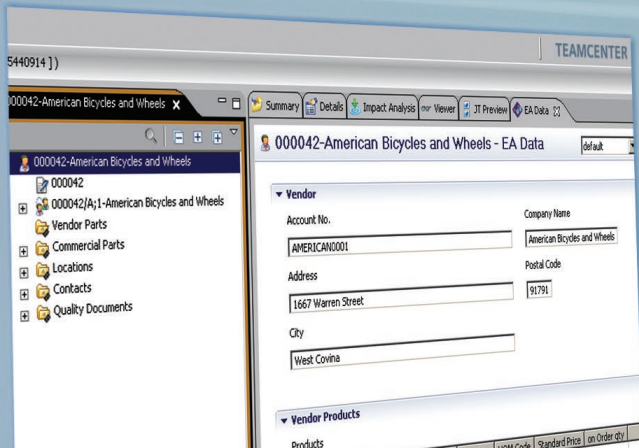




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Ingenuity for life

Teamcenter Gateway for Enterprise Applications

Providing flexible, bi-directional integration across the enterprise

Benefits

- Provides transparent, controlled access to information
- Shortens innovation cycles
- Increases efficiency
- Enables flexibility to adapt to changing environments
- Provides consistent company-wide data and optimized processes
- Facilitates better decision making

Summary

Teamcenter Gateway for Enterprise Applications software is an integral element of Siemens Digital Industries Software's Active Integration product suite, and is a powerful solution for the seamless integration of almost any enterprise application (EA) with Teamcenter® software from Siemens. Teamcenter Gateway for Enterprise Applications helps you synchronize your product development processes with data from a variety of systems, including enterprise resource planning (ERP), manufacturing execution systems (MES) and customer relationship management (CRM) to make sure that the right data is available at the right time, wherever it is needed across your information technology (IT) landscape.

Proven standard technology

Teamcenter Gateway for Enterprise Applications leverages the proven track record and reliability of the integration solutions Teamcenter Gateway for SAP S/4HANA® and Teamcenter Gateway for Oracle® E-Business Suite with flexible capabilities that can be configured to share information in a variety of ways. By the way, Teamcenter Gateway for SAP S/4HANA continuously supports SAP Business Suite. Design your IT landscape around Teamcenter the way you need it:

- *Fully bi-directional information exchange* – Teamcenter Gateway for Enterprise Applications can be used to transfer and import Teamcenter objects
- *Powerful integration capabilities* – Teamcenter Gateway for Enterprise Applications supports a broad range of the most widely used interfaces, including application programming interfaces (APIs), web services/Simple Object Access Protocol (SOAP), structured files such as Extensible Markup Language (XML), Java Database Connectivity (JDBC)/Open Database Connectivity (ODBC) connectors and flat files
- *Adapt to changing environments* – The open mapping configuration file facilitates modifications whenever necessary to adapt to changing business needs

Teamcenter Gateway for Enterprise Applications

Features

- Provides consistent data
- Facilitates data migration
- Allows central access to data
- Ensures data integrity
- Provides extension to integrate additional enterprise applications

Maximum freedom

Teamcenter Gateway for Enterprise Applications includes many beneficial features and intuitive functions:

- *No in-depth Teamcenter knowledge required* – Implementation of Teamcenter Gateway for Enterprise Applications is based on Tcl, an easy-to-learn but powerful scripting language, so your EA integration team does not need to possess any Teamcenter-specific development know-how
- *Flexible configuration* – Teamcenter Gateway for Enterprise Applications is based on standard Teamcenter workflow handlers and user exits so you can easily configure your EA-specific business or transfer rules. Features include: Teamcenter handler for simple objects (for example, items) as well as for structures, such as bill-of-materials (BOM) views; Teamcenter user exit to start EA transactions or to display EA data in the Teamcenter client; generic mapping and transfer template and generic import batch job for simple objects as well as for structured objects

- *Intuitive administrative graphical user interface (GUI)* – Process control, administration and monitoring are all in one place, with very robust capabilities for error detection, analysis and prevention. Drill down through multiple levels of transactions, session and batch log files to the required level of granularity

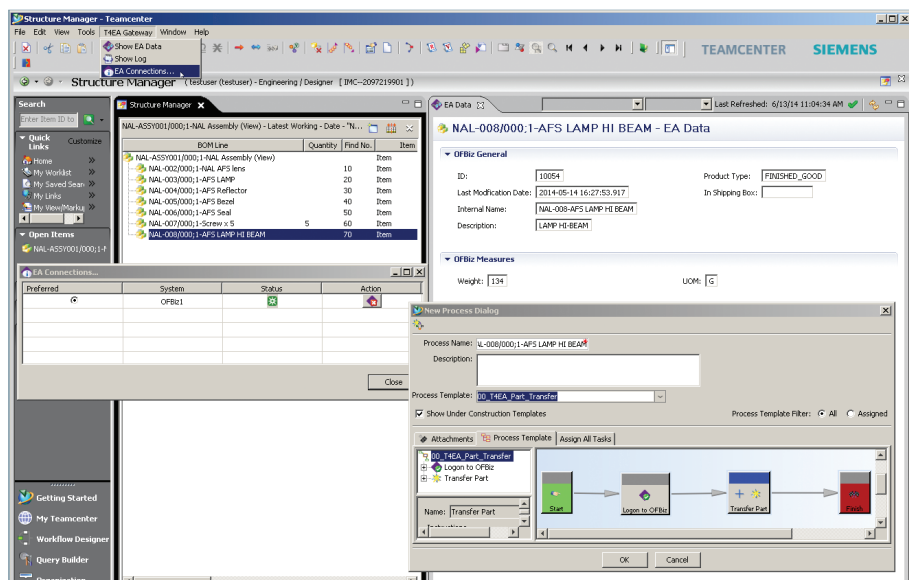
Better decision making

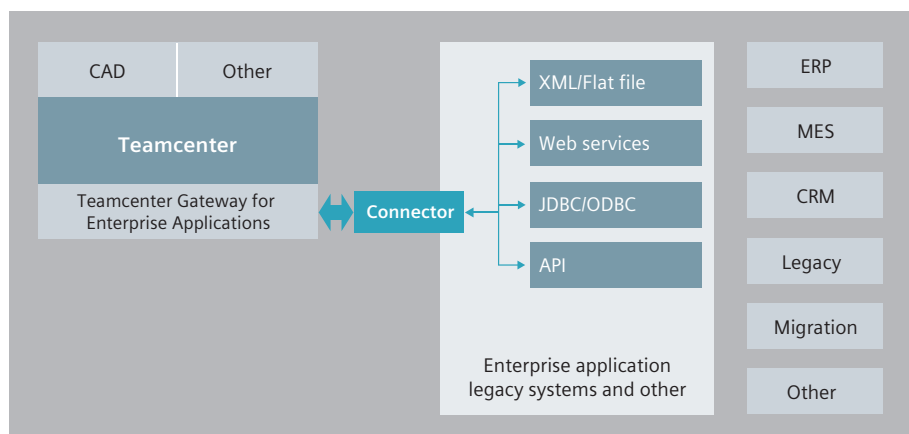
Teamcenter Gateway for Enterprise Applications allows users to conveniently search for EA objects from their familiar Teamcenter environment. The search for relevant information is fast and easy no matter where it is stored:

- *Teamcenter Gateway for Enterprise Applications query* – You can search for EA data and display search results directly from the Teamcenter GUI. EA objects (for example, items) can be imported directly from the results list with a click of your right mouse button
- *EA data view* – Teamcenter Gateway for Enterprise Applications provides users with a configurable display of EA data. Standard GUI formatting elements, such as checkboxes, table support and color coding, provide a user-friendly look and feel that helps you spot important information right away, enabling you to make the correct decision

Integration scenarios

Teamcenter Gateway for Enterprise Applications provides maximum reliability, flexibility and efficiency when integrating Teamcenter with a large variety of enterprise applications. Teamcenter Gateway for Enterprise Applications was built to enable integration with database-based applications. Integrations with computer-aided technologies (CAx) and other applications that are not database oriented should be implemented using methods specifically designed for those types of applications.





Examples of Teamcenter Gateway for Enterprise Applications integration scenarios include, but are not limited to, the following use cases:

Enterprise resource planning systems

Teamcenter Gateway for Enterprise Applications can be used to integrate product information and workflows controlled by ERP systems with Teamcenter, including IFS, Infor, Microsoft Dynamics, proAlpha and PSIpenta, as well as custom or legacy ERP systems. Once the communication layer is established based on industry-standard communication protocols, the business process mapping layer provides functionality similar to the Teamcenter Gateway for SAP S/4HANA and the Teamcenter Gateway for Oracle E-Business Suite. Typical use cases for EA integration include transfer of parts and BOMs, documents, vendor and supplier information, or even production planning depending on the capabilities of the ERP system:

- Create and change articles
- Create and change BOMs
- Search for articles and display them across systems
- Import BOMs from EA
- Import articles from EA
- Display attributes in real time
- Create and change documents

Please note that Teamcenter Gateway for Enterprise Applications cannot be used for integrating Teamcenter with the SAP Business Suite, SAP S/4HANA or with the Oracle E-Business Suite (Oracle EBS).

Manufacturing execution systems

Keeping the as-built structure in PLM is very important to companies providing products that are in service for decades, such as aircraft and heavy equipment, to maintain the link between the virtual and real worlds. Using Teamcenter Gateway for Enterprise Applications enables you to connect to most MES systems to read as-built information, including serial numbers and other objects and attributes, and to integrate that information with the respective data in Teamcenter. With Teamcenter Gateway for Enterprise Applications, customers can even implement a three-way integration involving Teamcenter, ERP systems and MES.

Customer relationship management systems

Executing service requests against a virtual product represented by an as-maintained structure in Teamcenter enables customers to always know the status of the real product. Teamcenter Gateway for Enterprise Applications helps you gather the necessary service-request information from a CRM system, and integrates that to the as-maintained structure in Teamcenter.

Legacy systems

Mainframe systems are still widely used in many companies. Typical use cases include generating part numbers and maintaining options and variants or usage of BOMs. Teamcenter Gateway for Enterprise Applications enables you to connect to such systems to ensure that the item identification (ID) assigned in the PLM system is retrieved from the legacy part-number system, or the options and variants relevant for the engineers in PLM are imported from the legacy system.

Migration

Teamcenter Gateway for Enterprise Applications supports various migration scenarios, including PLM-to-PLM migration or migrating legacy system data to Teamcenter. The benefit of using Teamcenter Gateway for Enterprise Applications for data migration is that you can decide whether you want a big-bang migration or a transactional approach in which both systems are still available and data is transferred on demand. The latter approach makes it likely that only the data that you need is migrated.

Transparent, controlled access to information

Teamcenter Gateway for Enterprise Applications facilitates data sharing between all functional areas responsible for bringing a product to market:

- *Shorten innovation cycles* – Teamcenter Gateway for Enterprise Applications enables you to make sure that all stakeholders are up to date on product changes
- *Increase efficiency* – Effortless data sharing through business process automation
- *Information at your fingertips* – Access information wherever it resides

Flexibility to adapt to changing environments

Be sure that your business needs determine how the integration operates, not the other way around:

- *Flexible configuration* – The open mapping configuration file facilitates modifications whenever necessary
- *Flexible updates* – Update Teamcenter or independently and whenever necessary
- *Highly extensible* – Connect other databases, from marketing to MES, CRM, etc.
- *Data migration* – Provide openness to support data migration from one system to another

Enhancing business-process integration

The solutions based on the Siemens Digital Industries Software Active Integration product suite are aligned and configured quickly by consultants that are experts in Teamcenter and enterprise integrations:

- *Implementing your use cases* – Consultants from the Enterprise Integration Division of Siemens Digital Industries Software work with stakeholders throughout your organization to ensure that an enterprise integration project accurately incorporates your business processes and integration use cases

- *Optimizing enterprise processes* – We incorporate industry-best practices to define a user-interaction model that is seamless and largely transparent. At the same time, everything that we do translates to an integration that is easily modifiable and upgradable, so it can grow and change as your business does

Secure for the long term

Siemens Digital Industries Software understands that Teamcenter Gateway for Enterprise Applications is a key component of a company's IT infrastructure, so it is always kept up-to-date to support the latest Teamcenter release. Teamcenter Gateway for Enterprise Applications was developed specifically to provide customers in manufacturing with an intelligent solution for company-wide consistent data and optimized processes. It fulfills even the most sophisticated requirements to make certain that your business needs determine how the integration operates, not the capabilities of the integration software.

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