



Release Highlights 2024T1

Top Picks – what we’re most excited about in 2024T1!

Outfitting/3D Plant Design

- **Piping isometric enhancements:** Discover upgraded isometric drawings where your 2D annotations and custom labels are retained, enhancing clarity and usability.
- **Isometric setting preview:** Easily visualize the impact of annotation settings on isometric drawings, ensuring optimal configuration before finalizing.
- **Pipe routing innovations:** Navigate effortlessly to pipe sides and center points with additional navigation commands and start following a pipe seamlessly during routing.

Hull

- **Enhanced work breakdown structure (WBD):** Experience our improved WBD for flexible, clear digital assembly access, even during workflow, via eShare.
- **Advanced shell plate design:** Realize your complex shell plate designs directly in the 3D environment. Our enhanced design capabilities turn your ideas into reality with seamless precision.

Information Management

- **eShare browser scalability:** The 2023T2 update's model splitting capability is now extended to the browser version of eShare, accompanied by experimental 64-bit memory use allowing up to 16 GB for models. Handle very large eShare models in your browser with greater ease and efficiency.

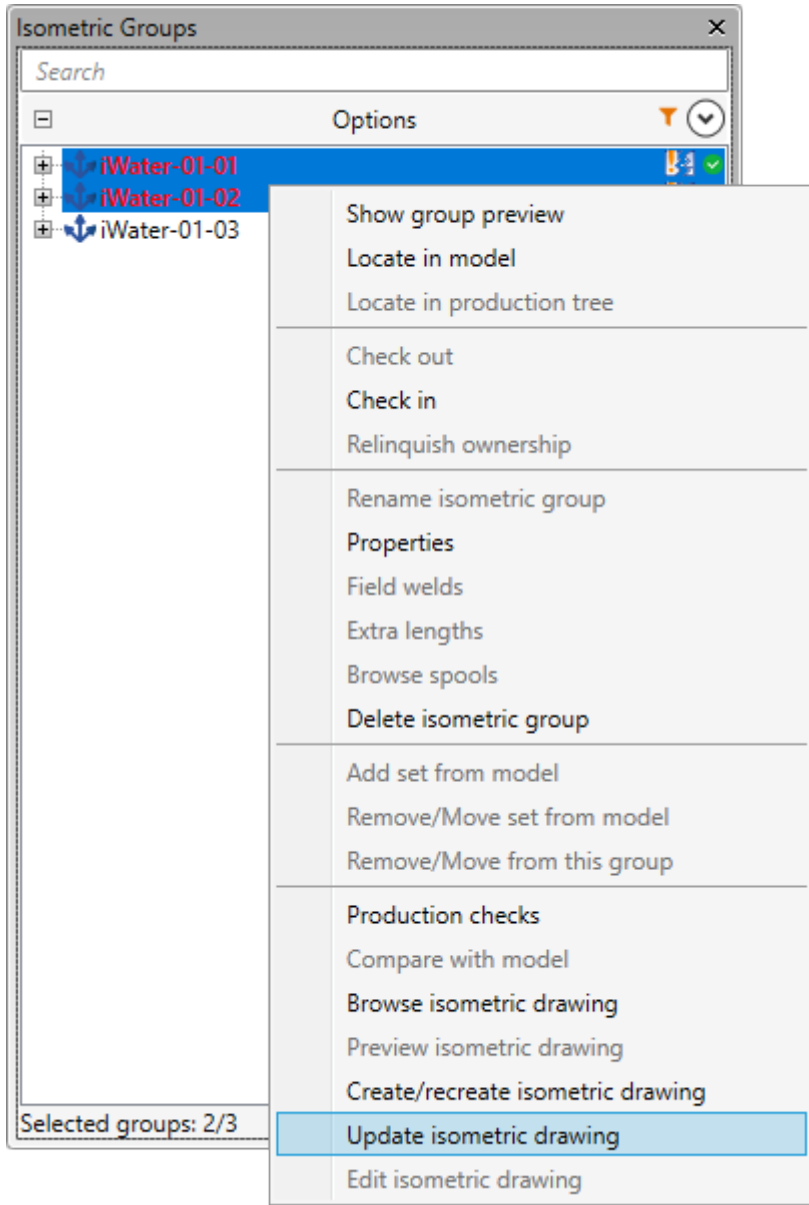
Web API

- **Web API improvements:** For integration developers, our Rest API now supports dynamic model queries on the fly, with new query filters featuring regex operations, set operations, and array support for nested structures. This update brings greater flexibility and power to data handling.

Outfitting/3D Plant Design

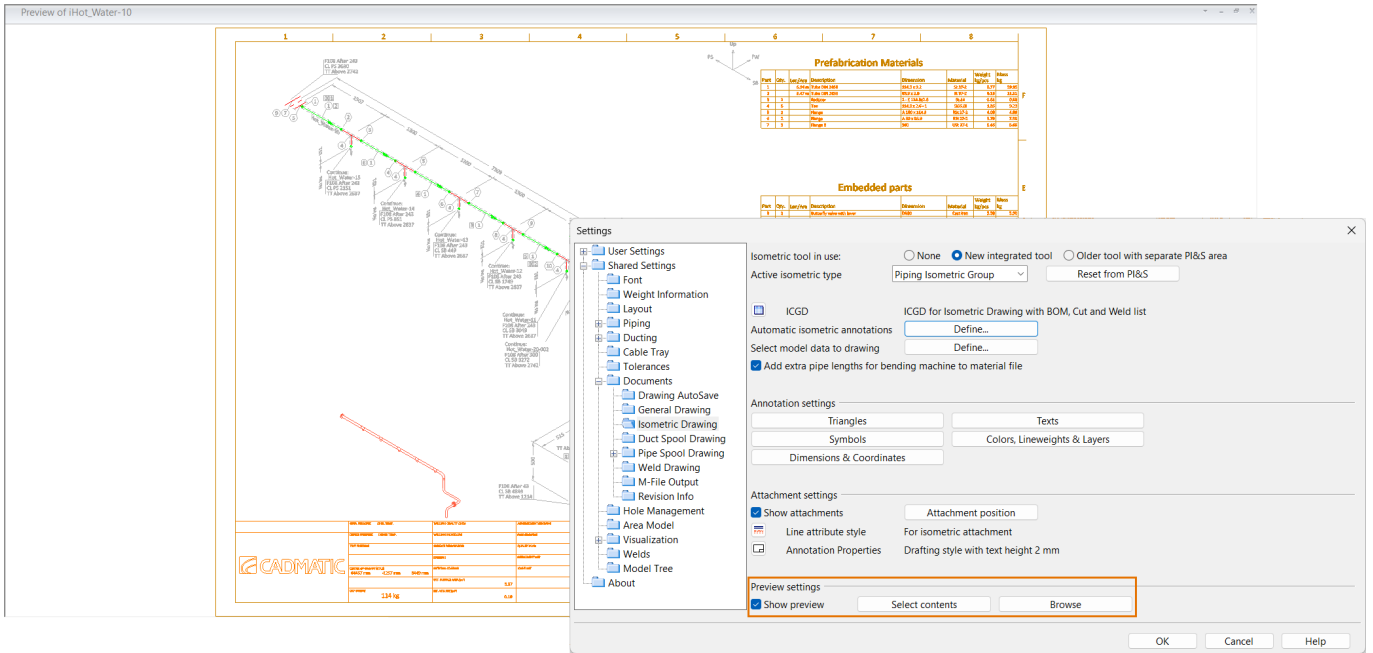
Update existing piping isometrics

Changes in the 3D model can now be updated to piping isometrics without losing existing manually added or modified coordinates, labels, or free-text labels.



Isometric drawing settings with preview

When defining settings for piping isometrics, the administrator can use an existing isometric document to see a preview of how the changes in the settings affect the document.



Improved pipe routing

During pipe routing, the piping designer can select to follow another pipe, either one segment at a time or the whole pipe at once. There is still also a separate Follow Pipe tool, and it provides improved animation for both the existing pipe and the new pipe. In addition, pipe ends have four quadrant points that can be used in navigation.

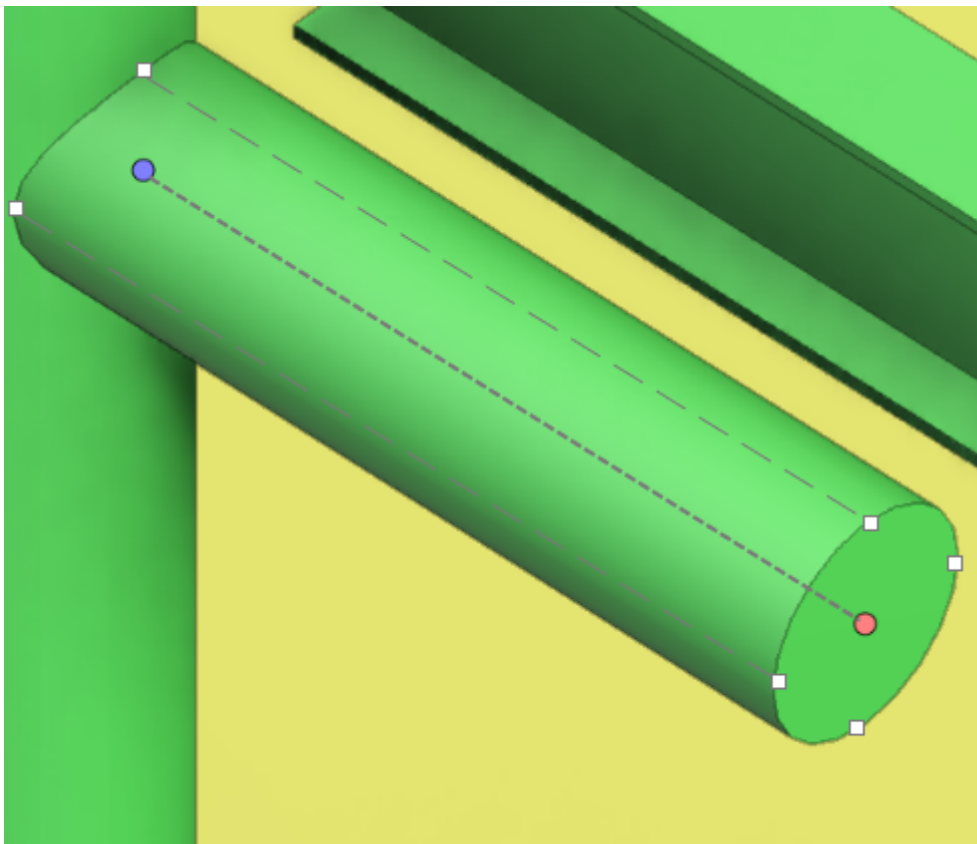




Table import

Drafting tools now have tables as special entities that can be moved and stretched easily, and their appearance can be defined in a Table Style. Tables can be imported from Microsoft Excel files, and if the linked source file is changed later, the user is notified to update the contents.

	Pump	P001A
Created by:	LEH	19.12.13
Checked by:	N/A	19.12.13
Approved by:	N/A	19.12.13
GENERAL	Fluid:	Water
	Diagram name:	Training_Diagram_Room_A
	Type:	PUMPS
	Function:	Centrifugal Pump
PROCESS	Capacity:	3 m3/min.
	Design Pressure:	50 bar
	Motor Rating:	50 kW
	Note:	Outdoor horizontal mounting

				Description			
				Training Drawing of Water Pipeline			
			Scale				
			1:20				
			Total weight				
			1017 kg				
Drwn	Roeh	20.12.2009	Assembly drg.		Draw.No.	Page	Rev.
Chkd	NMR	22.01.2010			TR-W-NMR		2(2)
Appvd.	KMS	22.01.2010	Supersedes				

P&ID

Multi-editing in the property pane

The P&ID property pane now supports editing of multiple diagram objects at the same time. The user can select many objects of several types, and then use checkboxes to select which object types to include when editing the values of attributes that are common to the set.

Training_Diagram_Room_A (PID) - Edit

Properties

Basic information

Selected items

<input checked="" type="checkbox"/>	Armature	5
<input type="checkbox"/>	Equipment	3
<input type="checkbox"/>	Piperun	12
	Total	20

Object

Object's system name AA_Water

Name of object's pipeline Multiple values

Shared items

Posid Multiple values

RoleInProcess

Spec Inherited Specification

- Inherited Specification
- Example_training
- DIN_H2A

InsulationSpec

MenuMData

Description Multiple values

DmPartCode

Compartment

EstimatedX Multiple values

EstimatedY Multiple values

EstimatedZ Multiple values

Shared type items

NS Multiple value 150

PN Multiple values

CADMATIC Scale

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	Design Pressure:	50 bar
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	Note:	Outdoor horizontal mounting

Description

Training diagram Room_A

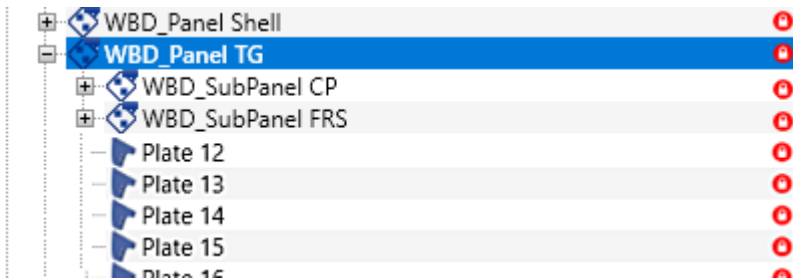
Scale

Total weight

Hull

Improved work breakdown structure

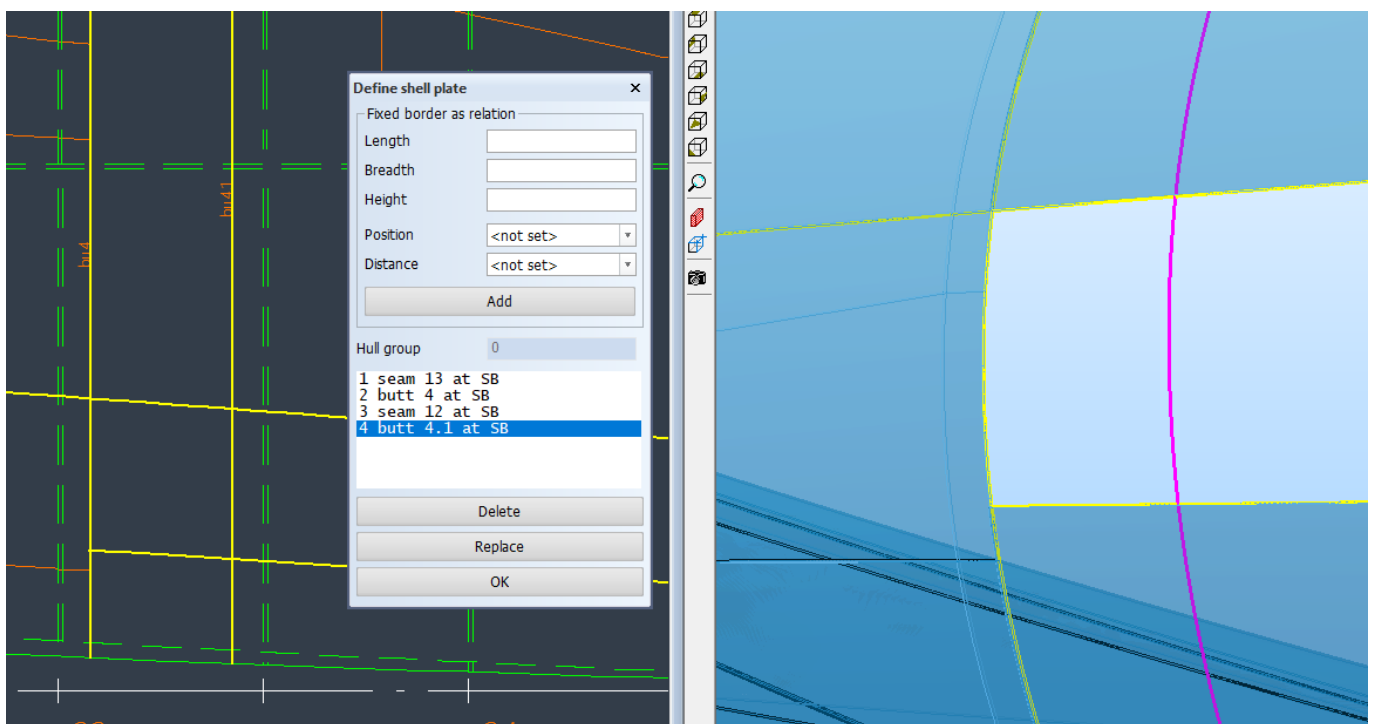
Saving the work breakdown (WBD) structure to COS has been streamlined so that levels which do not contain models are skipped. Such levels are also no longer shown in the model tree in CADMATIC Plant Modeller. The model tree is shown in the same way as the work breakdown structure is shown in Hull Viewer, with the real WBD level and Hull construction part names.



These changes are reflected in CADMATIC eShare as well, in the linking of the 3D models to Hull documentation.

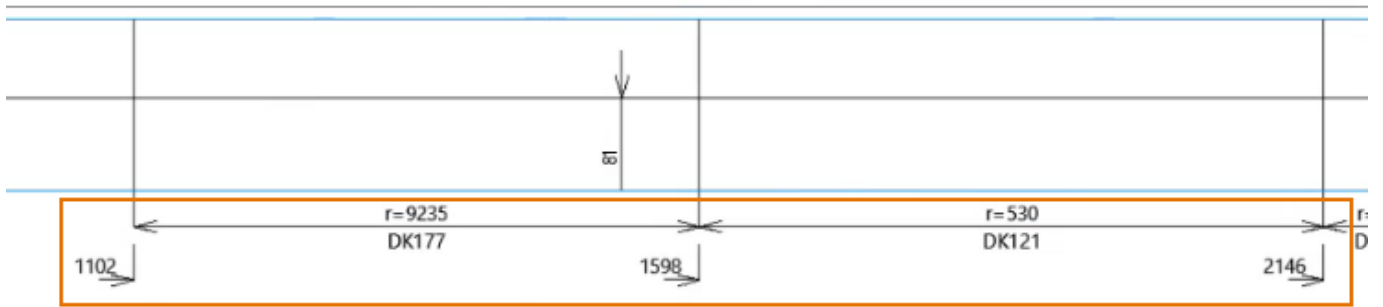
Advanced shell plate design

When creating shell plates, the hull line relations can be selected in 3D environment in Hull Viewer. The Hull Viewer view is shown side by side with the regular shell view. Hull lines can be selected in either view, and the selections made in one view are immediately reflected in the other.



Improved profile sketch for bent face plates

The presentation of bending information in profile sketches for bent face plates has been improved so that there are less bending lines in the sketch, but with more bending information. The bending radius and angle are shown for each bending line. This makes the profile sketches more more readable, and the sketch contains enough information for producing the face plate without using the DXF file or the bending template.

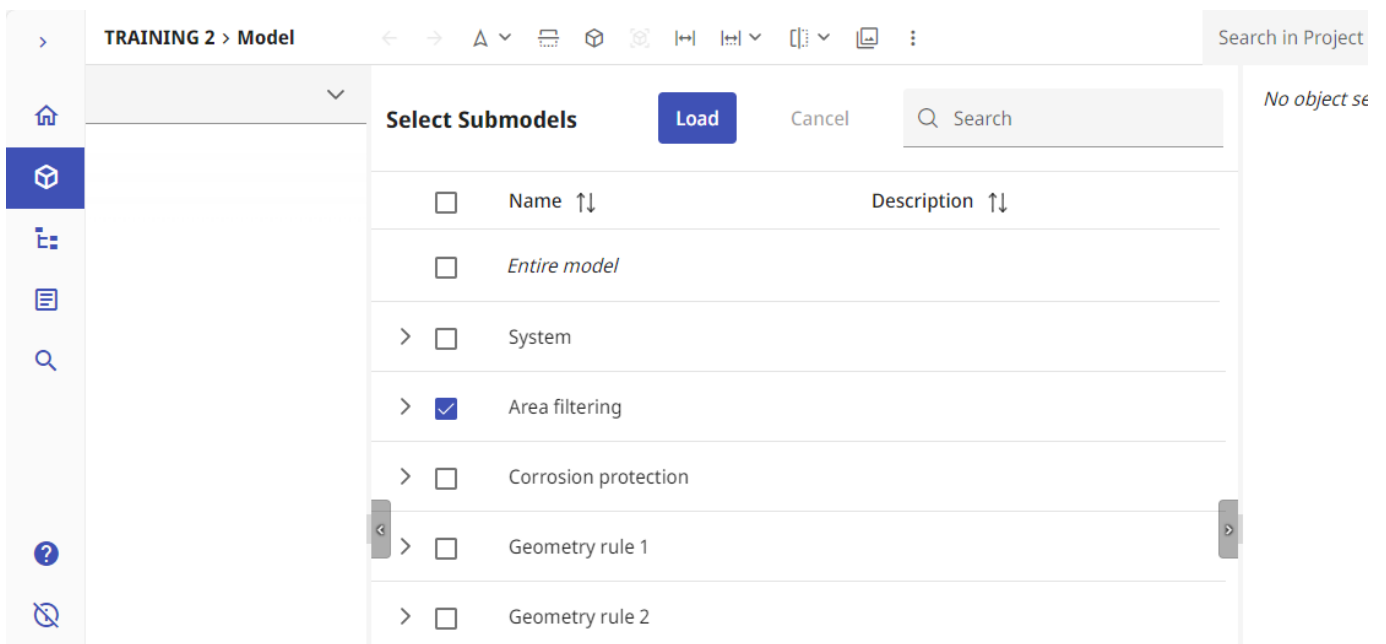


Information Management

Submodels in Browser eShare

The possibility to divide larger models into smaller submodels has now been extended also to eShare in a browser. Submodels enable working with larger models as it allows viewing only one or multiple smaller parts of the complete model, which saves time and memory for more efficient workflow in shared projects.

Selecting and loading the submodels functions in the same way as in eShare App.



eShare models can be split into submodels with different types of configurations, based on attributes, filtering

rules, geometry, or a combination of these. All of the submodels configured in the project are published during the model publish, which makes opening the submodels fast and smooth. This feature makes it easier to handle smaller parts of the project, without having to load the full model every time.

It is still possible for the project administrator to configure that the full model is not loaded at startup, but submodels are used instead by default.

Submodels configuration

Load entire model on startup Yes No

If there is a link in the model to an object not present in any of the loaded submodels, eShare offers to load submodels containing the object.

The targeted object(s) are not present in the open submodels

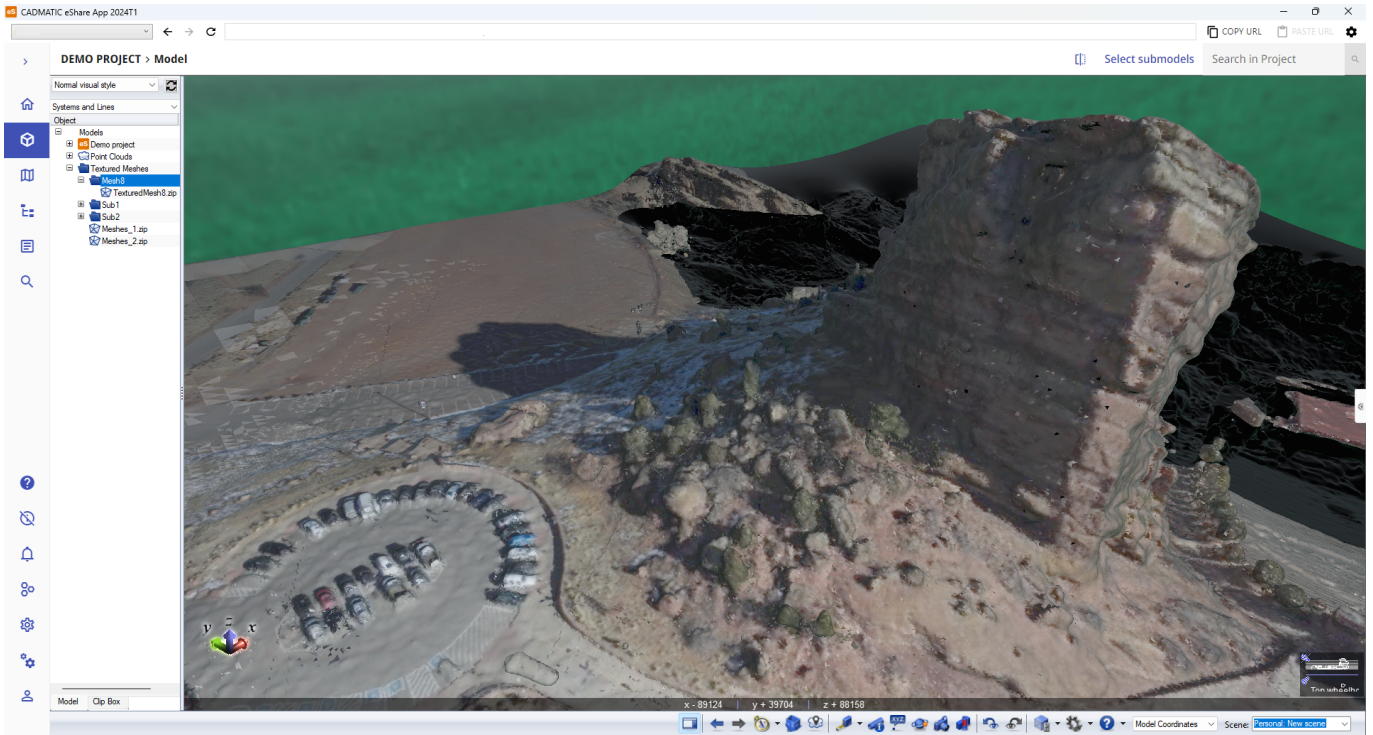
Please select one or more listed submodels to view the object(s) in the model view.

Select Submodels

<input type="checkbox"/>	Name ↑↓	Description ↑↓
<input type="checkbox"/>	<i>Entire model</i>	
> <input type="checkbox"/>	System	

Textured Meshes in eShare App (beta)

Textured meshes is now available in 2024T1 as a beta version. Textured meshes can be uploaded to eShare projects by the project administrator and viewed in eShare App. Textured meshes are traditional 3D objects representing the same data as point clouds. The advantage of textured meshes is that they generally perform better in drawing to 3D and look nicer depending on the data. Textured meshes and their data is not limited to scanner positions. A possible use case could be displaying outside scans of facilities created by a drone.



In administration user interface the textured meshes is on the same configuration view as point clouds, which has now been renamed as Point Clouds and Meshes.

Point Clouds and Textured Meshes Configuration

Viewing Options

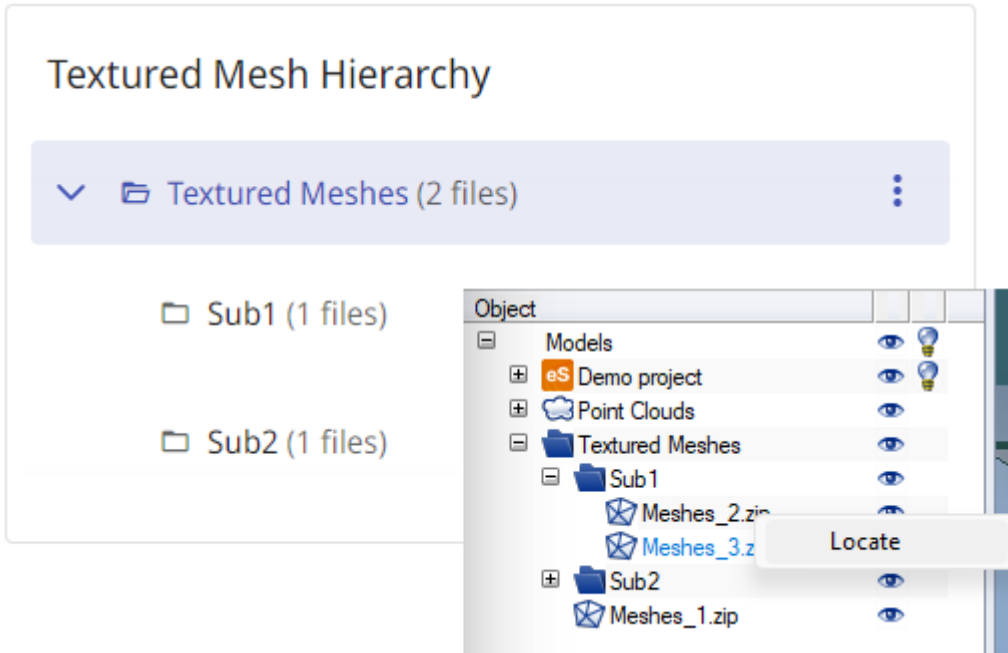
Show Point Clouds by Default Hide Show

Color Scale Factor (Brightness)

Groups Allowed to See Clouds and Meshes

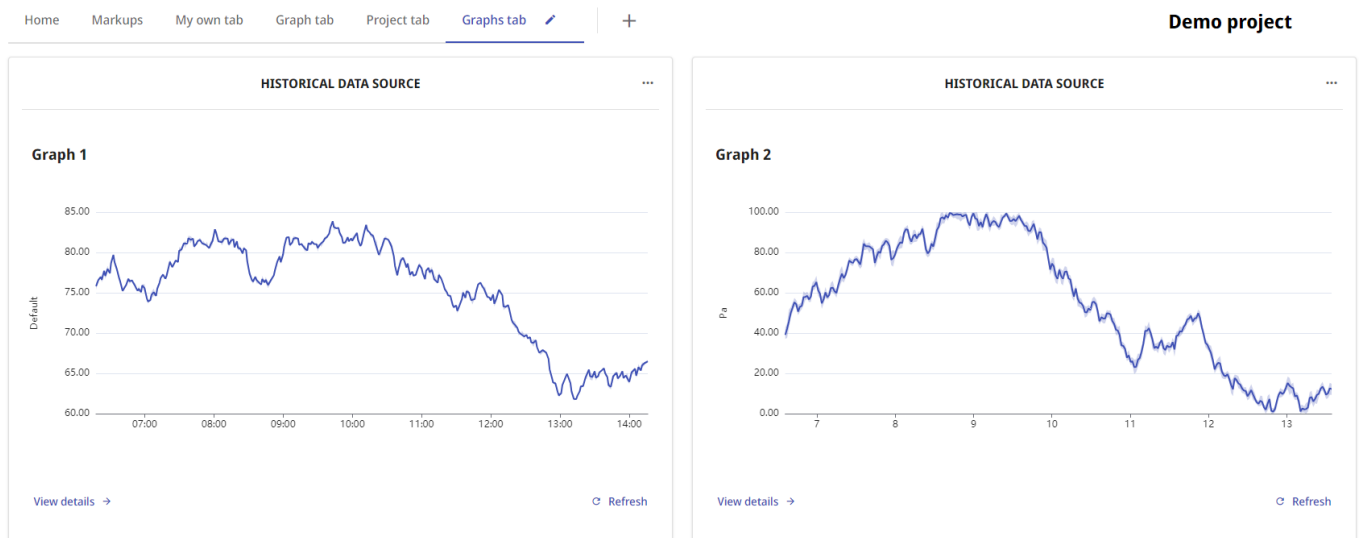
Name ↑

Textured meshes behave in eShare similarly to point clouds and are displayed in the model tree. Custom hierarchies can also be created in configuration view, which is then reflected in the model tree.

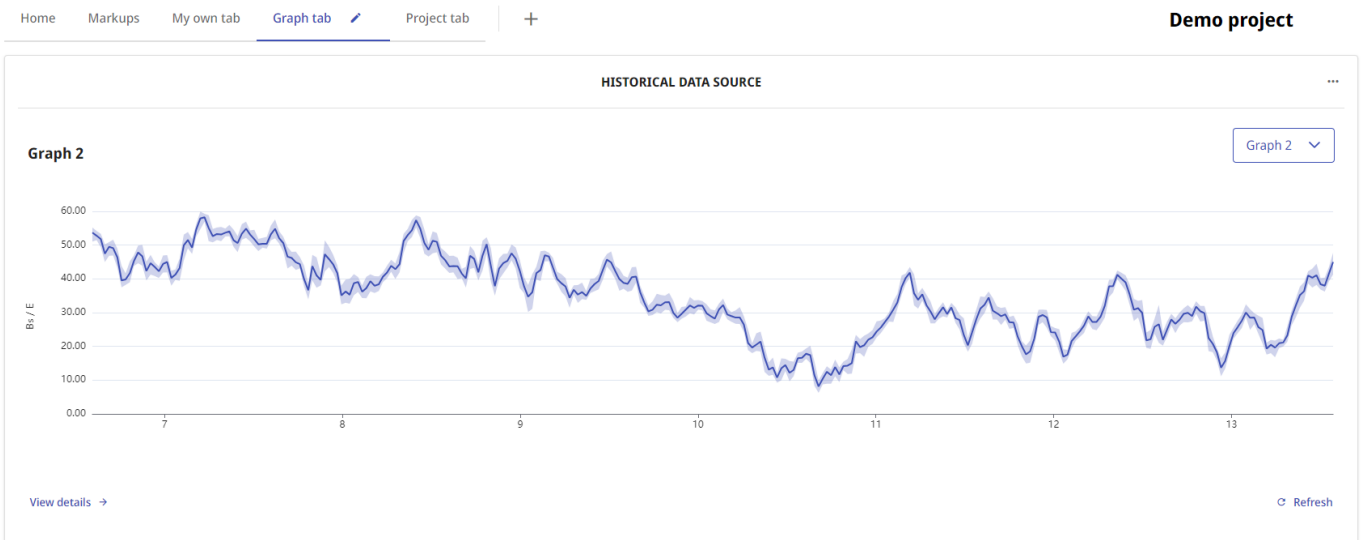


Historical Data Source Widget

The project home view has acquired yet another widget type: historical data source widget. It can be configured to show data from a historical data source in the home view. It can be configured to show one or multiple graphs, which are named and a default graph can be set.



All historical data sources the user has access to in the project can be selected as the target data source for the widget. The configuration also includes settings for the time range of the graph, as well as data source parameters used for acquiring the data, depending on the type of the historical data source. If there are multiple graph options configured for the widget, the user can switch between the graphs using a drop-down menu for selection.



Web API

Dynamic model queries

The Web API can now run dynamic model queries that are not created or stored in COS but created on-the-fly when the query is sent to the Web API. The parts can optionally include connection points and material data.

Query filtering

The Web API query filters have been extended, and there are powerful new features:

- Support for regular expressions allows querying of complex string data.
- Set operations can be used, for example, to read data from multiple different object types.
- Query and reply filters now support arrays, which allows querying of nested structures returned by the API.