

# Teamcenter feature checklist

Simplifying PLM.

#### **Benefits**

- Get up and running quickly
- Make more informed decisions
- Manage mechanical, electronics, software and simulation data in a single environment
- Operate with ease in a multi-CAD environment
- Validate design data before release to manufacturing
- Improve product quality and lower costs
- Comply with company, sustainability and industry standards
- Manage product requirements using a systems engineering approach

#### Summary

The Teamcenter® product lifecycle management (PLM) solution suite from Siemens PLM Software provides the right information at the right time so you can make better product decisions from planning and development through manufacturing and support. Teamcenter delivers new capabilities and more powerful tools to help you implement PLM rapidly. Using Teamcenter,

you can develop and deliver increasingly complex products while maximizing productivity and streamlining global operations.

## A proven path to grow your PLM deployment

Teamcenter simplifies PLM by taking the guesswork out of the deployment process. We deliver a flexible portfolio of focused applications organized to allow you to strategically grow your PLM maturity in a way that makes sense for you.

#### Start with PLM

For most of our customers, the first step on the PLM path is to take control of your product data and processes. Manage and share product designs, documents and BOMs. Use standardized workflows and change processes to streamline efficiency throughout your organization.



## Teamcenter feature checklist

#### Benefits continued

- Leverage systems-driven product development with integrated systems engineering
- Make increasing product complexity more manageable
- Automate the suppliers' exchange of design and process information

#### Extend the value

Next, take a look at related domains and processes. Manage requirements. Include suppliers. Connect engineering with manufacturing and service. Extend the value of PLM across the product lifecycle.

### **Transform your business**

PLM can take your business to the next level. Apply transformational solutions to your product lifecycle for a profound business impact. Drive your product cost, quality, sustainability and systems engineering initiatives.

#### **Build on the PLM platform**

A robust PLM platform provides a solid foundation for every Teamcenter application. The Teamcenter platform delivers a streamlined and intuitive PLM user experience, critical common capabilities and flexible deployment options to get your implementation up and running quickly.

#### Teamcenter solution

### START

#### **Design management**

Teamcenter enables you to manage and share cross-domain design information, including mechanical, electronics, software and simulation in a single environment.

#### **Solution features**

- Manage mechanical, electronic, software and simulation data in a single secure source
- ✓ Link requirements to physical implementation across all domains
- ✓ Integration with multiple MCAD, ECAD, software, simulation and modeling tools
- ✓ Leverage stock materials and "make from" requirements
- √ Visualize and validate multi-CAD assemblies
- ✓ Manage ECAD design, part library, part vendor and manufacturing data
- ✓ Visualize and analyze ECAD layout, assembly and test data
- Manage software components, signals/ message, configuration and calibration parameters

- ✓ Manage software to software, software to hardware and hardware to hardware dependencies
- ✓ Manage wire harness design, components, options and variants
- Simulation structure and data management
- Automatic creation of simulation structures
- ✓ Batch meshing
- Remote job submission and load balancing
- Lightweight model and result visualization

Teamcenter solution	New features and enhancements	Customer value
START continued		
Document management Teamcenter advanced document and content management capabilities enable you to fully integrate authoring and publishing of structured documents and XML content within your PLM environment.	<ul> <li>✓ Document management</li> <li>✓ Digital signatures for PDF</li> <li>✓ Markup management</li> <li>✓ Print management</li> <li>✓ On-demand rendering and viewing in neutral formats</li> <li>✓ Structured XML content management</li> <li>✓ Technical and multichannel publication</li> <li>✓ Integration to leading authoring applications</li> <li>✓ Translation management</li> </ul>	<ul> <li>✓ Automated review/approval</li> <li>✓ Embedded Microsoft Office Integration</li> <li>✓ Attribute exchange between PLM and documents content</li> <li>✓ 2D/3D illustration and animation authoring</li> <li>✓ Graphic content management</li> <li>✓ \$1000D support</li> <li>✓ Darwin Information Typing Architecture (DITA) support</li> </ul>
Bills of material (BOM) management Teamcenter enables you to know your complete product BOM – no matter if your products consist of a few parts managed with basic processes and tools, or more complex products containing millions of parts and multiple product options requiring more advanced tools.	<ul> <li>✓ Enterprise BOM management</li> <li>✓ Mass structure updates</li> <li>✓ Alternate and substitute part management</li> <li>✓ Context specific data structure and management</li> <li>✓ BOM audit and accountability tools</li> <li>✓ Collaborative BOM markup and rollup</li> <li>✓ Configuration management</li> </ul>	<ul> <li>✓ Product variability</li> <li>✓ Revision management</li> <li>✓ Configuration of lot and serial definitions</li> <li>✓ Multi-unit configuration management</li> <li>✓ Neutral product structure support</li> <li>✓ BOM integration to ERP and other enterprise systems</li> </ul>
Process execution Teamcenter helps you effectively plan, manage and execute the work people do to streamline and standardizes processes while reducing cost.	✓ Schedule management ✓ Project collaboration ✓ Integrated workflow execution ✓ Program management ✓ Resource management ✓ Strategic planning ✓ Capacity planning ✓ Budgeting and financial planning	<ul> <li>✓ Costing – time sheets and earned value management</li> <li>✓ Product portfolio management</li> <li>✓ Reporting, analytics and executive dashboards</li> <li>✓ Process and signoff history</li> <li>✓ Business process automation</li> <li>✓ Issues/visual issues management</li> <li>✓ Integrated change process management</li> </ul>

Teamcenter solution	New features and enhancements	Customer value
EXTEND		
Requirements management Teamcenter helps you capture product require- ments and validate contractual compliance from a single source of knowledge that can be leveraged throughout the entire product lifecycle.	✓ Capture and manage customer or contractual requirements	<ul> <li>Manage requirement versions and configuration allocations</li> </ul>
	✓ Import/exchange requirements with other tools and formats	✓ Link and trace requirements across the product lifecycle
	✓ "Live" integration with Microsoft Office applications	✓ Capture and document requirement or decision rationale
	✓ Web-addressable URL hyperlinks to access, manipulate and share requirements	✓ Generate requirements documents and reports
Service lifecycle management Teamcenter enables lean	✓ Service lifecycle management	✓ Service planning
	✓ Asset management	✓ Service request management
aftermarket or maintenance	✓ Service and part history	✓ Service scheduling
operations through a single source of asset and service	✓ Build record	✓ Service execution
knowledge and related applications.	✓ Service knowledge management	✓ Support for industry standards
Manufacturing process management Teamcenter enables engineering and manufacturing teams to collaborate in a digital environment by leveraging a single source of product, process, resource and plant information.	✓ Plant design data management ✓ Line balancing	✓ Advanced bill-of-material (BOM) and bill-of-process (BOP) management
	<ul> <li>Manufacturing process planning in an intuitive and flexible user interface</li> </ul>	<ul> <li>Manufacturing change, configuration and workflow management</li> </ul>
	✓ Part planning	✓ Resource management, classification and optimization
	✓ Report generation	✓ 3D interactive work instruction
	✓ Time management	documents
	✓ Product, process, resource and plant	✓ Weld data management
	data management	✓ Process Gantt and Pert chart

#### **Teamcenter solution** New features and enhancements **Customer value EXTEND** continued **Supplier integration** ✓ Integration of supplier product data ✓ Request for information, proposal or Teamcenter offers a portfoquotation (RFx) management ✓ Supplier collaboration lio of supplier integration ✓ Internet negotiation (reverse and Dutch) solutions that help you opti-✓ Supplier integration with purchasing, auction) management mize collaboration with engineering, quality, manufacturing and ✓ Lightweight standalone supplier global suppliers for product other organizations planning, direct material application enabling suppliers to work ✓ Supply chain management sourcing, development and offline on OEM design packages support. Teamcenter can √ Visibility of supplier performance enable suppliers to partici-(monitoring/reporting/traceability) pate in and/or be compliant with OEM processes and can provide secure data exchange with traceability and version control. **TRANSFORM Quality management** ✓ Role based, intuitive user experience ✓ Propagation of issue and CAPA data to Teamcenter enables your change requests ✓ Choice of configurable or out-of-the-box team to more clearly workflows to manage the issue resolution ✓ Product data, related issues and identify critical quality resolution in one PLM environment process characteristics, failures/ non-conformances and ✓ Single view for all quality related tasks ✓ Ability to capture knowledge of how to resolutions to quality issues, and sign-offs resolve issues helping you make smarter ✓ Powerful, flexible and easy-to-customize ✓ Support for 8D reporting and ISO decisions across the global, reporting standards extended enterprise. ✓ Dashboard views to analyze quality data and identify trends ✓ Differentiated overhead calculation Cost management ✓ Consistent data from purchase prices over Teamcenter enables you to (freely selectable degree of detail) cycle times to finance KPIs (e.g. ROCE, see detailed product and NPV, IRR, etc) ✓ Process-based bottom-up calculation and tool costs across all corpocost models (cost engineering approach) ✓ Tracking of project history from initial rate functions. You manage planning to end of life cost by answering questions <a> Integrated cycle time calculators (die</a> early and continuously casting, injection molding, machining, ✓ Flexible simulations of what-if scenarios during the entire product MTM, customer proprietary, etc.) (e.g., production alternatives, volume development and delivery adjustments) ✓ Parametric tool costing for various process. tooling technologies ✓ Product lifecycle costing (return-oninvestment over product lifecycle) ✓ Worldwide factor costs (labor, production) area, energy, interest rates etc.) ✓ Flexible reporting functions (e.g., multi-stage cost driver analysis) ✓ Complete reference processes for many

manufacturing methods

✓ Profitability analysis

#### **Teamcenter solution** New features and enhancements **Customer value** TRANSFORM continued Sustainability and ✓ Standard regulatory rule sets for ✓ Create and manage materials and environmental compliance compliance grading against REACH, RoHS substances Teamcenter can help you and Conflict Minerals ✓ Aggregate material and substance establish a framework for amounts across a product structure ✓ Support for industry standard formats sustainability and Design (IPC-1752) for the Environment initia-✓ Initiate material and substance tives and understand and declaration requests to suppliers and ✓ Rules editor to satisfy company-specific control the material and import declaration forms from suppliers and future regulations substance makeup of your and external users ✓ Support for data exchange with thirdproducts. You gain full ✓ Compliance grading and reporting party material providers (e.g. import end-to-end visibility to all including dashboard views MatML files for content, IMDS) and compliance related product supplier warehouses (e.g. BOM check) and process information, including information originating from the supply chain. Systems engineering ✓ Integrated system diagramming and ✓ Access and manipulate objects via Teamcenter enables you model management web-addressable URL hyperlinks to create systems-level ✓ Integration with Microsoft office ✓ Link and trace system and sub-system behavioral, functional and applications (Visio, Word, Excel, Outlook, definitions to requirements logical definitions as well as the models that help ✓ Define, manage and publish system ensure products perform interfaces and definitions ✓ Integration with mathematical, multias intended. physics, functional, and logical modeling ✓ Support for MatLab®/Simulink® modeling and simulation tools and simulation ✓ Configurable stencils, structures and ✓ Support for LMS modeling, simulation model definitions and test ✓ Capture and document design or interface decision and trade-off rationale

Teamcenter solution	New features and enhancements	Customer value		
PLATFORM				
High Definition User Experience				
Active Workspace Active Workspace provides a streamlined and intuitive PLM user experience across operating systems and computing devices to facilitate smarter decision-making.	✓ IT friendly platform with no customer install that can run anywhere	✓ Intelligent charting to visually navigate search results in logical groups		
	✓ Web-intuitive, touch-enabled interface that is optimized for mobile	✓ Easy access to relevant data stored in multiple external systems		
	✓ Flexible UI that can be easily tailored to fit your needs	✓ Context aware display presents relevant information based on role and task		
	✓ Powerful interactive search and filtering capabilities	✓ Visually understand and navigate through data structures and relationships		
Teamcenter Mobility Teamcenter Mobility, available at no charge from the Apple App Store, provides secure and easy access to PLM from your mobile device anywhere, anytime.	<ul> <li>✓ Teamcenter Mobility enables you to access PLM and be productive anytime, anywhere</li> <li>✓ Teamcenter AppShare enables you to join online conferences from your iPod, iPhone, or iPad</li> </ul>	✓ JT2Go provides free JT viewing with intuitive touch-enabled user experience on your mobile devices		
Platform capabilities				
Visualization Pervasive visualization throughout Teamcenter enables everybody involved with the product lifecycle to communicate clearly using 3D.	<ul> <li>✓ Use JT, the ISO International Standard for viewing and sharing lightweight 3D product data</li> <li>✓ Comprehensive suite of visualization solution providing basic viewing and markup capabilities to advanced analysis of digital mockups</li> </ul>	✓ Massive model visualization providing constant visual interactivity regardless of the size and complexity of the model		
Foundation	✓ Security	✓ Extensibility		
Critical common capabilities for a solid PLM foundation.	✓ Classification	✓ Scalability		
	✓ Collaboration	✓ Enterprise application integrations		
	✓ Reporting and analytics			

Teamcenter solution	New features and enhancements	Customer value
PLATFORM continued		
Deployment options		
Teamcenter Rapid Start Teamcenter Rapid Start is a preconfigured Teamcenter environment, designed for companies that want to deploy product data man- agement (PDM) as quickly as possible.	✓ Single source of product data ✓ Multi-CAD data management ✓ Preconfigured roles and functionality	<ul> <li>✓ Preconfigured process workflows, including collaborative design review and change management</li> <li>✓ Integrated visualization</li> </ul>
Teamcenter on the Cloud Teamcenter can be deployed on the cloud, using an Infrastructure as a Service (laaS) model, which moves	<ul> <li>✓ Manage IT infrastructure for lower total cost of ownership</li> <li>✓ Complete Teamcenter functionality supporting all Teamcenter 4 tier user interface customers</li> </ul>	√ Teamcenter support for all cloud configurations including on- or off-premises, hybrid

interface customers



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some or your entire PLM computing infrastructure to a third-party cloud service

provider.

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