

What's new in Teamcenter 10.1.7

New capabilities improve productivity and efficiency

Benefits

- Increased productivity with Active Workspace embedded in MCAD tools
- Improved cross-domain visibility with tighter PLM-ALM interoperability
- Greater flexibility in the management of LMS Amesim models
- Increased user productivity with workflow and background rendering of document watermarks and stamps
- Simplified exchange of configurator data with ERP and other applications
- Enable more users to leverage configurator capabilities
- Readily understand complete workflow history to make better decisions
- Improved Excel-Teamcenter interaction for shortened learning curves
- Easier identification of requirements changes
- Improved relation visibility between diagrams and visualization for faster understanding of impacts

Summary

The Teamcenter® software product lifecycle management (PLM) solution suite from Siemens PLM Software delivers a flexible portfolio of focused applications that enable you to strategically grow your PLM maturity in a way that makes sense for you.

Teamcenter 10.1.7 with Active Workspace 3.2 delivers enhanced applications throughout the portfolio that can help you improve productivity and efficiency. For example, with new application programming interfaces (APIs) for Product Configurator, you can more easily exchange variability information with ERP, sales systems, and other third-party applications. We've introduced analysis and extraction tools that help customers currently using classic variants move to the new configurator capabilities. With workflow, you can easily access the history of both active and completed workflows for an item in Teamcenter. We've also expanded our support for PLM-ALM

interoperability through a number of enhancements designed to provide product development teams with greater visibility to cross-domain data and processes. We've improved visibility/usability of system models and model/relationship navigation to de-clutter and simplify diagram presentation. Attributes and analysis requests have been upgraded to include reporting, comparison, and usability improvements – making it easier to get the information you need without getting overwhelmed with data.

In the Teamcenter platform, you will see many customer-focused user productivity improvements in overall usability as well as productivity improvements in document management, visualization and structure management. To reduce information overload, we continue to enhance search and filtering capabilities to help you find what you need faster, as well as adding support for classification and enhanced security. We continue to make investments to make it easy for you to tailor Teamcenter to fit your needs with a declarative UI framework, re-usable widgets and enhancements to Linked Data Framework. Finally, the first release of Deployment Center provides you with a centralized web-based application that you can use to deploy Teamcenter and manage your deployments.

What's new in Teamcenter 10.1.7

Benefits *(continued)*

- Efficient capture of supplier material data supports holistic product views and reduces risk of noncompliance
- Meet compliance objectives and reduce rework and errors with an intuitive user interface tailored to compliance tasks
- Accelerated status assessment with simplified attribute rollout/dashboard presentation
- Enhanced materials data management with support for materials inheritance
- Improved integrations to integrated material management supporting material assignments
- Improved usability, collaboration and efficiency with Active Workspace navigation and workflow enhancements
- Improved visualization usability through expanded multi-select capability
- Reduced information overload with query builder-based advanced searching
- Easily tailor Active Workspace to your needs without writing custom code
- Simpler deployment of Active Workspace, environments and custom software

Start with PLM

Mechanical design and data management

New capabilities in this release enable mechanical design teams to take full advantage of Active Workspace embedded in their MCAD applications. Supported with NX™, Solid Edge®, CATIA®, Creo® (Pro/ENGINEER®), SolidWorks®, Inventor® and AutoCAD®, Active Workspace provides a streamlined and intuitive user experience that makes design teams more productive by enabling them to execute product data management (PDM) and PLM functions from within their native MCAD tools. Leveraging Active Workspace, designers can search, find and re-use information stored in Teamcenter and establish the appropriate design contexts for themselves and others across the design chain. In addition, Active Workspace provides them with easier access to workflows, change management processes, requirements and more, all from within their familiar MCAD authoring environment, thus helping to ensure product quality and data integrity.

Software management

The Teamcenter 10.1.7 release also provides greater cross-domain visibility by enhancing support for interoperability of PLM and application lifecycle management (ALM) solutions. Polarion ALM™ and Teamcenter items are automatically mapped across the requirements and change management workflows for better bi-directional traceability. To provide a more intuitive web-based user experience in Polarion and Teamcenter, all traceability information and data is accessible using Active Workspace. The visibility of the information helps design teams get a clearer, more familiar view of cross-domain data. Since hardware and software teams are more productive when working in their native environments, users will be able to initiate change and requirement engineering workflows in either Teamcenter or Polarion.

Model management and simulation process management

Because the ability to model and simulate the product early are core functions of any design process, Teamcenter 10.1.7 supports greater flexibility in the management of LMS Imagine.Lab Amesim™ models. First, the model structure can be stored as a block, subsystem, model and function across multiple libraries or repositories, thus making it easier to manage, find and re-use models. In addition, there is improved capability for managing the models and all their associated dependencies to other design and requirements objects, as well as to other models. Lastly, management of LMS Amesim models can be performed directly in Teamcenter, eliminating the need for LMS Imagine.Lab™ Sysdm software or other tools for model management.

Content and document management

Teamcenter 10.1.7 with Active Workspace delivers new rendering of watermarks and stamps on documents to increase user productivity. Authors can now initiate rendering as a background task and be notified at completion, or take advantage of the ability to have rendering done automatically as a step in a workflow.

BOM management

The 10.1.7 release delivers several enhancements to Teamcenter Product Configurator capabilities. With new application programming interfaces (APIs), you can feed configurator data to enterprise resource planning (ERP) systems, sales systems and other third-party applications. New analysis and extraction tools help customers currently using classic options and variants to assess their data to move forward with new configurator capabilities. Additional enhancements to Product Configurator provide the ability to manage status, revision, effectivity and release of configurator data.

PLM process execution

Process execution enhancements in Teamcenter 10.1.7 include an enhanced workflow viewer that enables you to see the active workflow, as well as any completed workflows. Additional enhancements provide more complete workflow execution in Active Workspace. You can now fill out a form required for completing a task, participate in multi-user review tasks, easily navigate and interact with an improved graphical workflow viewer, view background processes and errors from your inbox and localize workflow task names for non-English languages.

Extend the value

Requirements management

Teamcenter 10.1.7 makes it easier to create, link, compare and modify requirements. Single-click create, start link/end link and improved Microsoft® Excel® integration enable users to rapidly create requirement traceability networks with minimal input.

Transform your business

Environmental compliance and sustainability

In the substance compliance solution, you can efficiently address your compliance tasks with an easy-to-use interface tailored to support your sustainability and product compliance initiatives. Reduce your risk of noncompliance by ensuring that you have a complete view of your product including accurate supplier data with an integration to the BOMcheck substance declaration database.

Systems-driven product development

Teamcenter 10.1.7 system modeling performance and usability improvements include intuitive relationship navigation, de-cluttering of diagrams through relationship filtering and 'rol-lup' connections, and cross-probing with Teamcenter visualization for rapid impact understanding.

Teamcenter 10.1.7 also adds enhancements for analysis requests, including better display and control of the attribute values associated with the request as well as personnel who are contributing/consuming the request. Improvements also include a robust library of comparison operators, consistency checks, and out-of-the-box (OOTB) reports.

Explore the PLM platform

Integrated material management

Keep data in sync and streamline your engineering processes with materials data management in Teamcenter. Material assignments can be made directly from NX or other systems, leveraging materials data managed with Teamcenter integrated material management. With materials inheritance enhancements, material sub-classing can now support multiple material import use cases.

Platform usability

Teamcenter 10.1.7 with Active Workspace 3.2 continues to deliver customer-focused productivity improvements in various areas, including improved usability with folder navigation; better handling of command overflow in smaller mobile devices and more editing capabilities in various display modes; and better collaboration with direct URL links to any Active

Workspace objects. Easily identify objects that include a release status and quickly determine release status. More efficient flow in document creation supports attachments and continuous creation of multiple objects with similar properties. Improved visualization usability provides expanded multi-select capability and a familiar breadcrumb mechanism. Teamcenter 10.1.7 also delivers significant massive model visualization performance, scalability improvements and more efficient structure navigation through support for filtering and Product Configurator-based variability.

Continued improvements to search and filter, classification and security help you reduce information overload. You can readily tailor Active Workspace to fit your needs with expanded adoption of the declarative user interface (UI) framework and many re-usable widgets. Improved support for creation and navigation of linked data simplifies management of federated data.

Platform deployability

The first release of Deployment Center provides you with a centralized web-based application that you can use to deploy Teamcenter and monitor your deployments. You can easily deploy Active Workspace 3.1 or 3.2 in your existing Teamcenter platform, upgrade Active Workspace and deploy Active Workspace applications. Create demonstration or testing environments by deploying a single-box environment or more complex environments distributed across multiple machines. Deployment Center also makes it easier for you to consistently deploy any custom software that you've built to one or more of your Teamcenter installations.

Teamcenter 10.1.7 Solution Summary

- Active Workspace embedded in MCAD tools
- Tighter PLM-ALM cross-domain traceability
- Teamcenter management of LMS Amesim models
- Background and workflow-driven rendering of watermarks and stamps on documents
- New APIs for integrating configurator data with third-party applications
- Tools to help move from classic options and variants to the new configurator
- Improved workflow history displays current and completed workflows
- Improved requirement usability; faster creation, linking, modification, and reporting
- Cleaner system models with intuitive relationship navigation, including integration with 3D visualization product model navigation
- Analysis request display, comparison operators, consistency enforcement with OOTB reports and dashboards
- API for material assignments to support robust integrations
- Material inheritance enhancements to support material import use cases
- BOMcheck integration to efficiently gather supplier material declarations
- Support of substance compliance on Active Workspace to tailor the user interface to sustainability and compliance initiatives for ease of use
- Core usability improvements
- Document management, visualization and structure management productivity improvements
- Search and filter enhancements
- Classification enhancements
- Security improvements
- Declarative UI with re-usable widgets
- Linked Data Framework enhancements
- Simplified Active Workspace deployment
- Environment and custom software installs

Teamcenter solution	New features and enhancements	Customer value
START		
Design management Teamcenter enables you to manage and share cross-domain design information, including mechanical, electronics, software and simulation in a single environment.	<i>Mechanical design and data management</i> <ul style="list-style-type: none"> • Active Workspace embedded in MCAD tools: <ul style="list-style-type: none"> - NX, Solid Edge, CATIA, SolidWorks, Creo (Pro/E), Inventor and AutoCAD • Search and browse items, revisions, datasets • Execute workflows and change processes <i>Software management</i> <ul style="list-style-type: none"> • Improved cross-domain traceability for requirements and change management processes • Active Workspace support for PLM-ALM interoperability • Launch workflows from either Teamcenter or Polarion 	<ul style="list-style-type: none"> • Easily manage, find, re-use and share MCAD design data • Tighter integration of software development into the design process for better cross-domain visibility • Models managed in a centralized source for enterprise-wide access that maximizes re-use

Teamcenter solution	New features and enhancements	Customer value
Design management <i>(continued)</i>	Model management <ul style="list-style-type: none"> • Integrated LMS Amesim model management • Manage model libraries and model dependencies • Maintain model structure across model repositories 	<i>(continued)</i>
Content and 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 style="list-style-type: none"> • Background rendering of watermarks and stamps on documents • Workflow-initiated rendering of watermarks and stamps on documents 	<ul style="list-style-type: none"> • Increased productivity with workflow automation or launch-in-background rendering of watermarks and stamps
BOM management Teamcenter helps you effectively manage the bill of materials (BOM) as a critical part of design and manufacturing by providing clear, current and accurate product definitions, specific to the needs of teams and users.	<ul style="list-style-type: none"> • Product configurator enhancements <ul style="list-style-type: none"> - APIs to integrate with third-party applications - Analysis and extraction tools to evaluate existing options and variants data - Manage configurator data using status, revision, effectivity and change processes 	<ul style="list-style-type: none"> • Simplify the exchange of information with ERP, sales systems and other third-party applications • Enable more users to leverage configurator capabilities • Simplified organization and management of configurator data
PLM process execution Teamcenter can help you manage and execute the many processes required to get the right products to market at the right time.	<ul style="list-style-type: none"> • Improved workflow management <ul style="list-style-type: none"> - Enhanced workflow viewer displays active workflow as well as all completed workflows. - Active Workspace enhancements to support forms for tasks, simplified graphical workflow viewer, localized tasks for non-English languages, and more 	<ul style="list-style-type: none"> • Clearer overall view of workflow history • Simplified user experience
EXTEND		
Requirements management Teamcenter capabilities for requirements management ensure the delivery of products that reflect the voice of your customer.	<ul style="list-style-type: none"> • Improved Excel live editing that applies to all structures including runtime property editing and background processing • Simplified, rule-driven requirement/trace link creation via streamlined create with start link/end link; supporting 1-to-1, 1-to-many, and many-to-1 linking. • Drag-and-drop OLE object embedding in requirements • HTML-based compare/contrast to highlight differences between requirements, versions or specifications 	<ul style="list-style-type: none"> • User-intuitive editing of Teamcenter information via Excel • Rapid/simplified traceability creation for better impact understanding • Easy requirement documentation/reference creation by including OLE-like files with requirements • Easier identification of content changes and differences

Teamcenter solution	New features and enhancements	Customer value
TRANSFORM		
<p>Environmental compliance and product sustainability Teamcenter can help you establish a framework for sustainability and design for environment (DfE) initiatives with a substance compliance solution to support the development of green, environmentally friendly products.</p>	<ul style="list-style-type: none"> Integration to BOMcheck database from Teamcenter to collect supplier declarations Support for substance compliance on Active Workspace 	<ul style="list-style-type: none"> Provide customers with another avenue to capture the right supplier material data where flexibility in interacting with suppliers is critical User experience is tailored to the data and task at hand to efficiently achieve sustainability and compliance goals
<p>Systems engineering With Teamcenter capabilities for systems engineering, you can construct a systems-level behavioral, functional and logical definition to help ensure products perform as intended.</p>	<p><i>Analysis Requests (AR)</i></p> <ul style="list-style-type: none"> Improved/simplified attribute table presentation Expanded min/max operator support including +/-, %, and more (includes operator consistency checking) Attribute "where used" including multi-site OOTB AR reports including rollups, dashboards, and compare/contrast <p><i>Multi-domain architecture modeling</i></p> <ul style="list-style-type: none"> Scalable diagram rendering via streaming Simplified/de-cluttered diagram (roll up connections) with selection highlighting Intuitive diagram navigation – expansion in direction of travel, filtered display during navigation, etc. PDF diagram output Diagram-3D visualization part cross-probing with highlighting 	<ul style="list-style-type: none"> Greater visibility of attributes and values associated with analysis requests Highlight deviations Impact understanding Improved collaboration between designers and simulation engineers Greater visibility on AR progress and deviations <ul style="list-style-type: none"> Improved display rendering and navigation speed Complex information delivered in a simplified way; easy to grasp by users Intuitive user interface makes it easy to use/learn Complete cross-domain impact understanding delivered in a graphical way
PLATFORM		
<p>Integrated material management Teamcenter provides holistic, integrated materials management to help your company create innovative, sustainable products.</p>	<ul style="list-style-type: none"> API for material assignment supports robust integration to NX and other systems Inheritance model for sub-classing materials supports various import use cases 	<ul style="list-style-type: none"> Increased productivity and reduced errors with streamlined materials data management capabilities and robust integrations
<p>Platform usability – customer-focused user productivity improvements Core usability improvements to increase your productivity and continued improvements in document management, visualization and structure management.</p>	<p><i>Core usability improvements</i></p> <ul style="list-style-type: none"> Folder navigation via breadcrumb and column configuration Better handling of command overflow in mobile devices Share links to any Active Workspace objects Edit in table with summary and hierarchical display Release status indicator icon 	<ul style="list-style-type: none"> Increased user productivity in various use cases from simpler folder navigation to advanced structure navigation with Product Configurator-based variability

Teamcenter solution	New features and enhancements	Customer value
<p>Platform usability – customer-focused user productivity improvements (continued)</p>	<p><i>Document, visualization and structure management productivity</i></p> <ul style="list-style-type: none"> • Render watermarks and print stamps in the background • Attach files during creation of a document under Item Revision Definition Configuration (IRDC) control • Continuous creation of multiple objects • Multi-select and breadcrumb navigation enhancements • Massive model visualization performance and scalability improvements • Configure structures with Product Configurator-based variability • Filter content in structure • Share and control edit access to saved working contexts 	<p>(continued)</p>
<p>Platform usability – reducing information overload Continued improvements in search and filtering as well as classification and security to help you better find what you need faster</p>	<p><i>Search and filter enhancements</i></p> <ul style="list-style-type: none"> • Query builder advanced searching • Search and filter on referenced objects' properties • Filter by categorization for object types • Search by alternate ID <p><i>Classification enhancements</i></p> <ul style="list-style-type: none"> • Show classification properties while comparing objects • Index and search for objects with multiple classifications <p><i>Security improvements</i></p> <ul style="list-style-type: none"> • Assign project security at create • Assign authorized data access (ADA/ITAR) licenses 	<ul style="list-style-type: none"> • Find the data you need to do your work faster than ever before

Teamcenter solution	New features and enhancements	Customer value
<p>Platform usability – configurable and extensible framework</p> <p>Continued adoption of declarative framework with re-usable widgets and linked data framework enhancements to make it easy for you to tailor Teamcenter to fit your needs without writing custom code</p>	<p><i>Declarative UI framework with re-usable widgets</i></p> <ul style="list-style-type: none"> • Declaratively define the content and behavior of command panels • Re-usable widgets for additional property types • Re-usable widgets for declarative page controls <p><i>Linked Data Framework enhancements</i></p> <ul style="list-style-type: none"> • Simplified creation and ability to navigate in relations browser 	<ul style="list-style-type: none"> • Easily tailor Active Workspace declaratively through stylesheets without writing any custom code
<p>Platform deployability – Deployment Center</p> <p>Deployment Center 1.0 provides a single, centralized, web-based application to deploy and monitor your Teamcenter environment.</p>	<p><i>Simplified Active Workspace deployment</i></p> <ul style="list-style-type: none"> • Deploy Active Workspace 3.1 and 3.2 • Upgrade Active Workspace • Deploy Active Workspace applications <p><i>Environment and custom software installs</i></p> <ul style="list-style-type: none"> • Single-box or distributed environment installs • Install custom software 	<ul style="list-style-type: none"> • Faster and easier deployment of Active Workspace, environment and custom software

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