jagged edges.
Line width	Sets the line width.

4 Contact Tekla Structures support (Support tool)

The Support tool allows you to contact Tekla Structures support directly. With this tool you can collect the model, related files, and other necessary information in one support request, and safely upload your request to Tekla Structures support.

The Support tool:

- Automatically identifies the open model and includes all files or selected files according to your selection from the model folder as attachments to your request. Some logs and files in other folders are also attached, such as the user feedback log, Tekla Structures logs and user-defined attribute files.
- Automatically gathers application and system information.
- If a crash is encountered, attaches automatically to the Support tool the crash dumps, session log files and Windows logs of type Error from last 72 hours. They can be skipped by clearing the **Crash information** file category selection.
- Uploads the problem description, attached model, attached files, and all other gathered information to Tekla Structures support.

NOTE **Confidentiality information**

All files you upload are treated as confidential. Only the recipient can access the files.

4.1 Create a support request

1. On the **File** menu, click **Help** --> **Contact Tekla support** .
2. Log in using your Trimble Identity.

The Support tool opens and automatically fills in user, application and Tekla Structures version information. Support tool reads your name, email address, company name and support email address from your Trimble Identity profile.

You can switch to another account by clicking **Switch user**.

3. Select a category from the list of predefined categories, or select **Other** and enter the category.
4. Enter the problem description.
5. Click **Next**.
6. Select what you want to attach. The file name, file group, file size, and file location are mentioned for each file.
   - By default all files are selected.
   - Select the **All** check box, or select specific files from the **Select the files** list.
   - If you want to send some other attachments than shown in the **Select the files** list, click the **Add extra files** button and browse for the files.
7. Click **Next**.

   The Support tool creates the package and shows the total attachment size. You can also check application information and operating system information before finalizing the support case creation.
8. Click **Create case** to upload your case to Tekla Structures support.

While you create the support case, the navigating back button in the upper-left corner is disabled for a moment so that you cannot accidentally interrupt the upload.

When the upload is complete, you will receive a notification at your email address. After a successful upload, an automatic confirmation message will be sent to you, and then Tekla Structures support will start solving your case.

For a list of offices and resellers together with their contact information, see Offices and resellers.

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