

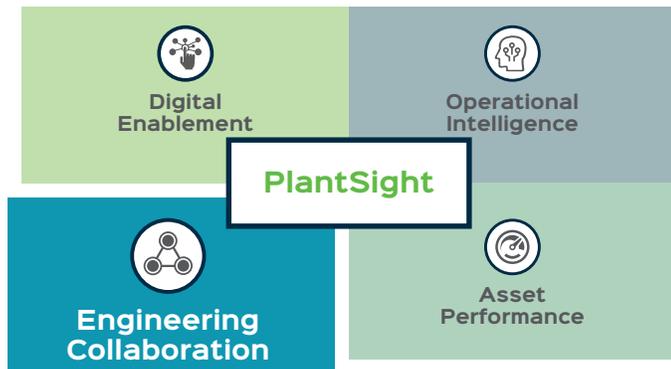


PlantSight – Engineering Collaboration

The Digital Twin for the Process Industry

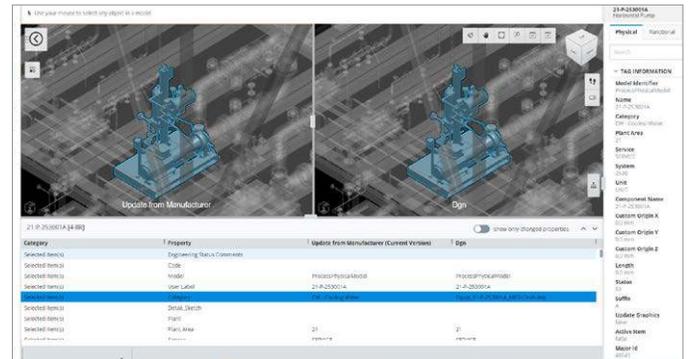
INTRODUCTION TO PLANTSIGHT

You will gain line of sight throughout your operation with PlantSight, the digital solution to advance your process plant. Bentley's digital twin capabilities offer organizations a digital representation of their assets, including related processes and systems as well as the information that allows them to understand and model its performance across the whole lifecycle. PlantSight provides a single source of truth for any plant, allowing design engineers to make changes to design models themselves. Whether in-house or remotely, engineers can work as a team within an open and connected environment and review all changes collaboratively.

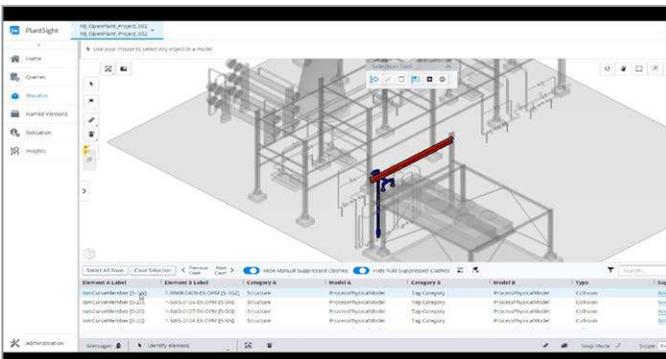


DATA ALIGNMENT AND MANAGEMENT

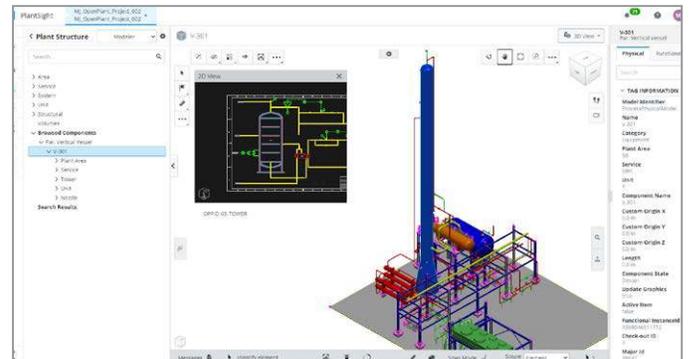
Central to any successful design phase of a new plant or an upgrade/modification is the ability to work with current engineering models and documents from multiple sources, including those from different vendors. PlantSight's data aggregation web service eliminates disparate data silos by pulling together design documents, P&IDs, designs, 3D models, and other information from multiple software packages to design and build your digital twin. Combine and review not only models and design and construction data created with Bentley design tools, but also those from third party sources such as AVEVA and Hexagon.



Record and view a timeline of changes by what, where, when and by whom, whenever any changes are made within the model.



Clash detection helps to increase the accuracy of your design across 3D piping, structures, equipment, and electrical and HVAC systems.



Observe different views (1D, 2D or 3D) of models simultaneously in 'Picture within Picture' window.

SYSTEM REQUIREMENTS

MINIMUM: Processor: Intel or AMD 64 bit processor 1.0 GHz or greater; Memory: 2 GB; Video: Intel HD Graphics 520

RECOMMENDED: Processor: Intel or AMD 64 bit processor 2.8 GHz or greater; Memory: 8 GB or more. More memory almost always improves performance, particularly when working with larger models; Video: Dedicated graphics card with minimum of 2 GB VRAM or more.

BROWSER COMPATIBILITY: Chrome, Firefox, Safari, Opera, Edge "New Chromium-based version"

Engineering Collaboration At-A-Glance

CREATE A DIGITAL TWIN

- ◆ Capture data from multi-discipline engineering design tools
- ◆ Leverage ContextCapture to create a reality mesh of a brownfield plant from photogrammetry
- ◆ Extract meaning and important information from P&IDs using AI and machine learning
- ◆ Import and label new P&ID symbols in minutes

MAKE CHANGES TO DIGITAL TWINS THROUGH OPENPLANT®

- ◆ Make and maintain changes with interoperability to OpenPlant in real time
- ◆ Maintain 3D designs of your plant piping, HVAC, mechanical, and electrical systems
- ◆ Make small changes yourself and in-house
- ◆ Add more users at any time
- ◆ Out-of-the-box ISO 15926 compliant schema for classes, attributes, and relationships
- ◆ Reuse existing designs, models, and associated data such as catalogues and specifications from SmartPlant 3D, E3D, PDMS, PDS, AutoPLANT®, and PlantSpace® Design Series

DATA VISUALIZATION

- ◆ Immersive 1D, 2D, and 3D visualization
- ◆ Observe different views of models simultaneously in 'Picture within Picture' window
- ◆ Select any component in either view and synchronize it in other view automatically
- ◆ Select and visualize any asset type in the model, such as piping, equipment, and valves
- ◆ Review and validate the accuracy of the data
- ◆ Flag any discrepancies to issue resolution service

TAG & DATA MANAGEMENT

- ◆ Manage tags and data to ensure you have trustworthy and actionable information
- ◆ Track how, when, and by whom the digital twin was changed
- ◆ View, create, edit, and generate reports on engineering data in the PlantSight portal with Data Manager

DESIGN REVIEW

- ◆ Easily share models, documents, and data with team members and collaborate in a distributed and scalable cloud environment
- ◆ Review and access engineering data from anywhere using the cloud native web portal
- ◆ Always work from a single source of truth, eliminating duplicates, out of sync data, and information silos

CLASH DETECTION

- ◆ Perform clash detection remotely and collaboratively
- ◆ Increase the accuracy of your design across 3D piping, structure, equipment, electrical, and HVAC
- ◆ Track and communicate inconsistencies with internal and external project members
- ◆ Discover clashes early in the design phase

VERSION COMPARISON

- ◆ Change tracking of complex engineering data
- ◆ Models can be from OpenPlant, Aveva, Hexagon, Autodesk and other applications
- ◆ Review changes between different states or milestones in the project over time
- ◆ Visualize what was added, modified, removed, or left unchanged between versions
- ◆ Discover when changes were made, by whom, and what changed in the data

ISSUE RESOLUTION

- ◆ Create issues related to changes or assets in the model
- ◆ Assign issues to a role or a user
- ◆ Add comments, attachments, images, and mark-ups to issues
- ◆ Review and track issues using a customizable dashboard
- ◆ Track and update all issues collaboratively and remotely
- ◆ Cloud-based collaboration
- ◆ Leverages iTwin® technology and services to create and maintain digital twin faster
- ◆ Secure, scalable, and accessible through a web browser
- ◆ Open environment enables seamless collaboration

DATA AGGREGATION

- ◆ Aggregate and view models from multiple sources in one digital twin (e.g. AVEVA, Hexagon, Autodesk)
- ◆ Federate data from any 3D design application and P&ID into a single view
- ◆ Generate insights from 1D, 2D, and 3D data in context

DIGITAL HANDOVER

- ◆ Continuous information sharing from project to asset
- ◆ Foundation for master data management
- ◆ Ensure accuracy and reliability of data
- ◆ Reduces ramp up time by up to 80%
- ◆ Aligned with ISO 19650