Teamcenter integration for SAP
Extending the value of PLM from design to production

Business challenges
Do you have problems making sure that everyone throughout the product lifecycle has access to the same product and process knowledge that they need?

Do you spend a lot of time and money creating and maintaining duplicate data like bill-of-materials (BOM) information in multiple systems?

Are you spending too much to develop and maintain customizations to make SAP do things it wasn’t designed to do?

Summary
Teamcenter® software’s integration for SAP creates a collaborative framework between Teamcenter and SAP Business Suite, extending the value of PLM from design through production. As a foundation of this framework, the integration creates a single source of product and process knowledge that crosses the entire lifecycle, eliminating the need for costly and error-prone maintenance of disparate knowledge sources. Seamless collaboration between world-class PLM and ERP technologies completes this collaborative framework, allowing companies to leverage the strengths of both Teamcenter and SAP to develop and deliver innovative products in record time.

Single source of product and process knowledge
Teamcenter’s integration for SAP breaks down the walls between PLM and ERP by allowing every user throughout the product lifecycle to interact with a common base of knowledge without regard to the environment in which they work. Users can easily transfer product and process knowledge between Teamcenter and SAP.

Collaborative new part release process across Teamcenter and SAP:
Teamcenter integration for SAP

Features
- Bi-directional integration of product and process knowledge between Teamcenter and SAP
- Ability to seamlessly view SAP attribute information within Teamcenter
- Ability to query for SAP knowledge within Teamcenter
- Ability to schedule automatic batch knowledge updates and synchronization between Teamcenter and SAP
- Comprehensive support for integration with multiple SAP systems or plants
- Ability to launch SAP client in the appropriate context directly from Teamcenter
- Ability to seamlessly create, modify and view SAP data in Teamcenter and vice versa
- Ability to extend Teamcenter process to SAP (ex: part release) and vice versa (ex: change request)
- Ability to define configurations including collaborative processes and data mapping with an easy-to-use graphical user interface (UI)
- Robust web-based administration UI
- SAP Certified Integration

Teamcenter and SAP Business Suite so this information can be leveraged by both engineering and manufacturing teams.

Tight integration ensures that both development and production processes, such as planning, budgeting and forecasting, can be performed concurrently and collaboratively with the most up-to-date knowledge available. When changes are made to the knowledge source, regardless of the environment used to make the change, Teamcenter’s best-in-class change management capabilities ensure that ripple effects throughout the product lifecycle are managed properly.

By establishing a single source of product and process knowledge, the integration eliminates the need for costly and error-prone maintenance of disparate knowledge sources while ensuring that production is always in-sync with development.

Synergy between world-class PLM and ERP technologies
Teamcenter’s integration for SAP enables seamless collaboration between world-class PLM and ERP technologies, allowing companies to leverage the strengths of both Teamcenter and SAP for their respective domains. Instead of spending a significant amount of time and money to customize Teamcenter or SAP beyond their respective domains, companies can simply leverage existing best-in-class technologies to quickly create product-centric cross-domain processes to develop and deliver innovative products in record time.

Out-of-the-box best practices
Teamcenter’s integration for SAP provides pre-defined business processes, data mappings and action handlers for common data-types based on best practices employed by world-class companies. Use of these out-of-the-box best practices enables companies to accelerate the creation of collaborative cross-domain business processes and quickly realize value from their software investments.

Flexibility for adapting to business needs
Because no two companies are exactly alike, Teamcenter’s integration for SAP can be easily configured to adapt to various integration scenarios. Companies can tailor a solution that matches their best-practices and business processes.

Engineering use cases
Part and assembly handling. You can create and update product data in SAP, as well as access up-to-date SAP product information in Teamcenter.

Document handling. You can create 2D and 3D neutral representations of product data and send them to SAP. You can also automatically fill in drawing title block with SAP material ID, status and other information.

Change management. You can create or update engineering change notices (ECNs) in Teamcenter to update product information in SAP.

Classification. You can create classification information for materials and documents stored in SAP based on Teamcenter data.

Status synchronization. You can propagate status changes between Teamcenter and SAP.

Preserve relations. You can create object links in SAP based on existing relations in Teamcenter.

Supported item types
- Item master/item revision
- Product structure
- Dataset with files
- Change master
- Classification information
- Status information
- Attributes
- Version/revision info
- Relations
- Effectivity
Manufacturing use cases

*Part and assembly process planning.* You can create full process plans in Teamcenter and send them to SAP for manufacturing execution and cost/quality rollup.

*Production resource tools.* You can synchronize information about work areas and other manufacturing equipment between Teamcenter and SAP.

**Supported entity types**
- Process plan
- Operation
- Resource
- Work area
- Work instruction
- Collaboration context

*Synchronize engineering BOM between Teamcenter and SAP.*