

GUIDE

Digital Twin Quick Start Guide

Setting up your digital twin in days with CADMATIC eShare

Welcome to your journey in setting up a digital twin with CADMATIC eShare in just a few days. This guide will walk you through the process in simple steps and provide advice on how to ensure smooth implementation. We finish with a case study of how a large owner-operator with an in-house engineering department benefited from implementing a digital twin.



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Choose SaaS installation for fastest startup – let Cadmatic do it for you

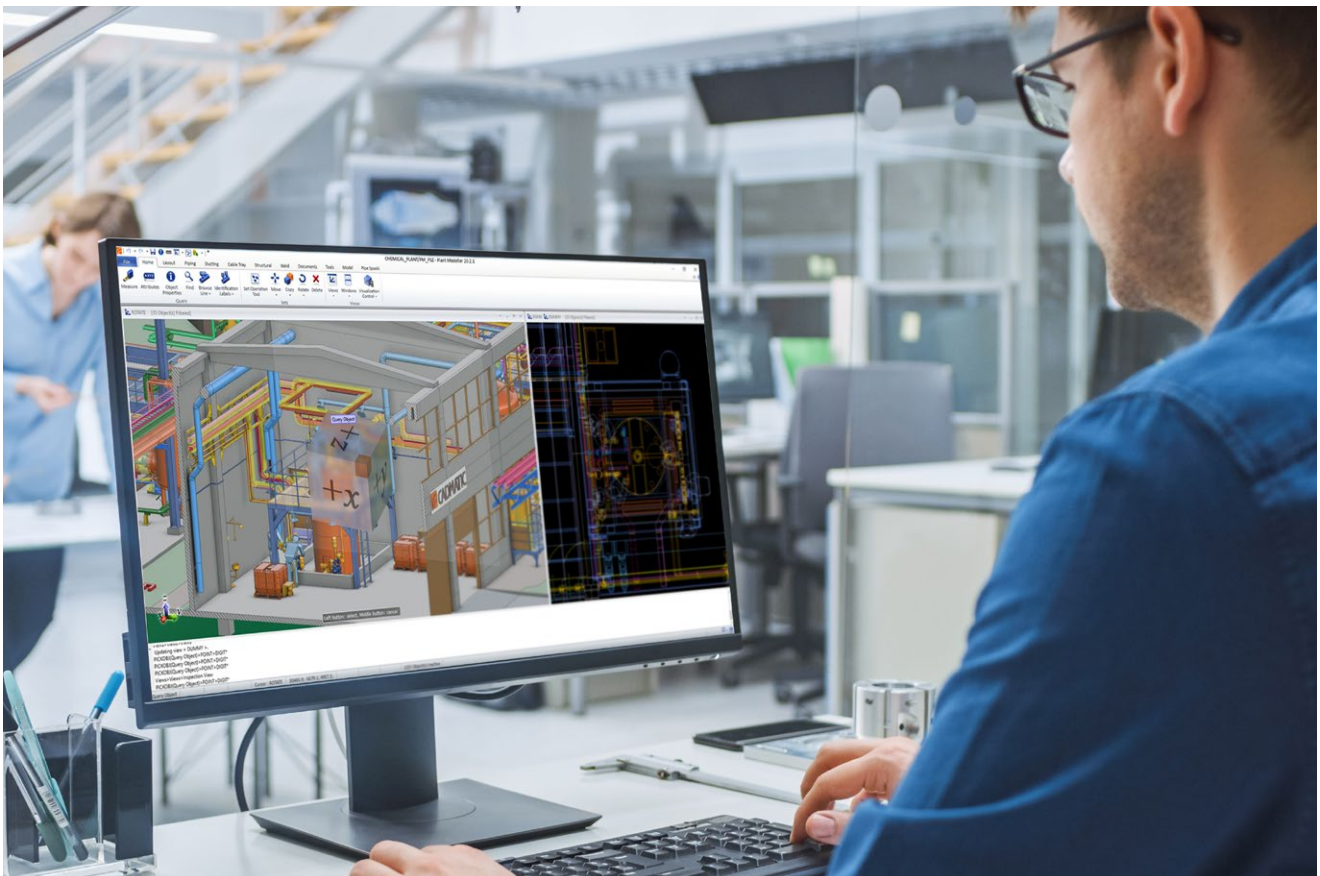
CADMATIC eShare is designed to enhance several processes in your organization. The digital twin platform becomes operational within a few days, allowing you to realize its benefits immediately.

To get your digital twin up and running as fast as possible, we recommend a SaaS-type service where Cadmatic takes care of the entire installation for you including all the steps outlined in this guide!

Benefits of SaaS installation

- Reduce hardware requirements with cloud computing
- Start using Cadmatic with ease
- Scale your operations faster
- Increase collaboration between all stakeholders

Note! If your IT policy/strategy dictates that you need an on premise or 3rd party cloud service, Cadmatic can help you with that.



Start building your digital twin in 3 easy steps

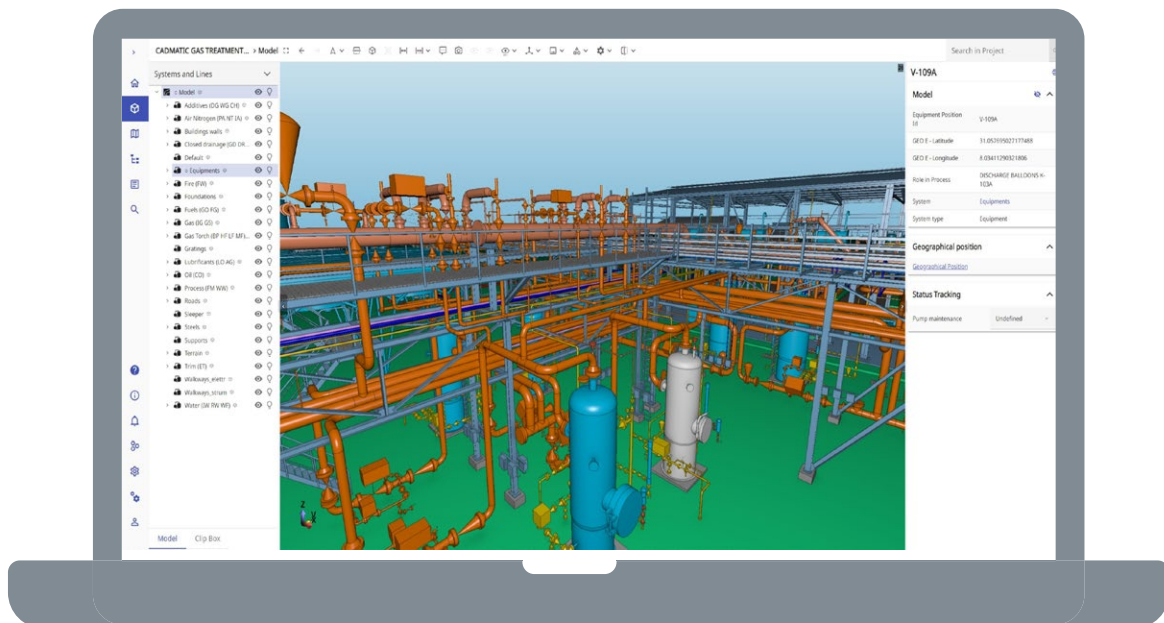
Step 1: Link your 3D models with CADMATIC eShare

Selecting the 3D models, you want to link with CADMATIC eShare is a key step in the process of implementing a digital twin. The goal is to create a comprehensive 3D environment for your digital twin by compiling your latest 3D models and filling gaps with new models or laser scans. CADMATIC eShare uses your existing 3D models and accesses data from their current locations.

Here is what to do

- Select which models you want to be linked with CADMATIC eShare
- Select which point clouds you want to be linked with CADMATIC eShare
- Provide area layout drawings that can be used as a map for navigating in the digital twin, if available

Note! Cadmatic supports all standard design file formats. Check if your models have the necessary metadata and let Cadmatic assist in assessing their quality.



Step 2: Link your documents with CADMATIC eShare

After selecting the 3D models that you want to link, you can select which documents will be linked to the digital twin.

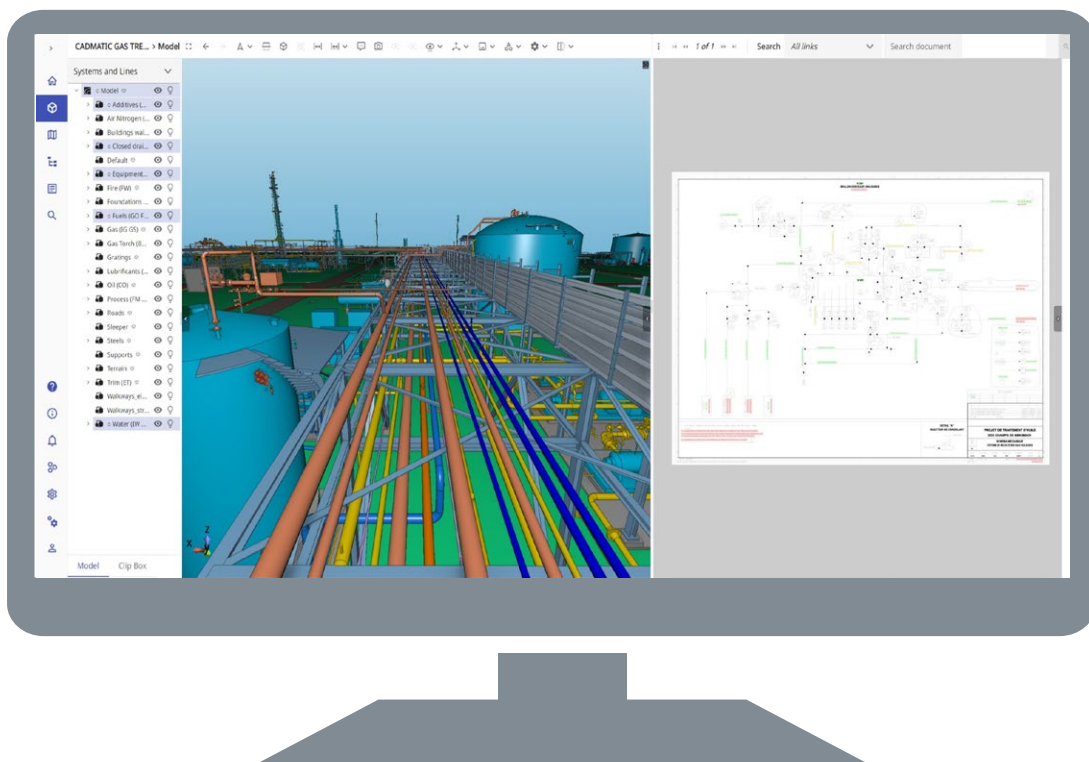
It is important to remember that CADMATIC eShare does not modify, copy, or move documents, but links to their current location. This also ensures that information in CADMATIC eShare is always up to date.

Your document locations could include file folders or a document management system. Typically, documents such as P&IDs, layouts, isometrics, data sheets, equipment documentation, and safety documentation are linked. Common document formats include PDF, DWG, or XLS.

Here is what to do

- Decide which documents need to be linked with CADMATIC eShare and identify their locations (folders, DMS, etc.)
- Let Cadmatic link the documents to the 3D models for you

Note! CADMATIC eShare does automated algorithm- and AI-based linking between 3D models and document contents.



Step 3: Link your business systems with CADMATIC eShare

The final step in setting up your digital twin is defining what business systems will be linked with CADMATIC eShare. This is the data you wish to be displayed in eShare when model objects are selected in the 3D model. You may, for example, want to visualize maintenance and supplier data from your ERP system in the digital twin.

Cadmatic has the necessary adapters for file imports like CSV or XLSX and an API to interface with all external data locations or systems.

Here is what to do

- Select the business systems and data you want to link with CADMATIC eShare and let Cadmatic take care of linking via key attributes
- Verify that all information is displayed as desired

Note! For linking, you need to provide access to these data sources. In some cases, it may be an external software provider that grants access.



Congratulations – Your digital twin is ready!

You have managed to set up your digital twin in a few days. To ensure your organization gets the most out of the digital twin, we recommend short training sessions for users and admins and making use of basic stakeholder guides that Cadmatic can draw up for you.

Here is what do: Optimize use of your digital twin

- Decide who will use CADMATIC eShare and for what purpose (user or administrator)
- Arrange 4h training for users
- Collaborate with Cadmatic to draw up basic stakeholder guides that outline how different stakeholders will use the software and how it will affect their workflows.
 - » Define user groups and software use cases
 - » Outline how digital twin will affect workflows
 - » Train personnel & optimize use



Case Study

Large owner-operator with in-house engineering department

This case study showcases how a large owner-operator with an in-house engineering department, collaborating with EPC contractors, revolutionized their project management using CADMATIC eShare.

Customer challenge

Our client, renowned for its expansive projects, faced significant hurdles in managing large engineering models generated from diverse design applications and data sources. The crux of their challenge lay in maintaining control over projects, regardless of whether they were internally managed or outsourced to EPC contractors. Previous solutions fell short, offering limited capacity and integration, leading to inefficiency and underperformance.

Innovative solution with eShare

Our approach was straightforward yet impactful, involving three primary steps that revolutionized their system setup. The speed and ease of implementation left the client in awe, especially given their years-long struggle with previous systems. What was expected to take several months was accomplished in days!

A key milestone was the adaptation of eShare for use in developing countries. Here, even complex models are now effortlessly accessed via low-quality laptops through a web browser, thanks to eShare's integration with VDI on the Cadmatic Azure Cloud.

The value unlocked

In projects: eShare became the backbone of project reviews and design verifications. The platform's ability to generate automatic reports that pinpoint discrepancies between documents and models significantly enhanced design quality. On construction sites, real-time access to updated project documentation via eShare minimized costly reworks and cemented construction quality.

In operations: The integration of eShare with external systems like asset management and inspection systems has been a game-changer. This synergy provides visual insights into asset criticality and inspection data. Furthermore, incorporating Scada allows live instrumentation data to be accessed through eShare, turning it into a central hub for up-to-date operational data.

Future development steps

The client is now set to mandate the use of eShare among their EPC contractors, aiming to uplift project performance, transparency, and stakeholder communication. Additionally, they plan to enrich the eShare digital twin platform by integrating operational guides, enhancing safety, and streamlining operations.



Let's create a proof of concept with your own data.
[Drop us a message.](#)



Please contact us if you are interested in hearing more.



BECOME MORE DIGITAL, FASTER

Cadmatic gives you better ways to run and modernize your EPC projects. Our 3D design and information management software helps you simplify data flows, connect people, share information, and reach better decisions throughout the project lifecycle. With Cadmatic, your digital transformation is faster and easier – empowering you to deliver EPC projects using fewer resources, at the best possible cost, on time and within contract.

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