Content management

Managing the development of structured documentation within PLM
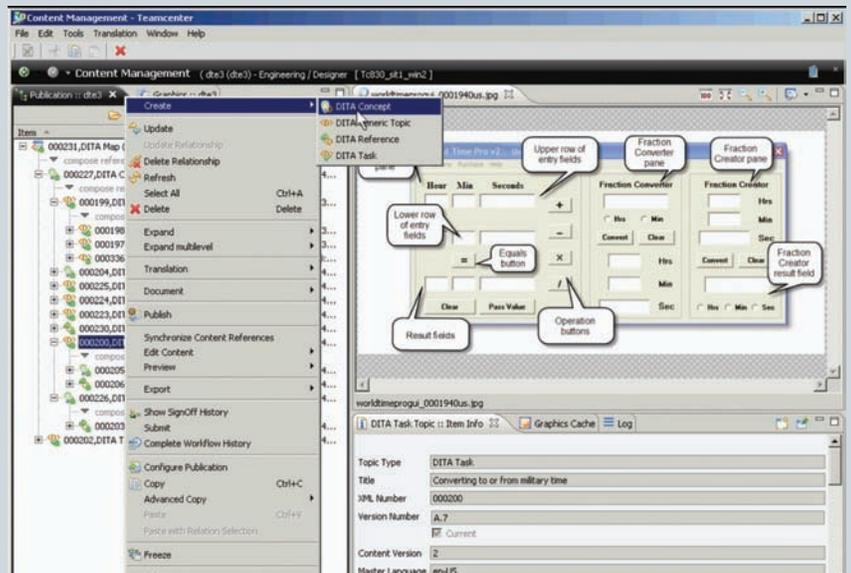
Benefits
- Improves productivity by establishing standards for document authoring/collaboration
- Accelerates time-to-market by leveraging SGML/XML tools that enable you to rapidly author/publish documents and multiple product-related variants
- Improves compliance through the use of schemas that ensure documents conform to required structure and content
- Improves product launch success by providing a single source of product knowledge that facilitates concurrent engineering and aligned communications for synchronized launch activities
- Reduces translation costs for global publications by re-using document components and tracking translations work/content
- Reduces documentation costs by re-using content components at an efficient level and eliminating cut-and-paste practices

Summary
Teamcenter® software's structured content management suite provides dynamic solutions for automating the activities associated with authoring, assembling and publishing complex product and/or service documentation in multiple languages and delivery formats. Teamcenter provides advanced integrations and customer-selected SGML/XML authoring and publishing tools. You can leverage these integrations and Teamcenter's smarter and faster authoring, review and publication capabilities to unify your product engineering and authoring processes, as well as to create and publish highly flexible and accurate documentation.

Business challenges
Ideally, documentation should be developed in concert with your product development process. Unfortunately, all too often, authors create and manage their work in isolated environments, with the result that technical publications groups need to perform significant rework as engineering changes occur late in the development process or even worse, they fail to deliver a document on time for the product release.

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Benefits *continued*
- Improves accuracy and quality by linking engineering and documentation components so that changes can be planned, completed and verified before publishing
- Improves interchange of document content by supporting industry standards, including S1000D and DITA

Features
Managing document content
- Document components at an appropriate level of granularity for management and re-use
- Document structures similar to bills of material
- Ability to maintain relationships between original documents and multiple outputs, including PDF and web

Clone and re-use by reference capability
- Ability to clone or reference existing topics to build document trees
- Ability to clone or reference within authoring tool
- Creation of template and boilerplate content as a starting point or for re-use

Search capability
- Where-used searching for impact analysis
- Saved and ad hoc queries
- Full-text searches

Change management
- Revision (document release)
- Sequence (interim or work-in-progress edits)
- Content-level (to correct relation of source versions to translated content versions)

Translation
- Ability to manage components in multiple languages and their relationship to each other

These unaligned and serial processes can cause companies to release their products to market without proper documentation, labeling or regulatory filings and often delay the product launch all together.

Teamcenter functionality
In today's fast paced global economy, documentation is critical to product launch and delivery. With this in mind, Teamcenter enables you to incorporate content management into your product lifecycle management (PLM) so that you can:
- Establish standards for documentation input and collaboration
- Leverage advanced content authoring and management
- Automate and optimize publication and distribution

For advanced documentation needs, you can extend your Teamcenter environment with content management capabilities that utilize SGML/XML applications to improve the processes associated with authoring, assembling and publishing product and service-related documents in multiple languages and output formats.

Facilitating seamless product and publication definition

Teamcenter addresses issues traditionally associated with document creation and technical publication, including risks introduced when processes:
- Fail to enforce consistent authoring
- Involve manual formatting and publication tasks that impose time delays
- Require difficult engineering changes that affect applicable publications

- Rely on cut and paste operations to multiple documents, instead of effective content re-use
- Require content rework for different delivery channels

In today's knowledge-based economy, companies are driven to meet customer demands for product and service information that is highly accurate, relevant and consistently up-to-date. Teamcenter eliminates the repetitive, error-prone processes normally associated with developing standard documents and technical publications. Teamcenter enables content authors and product teams to create, manage and publish vast amounts of technical systems information in sync.

Teamcenter can automatically perform full text indexing and document rendering to facilitate reviews. Teamcenter supports dynamic publishing by applying style sheets to content based on configuration, revision or effectivity considerations.

When using Teamcenter's content management capabilities, a document's content is separated from the format defined by the style sheet; users can easily format or render the same document for print, web or interactive electronic technical publications (IETPs). Teamcenter also makes it easier to publish documentation in multiple languages for each required output format. You can use Teamcenter to author and publish:
- User and owner manuals
- Parts and product catalogs and data sheets
- Training documentation
- MRO logistics support documents
- Service and repair manuals
- Specifications
- Resource descriptions
- Costing and estimating documents

Underlying concepts
Teamcenter enables you to manage your product development processes and document/publication support processes in the same, single environment with common product knowledge available to your entire team. Teamcenter allows you to create connections between source
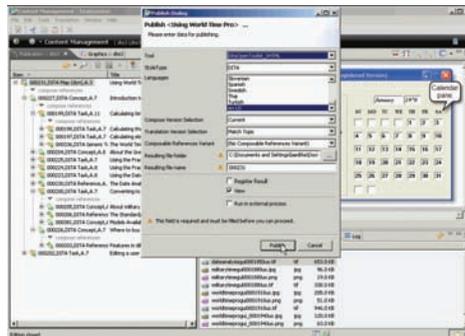
Features *continued*

- Translation orders and workflows to manage internal or external translation work assignments at any document level
- Matrix to track translation task status by components, vendor and language
- Ability to receive and import translations automatically

Graphics

- Built-in graphics viewer
- Ability to manage multiple formats and languages to optimize target output, including web and PDF
- Ability to easily search and reference graphics from XML/ SGML components

Ease of use

- Drag and drop topics to build documents
- Real-time access to topic metadata
- Document structure navigation at single or multiple levels with simple click
- Drag and drop relationship between style sheets, DTD and schemas to simplify configuration of document types
- Graphic workflow development and viewing
- Built-in preview and publish viewer
- Configurable lifecycle states to control access and processes at different stages of document development

content and related documents within the context of your workflow and business processes – for example, the relationships between a part or assembly definition (e.g., BOM and CAD data) and associated illustrations or parts tables that appear in technical documents.

Teamcenter provides open solutions that support industry-leading SGML/XML authoring and publishing engines, thereby enabling you to create and render documents in multiple formats using automated processes.

Use cases

Structured content management By letting you include technical writers in the PLM environment, Teamcenter enables these stakeholders to contribute directly to product launch processes and draw upon product engineering source data to create content as it is needed in your documents. Documentation teams can decompose documents into components that are the right size to justify their continued management and still support re-use in multiple instances. These components can be managed from a single source of information and leveraged to publish or update multiple documents.

You can access the Teamcenter repository to make a change to a single component that subsequently can be applied to multiple documents containing the original information. This practice is especially valuable for ensuring information integrity and accuracy. Managing a single source also reduces translation cost by enabling you to limit

translation requests only to those components that have changed – and then re-using these translated components in multiple documents.

Automating key documentation processes Teamcenter's workflow capabilities enable document teams to speed their review/approval processes, optimize their change processes and trigger audience-specific publication processes. Teamcenter-driven workflows enable companies to publish and deliver the right information to the right audience at the right stage in the product lifecycle.

Document teams can leverage Teamcenter's change management capabilities to ensure that product changes are executed through standardized best practices and include the necessary document changes. In addition, Teamcenter-driven workflows can automatically initiate processes that deliver audience-specific publications in the appropriate format.

Integrated total product development Teamcenter's single source of product knowledge brings product engineering and documentation teams together in an environment where change can be captured and communicated to all of the product launch's stakeholders. Engineering changes can be identified immediately and applicable content, such as parts, tables or graphics, can be automatically incorporated into documents and publications.