

UGS Teamcenter Visualization Professional

Full-function design review solution with robust investigation tools to enable high-performance multi-CAD assembly analysis

fact sheet

Siemens PLM Software

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► Summary

UGS Teamcenter™ Visualization Professional software extends the visual and analytic value of computer-aided design to product lifecycle participants who need to conduct design reviews with design data authored under multiple CAD systems. While many people need to work directly with design data trapped in proprietary CAD formats, they traditionally have had to learn how to use a native CAD system or wait for 2D drawings. Visualization Professional enables knowledge users who work with 3D data to validate design content and further its evolution without incurring the cost, complexity or training typically required by sophisticated CAD systems.

Benefits

Maximize productivity by enabling your enterprise to capture, manage and control all of the comments and reviews made by your product teams to make design reviews more effective

Streamline innovation by enabling extended design teams to leverage CAD data and visualize new ideas, test their validity and evaluate alternative concepts collaboratively

Accelerate time-to-market by enabling concurrent utilization of design data throughout your lifecycle processes

Reduce cost by enabling your development teams to validate form, fit and function without having to assume the costs associated with a CAD system

Extend the value of your intellectual capital by combining and visualizing multiple CAD formats in the context of one overall design

Improve collaboration by enabling upstream contributors and downstream stakeholders to leverage a common JT file format regardless of their chosen design-authoring tool

Extending the analytical capabilities of CAD

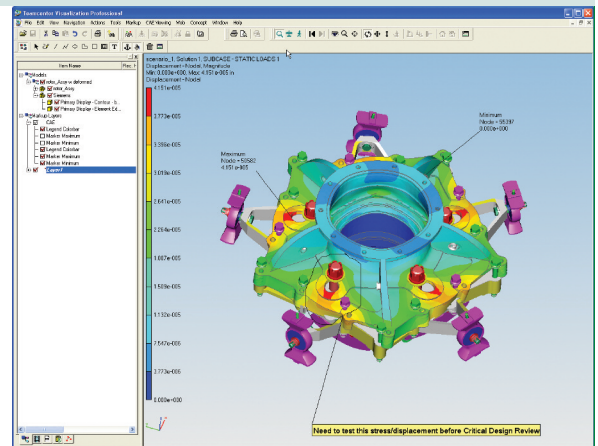
Teamcenter® Visualization Professional takes the analytical power of today's leading CAD features and puts them into an easy-to-use tool that enables you to visualize your product designs during collaborative design reviews without the use of a 3D CAD authoring system.

Traditionally, extended design teams have had to wait for a design to be complete before they could validate it for form, fit, function and manufacturability.

Visualization Professional allows downstream participants in the product lifecycle – which typically encompass more than 10 times the number of CAD authors – to begin their evaluations earlier in the lifecycle than was possible before. Having full-function design review tools at your fingertips during your reviews enables better decisions, faster, without wasting valuable meeting time.

Teamcenter Visualization has proven its credentials as the world's leading visualization standard for more than a decade by providing unmatched performance and a solution portfolio of unsurpassed breadth. Teamcenter Visualization has generated substantial returns on investment for more than 900,000 users in more than 35,000 sites across 43 countries. As a result, Teamcenter Visualization not only provides your enterprise with the best visualization technology on the market today, but also enables you to collaborate with industry-leading companies around the world.

Teamcenter Visualization is powered by JT™ technology. The JT format is a highly flexible CAD neutral format that allows full representation of relevant model information. Depending on your type of business processes, JT data can be very lightweight or it can be richer, holding precise model geometry, product structures, attributes and product manufacturing information, including geometric data, translations and annotations.



Features

- All Teamcenter Visualization Base and Standard capabilities (presented in their respective fact sheets). Key Base and Standard capabilities are listed below in italics.

2D viewing of all standard formats, including PDF, BMP, GIF, JPG, TIFF, CGM, HPGL, IGES, DXF, DWF (6.0 and above) and DWG

Complete 2D navigation, measurement and markup tools, plus 2D compare

Ability to visualize in JT format and navigate multi-CAD assemblies from major 3D CAD systems

Advanced 3D measurement

Ability to visualize product structure, properties and layer information

Ability to visualize PMI

Advanced 3D visualization tools

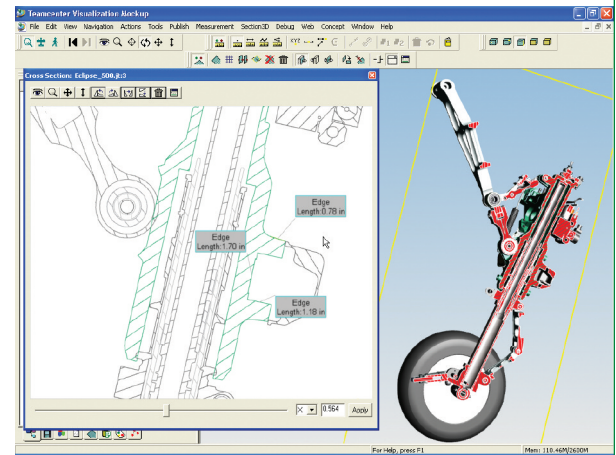
Enhanced 3D session and conferencing

- 3D comparison
- Dynamic 3D cross-sectioning
- Ability to view CAE results exported in JT format
- Callout and Symbol Manager for annotating exploded view illustrations
- Thrustline Editor for creating and displaying advanced exploded view centerlines
- Outline Capture for capturing hidden-line removed representations of the geometry
- Precise transformation
- Manipulators for interactive translation, rotation and scaling
- Appearance editor
- Fly navigation mode
- Read Visualization Publish files
- Motion file playback (VFM files created by Visualization Mockup and other motion authoring systems)
- Support for stereo viewing
- Animation file playback
- Ability to export JT (including alternate hierarchies), VRML, Nastran, and PLM XML files
- Ability to extend with Publish, Animation and Concept add-ons
- Ability to create session packages
- Windows, UNIX and Linux (SUSE) support

The lightweight nature of JT enables product teams to visualize extremely large assemblies and validate the interfaces of sub-assemblies and components in the context of the complete assembly. In fact, CAD users often employ Teamcenter Visualization for large assembly viewing because their native CAD system cannot handle this amount of data. JT is so complete that it can even replace CAD files for data exchange between OEMs and suppliers.

The advanced 3D measurement, cross-sectioning and comparison capabilities of Visualization Professional allow users to interrogate these models just like a CAD system. Manipulation features enable users to evaluate form, fit and function by allowing measurements in various stages of articulation. The flexibility of JT supports visualization data, as well as precise surface definitions (BREP) for CAD-level precision. JT files can be generated for all major CAD formats – thereby facilitating truly interoperable enterprise collaboration that allows users to work with multi-CAD assemblies.

Visualization Professional provides users with the tools they need to leverage multiple forms of design data and share this data in a common visual representation. This parallel stream of design data enables more lifecycle participants to leverage design data early in the design process – resulting in shorter cycle times, higher product quality and lower development costs.



Scalable solution that grows with your enterprise

The following Teamcenter Visualization service levels enable you to scale and extend the scope of your visualization solution to match the physical and functional growth of your enterprise.

Teamcenter Visualization Base – a powerful visualization solution that provides 2D and 3D visualization functionality, extensive 2D markup tools and 2D investigation tools, including measurement and comparison capabilities. Includes basic 3D viewing plus ability to visualize product structure.

Teamcenter Visualization Standard – an enterprise 2D/3D view and markup solution that provides advanced 3D visualization functionality, powerful 3D markup tools, 3D measurement and access to advanced product data including product manufacturing information (PMI).

Teamcenter Visualization Professional – a full-function design review tool with 3D investigation tools, including cross-section, 3D comparison and user-defined coordinate system capabilities that allow users to perform analysis on multi-CAD assemblies – collaboratively – without using a CAD system.

Teamcenter Visualization Mockup – a sophisticated digital mockup solution used to assemble a complete digital prototype, perform advanced analysis – including static and dynamic clearance analysis on the whole product – and detect issues early. Optional add-ons include, Clearance Database, Publish, Jack (ergonomics), VSA (tolerance analysis), Quality, Animation Creation and Path Planning.

iSeries – an easy to deploy and maintain web browser-based implementation of the Teamcenter Visualization Base, Standard and Professional service levels.

Contact

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