

JT Open

An open platform for visualization, collaboration and data sharing across the product lifecycle

fact sheet

Siemens PLM Software

www.siemens.com/plmcomponents

► Summary

JT™ Open is a unique community of software users and independent software vendors committed to the widespread adoption of a single, open and preferred 3D visualization platform based on JT technology. JT Open provides a forum where all members have equal access to JT technology that has proven value in visualization, collaboration and data sharing across today's most popular product lifecycle management (PLM) solutions.

Program benefits

Provides all members with level playing field access to JT technology and its user community

Enables corporate members to select best-in-class applications offered by JT Open's vendor members and develop in-house JT-enabled applications

Allows vendor members to offer royalty-free sales of JT-enabled products to other JT Open members

Provides vendor members with an economical way to enter the JT market

Provides members with a direct and strong voice in determining the future of JT technology

Extending the value of JT technology

JT Open enables application end users, independent software vendors and other likeminded parties to join a community-of-interest committed to establishing JT as the preferred technology for facilitating 3D visualization, collaboration and data sharing in today's product lifecycle.

By joining JT Open, members are able to pursue the following common interests:

- Promote the widespread adoption of JT technology across the PLM value chain by providing open access to common JT data through robust JT Open Toolkit software
- Enable users, suppliers and customers to share visualization data by leveraging the functional and collaboration benefits of standard JT technology

Depending on their area of interest, new members join JT Open in one of the following membership categories:

Corporate members – companies that use JT as the platform of choice for visualization and data sharing in their business processes.

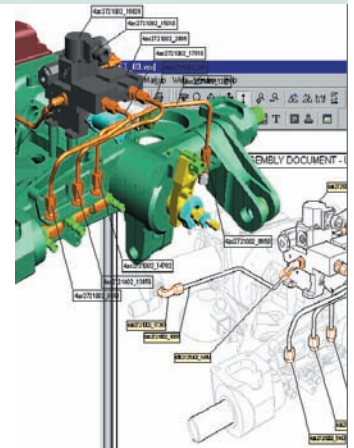
Vendor members – software vendors that provide JT-enabled applications to JT Open corporate members.

Interest group members – non-profit, industry-specific and/or cross-industry organizations that want to influence JT-based best practices.

Academic members – educational institutions that use the JT Open Toolkit for research and teaching, often in partnership with corporate or vendor members.

Advocates – in addition to formal membership, companies can show their support for JT Open by becoming advocates. Typically, advocates include hardware, software and service suppliers that actively support the goals of the JT Open community without having to become a member.

Advocates often support and participate in the community's marketing activities.



Technology benefits

Increases lifecycle collaboration by enabling product makers to integrate visualization data from dissimilar CAD systems into a virtual product that can be viewed, interrogated, and marked up by widely dispersed participants in the product lifecycle.

Sustains productivity by enabling engineers to work with their CAD system of choice while enabling non-CAD users to review design decisions using other more intuitive applications.

Reduces lifecycle cost by enabling all lifecycle participants to review the product design as early as possible, thereby minimizing lifecycle rework and accelerating the time-to-market schedule.

Reduces development cost by enabling design teams and other lifecycle participants to iteratively work with virtual prototypes instead of costly physical prototypes.

Enables knowledge users to access and work with intuitively understandable visualization data (even if they possess minimal engineering knowledge).

Allows engineers to interrogate the product design as it is being developed.

Allows extended enterprises to work with a smaller file format that is more agile and easier to transmit than most master CAD files.

Reduces the cost of information exchange by endorsing one common visualization format and eliminating the need for multiple translations and data re-entry.

Eliminates the need to manage different visualization file formats.

JT Technology and why it matters

JT is designed and implemented as a high-performance, compact, persistent storage representation for visualization data. This proven lightweight data format enjoys widespread use in the automotive and aerospace industries, where best-in-class large-scale assembly and interactive modeling systems adopt JT technology as the de facto standard for 3D visualization.

The JT format is a highly flexible, CAD-neutral format that can be created from most major MCAD applications, allowing full representation of relevant model information. JT data can be very lightweight, holding little more than facet data, or it can be richer and hold precise model geometry, product structures, attributes, and product manufacturing information (PMI), including GD&T and annotations.

High-end mechanical CAD applications export data in JT format to provide an efficient representation for viewing and exchanging 3D models. JT supports textures, lighting models, and motion, as well as multiple tessellations for level of detail (LOD) generation.

JT technology is especially popular in enterprise application systems that support today's product lifecycle. As a result, JT has earned its position as the de facto industry standard for 3D visualization, collaboration, and data sharing. Its popularity manifests itself across numerous applications, including systems used for:

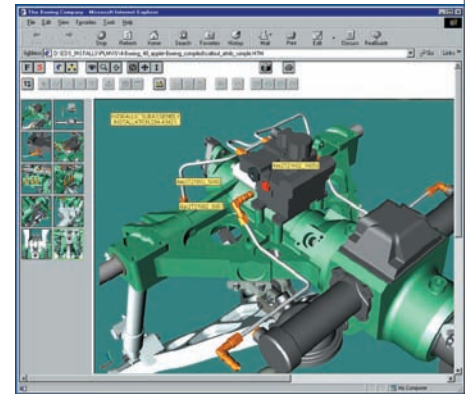
- Web viewing
- 2D/3D view and markup
- Enterprise quality
- Digital mockup
- Digital simulation
- Factory simulation
- Virtual reality
- Multi-CAD integration

JT Open Toolkit

The JT Open Toolkit is one of the products in Siemens' PLM Components suite of offerings. Its open design encourages widespread use, providing the entire PLM industry with a means to read/write JT data at a very low cost. The JT Open Toolkit is the primary mechanism provided to members to facilitate their access to the JT data pipeline. The JT Open Toolkit is a C++ library that enables applications to create and navigate JT data via a comprehensive suite of functionality accessible by toolkit classes. While the toolkit provides all of the necessary technology to access JT data, adopters will add their own application logic to create/manipulate JT data within their applications.

Siemens PLM Software has significant experience in delivering products and services within a level playing field paradigm. Along these lines, Siemens has provided Parasolid® software to independent software vendors for many years. Siemens will draw on its Parasolid credentials, as well as its experience with other open tools, to ensure that all JT Open members receive the same JT Open Toolkit at the same time with the same level of support.

JT Open Toolkit enhancements are targeted for release twice a year. Enhancement releases will be made available on a downloadable basis. The initial release of the JT Open Toolkit will be available for Windows, HP-UX, Sun Solaris, SGI Irix and AIX systems and will be supported on both 32 and 64 bit hardware platforms.



The Siemens development process for JT Open Toolkit ensures that all previously created JT data is supported. As new information is added to the JT data stream, Siemens will make certain that older applications are not impacted by the appearance of new data in the JT file. By facilitating compatibility between JT Open releases, the need to rebuild existing applications will be minimized; most releases will be plug-and-play compatible, requiring no integration effort.

JT Open members are entitled to submit enhancement requests for the JT Open Toolkit either through the JT Open program itself or by directly contacting Siemens Customer Services. Members who already employ other Siemens products will be able to work with their ongoing Customer Services contacts to communicate their JT Open interests. However, members can interact with other JT Open participants to collectively express their interest in particular toolkit enhancements.

Siemens will support the JT Open Toolkit via the Siemens Customer Services organization, as well as through its JT Open representatives. Siemens maintains a comprehensive problem and issue tracking system plus a knowledge repository of frequently asked questions (FAQs), previously reported/resolved issues, and tips and techniques.

The members-only section in JT Open's website presents information about implementation techniques, provides details about JT Open Toolkit enhancement plans, and describes additional forums that are available for answering technical questions.

Toolkit licensing

JT Open vendor members may use the toolkit to add JT read/write capability to their current and future applications and market those applications to JT Open corporate members. No royalty is owed to Siemens under these conditions.

In addition to being able to purchase applications from vendor members, JT Open corporate members may use the toolkit to add JT read/write to their own internally developed software and deploy these applications within their organization.

Both vendor members and corporate members pay an initial membership fee, plus an annual maintenance fee – both of which are scaled on the basis of the company's annual revenue. No royalty fees are paid to Siemens for each seat of a JT Open Toolkit-enabled application sold or deployed within a JT Open program member's organization. Vendor members may sell their JT-enabled applications outside of the JT Open program. However, in this instance, a royalty will be applied with these sales.

A documented process involving JT Open's Management Review Board and Technical Review Board is in place to gather consolidated input from JT Open members about program governance and toolkit enhancements.

Governing review boards

Two governing boards are responsible for coordinating the activities of the JT Open program. The Management Review Board represents the business and management interests of the JT Open member community, while the Technical Review Board represents the community's technical interests. Both boards are chartered with making recommendations regarding the JT Open program's:

- Operations and activities
- Processes for member interaction
- Enhancement and improvement
- Sales and marketing activities

In addition, each board undertakes special responsibilities pursuant to its own charter. Along these lines, the Management Review Board will:

- Host scheduled bi-annual meetings
- Review the overall performance of the JT Open program
- Provide high-level policy guidance
- Disseminate high-level information on business needs and driving requirements
- Assess and prioritize program enhancement requests
- Review and make recommendations on membership topics

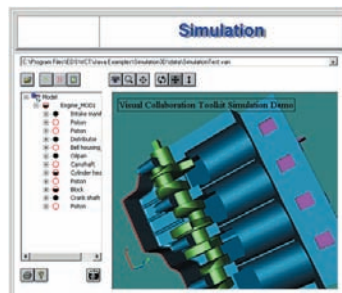
Similarly, the Technical Review Board will:

- Host scheduled bi-annual meetings
- Review the technical performance of the JT Open program
- Provide high-level policy guidance on visualization technology, as well as coordinate the collection of technical enhancement requests submitted by participating members
- Discuss technical topics of interest

As these responsibilities indicate, both boards play a significant role in gathering, assessing, and reviewing proposals to enhance the JT Open program and its supported technology. Typically, enhancement proposals materialize in two ways:

- Individual members can submit enhancement proposals directly to Siemens
- Multiple members can work with the Management Review Board, Technical Review Board, or other delegated members to collectively submit an enhancement proposal to Siemens

Don't miss this opportunity to join JT Open – a community of users, vendors, and other interested parties committed to enhancing JT technology, promoting its use, and sharing its benefits. Contact your nearest Siemens sales office now to learn more about JT Open and how you can become a member of one of the world's most exciting forums for improving today's product lifecycle.



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