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Teamcenter Requirements Integrator for DOORS

Using Teamcenter Requirements Integrator to exchange DOORS requirements

Benefits

- Extend DOORS-based requirements across the extended enterprise for better product decision-making
- Capture, manage, change and audit the evolution of DOORS-created product requirements across every phase in the product lifecycle
- Incorporate Six Sigma quality goals in early lifecycle stages, thereby enabling product teams to design-in quality and design-out defects

Summary

The Teamcenter® software integration with IBM Rational DOORS enables you to define, capture and manage structured product requirements created in DOORS. Teamcenter unlocks DOORS-based requirements and communicates them enterprise-wide, throughout the product lifecycle, for better product decision-making.

By delivering DOORS-based requirements to the enterprise, Teamcenter facilitates requirements-driven design, Design for Six Sigma, systems engineering and other business improvement initiatives that depend on your ability to build the voice of the customer into your product lifecycle.

Using Teamcenter to manage product requirements created in DOORS

By integrating Rational DOORS requirements into a single Teamcenter managed PLM environment, you can deliver requirements enterprise-wide. Product decision-makers are able to understand what your target markets and customers want in terms of documented expectations, preferences, standards and regulations that you capture as product requirements.

Once you import these DOORS-based requirements into Teamcenter, you can link these requirements to other product knowledge, such as the engineering data/documents that comprise your product/process definitions and populate your information workflows.

Teamcenter Requirements Integrator for DOORS

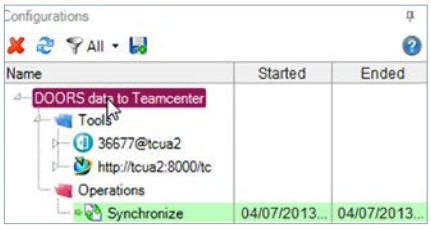
Benefits *(continued)*

- Relate product requirements to design elements, thereby facilitating requirements-driven design and ensuring that product development programs comply with customer and marketplace expectations
- Accelerate take-to-market cycles by ensuring the latest product decisions (such as requirement changes, design changes and their related impacts) are communicated and fully understood by every lifecycle stakeholder

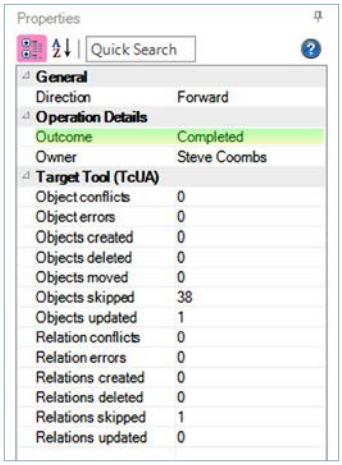
Features

- Ability to manage all DOORS data including contextual hierarchies, full descriptions, embedded images, attributes, tables and links
- Ability to include DOORS items fully within a Teamcenter-managed PLM environment
- Traceability between DOORS data and Teamcenter data
- Change mechanism for enabling new and amended DOORS items to be synchronized or viewed
- Fine-grain requirements management capabilities for establishing performance parameter targets and performing both trend and tradeoff analyses
- Use of existing schemas to combine data between DOORS and Teamcenter

By linking your DOORS requirements to fine-grain design elements, enterprise teams are able to access, leverage and trace an auditable set of requirements that can be repeatedly updated and changed as your product lifecycle evolves.



Teamcenter facilitates cross-discipline, closed-loop feedback by recognizing when product requirements are in danger of being violated, when changes to your requirements and design elements take place and when design changes impact product requirements – as well as when changed requirements impact product design.



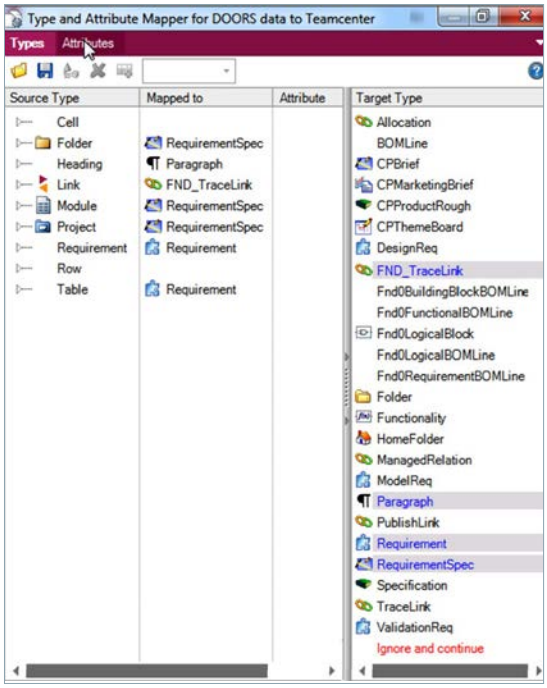
You can completely integrate your customer or regulatory requirements into your full deliverable ensuring that you have coverage as well as evidence to prove compliance. Once a change has been approved and incorporated into either Teamcenter or DOORS, you can easily exchange new baselines or versions and manage the change using Teamcenter workflow processes.

Underlying concepts

The Teamcenter integration for DOORS is managed by strong underlying technology that extracts the data and structures you need, and facilitates a level of mapping to your schema items before exchanging and restructuring the data.

The integrity of the data is maintained by the direction of the update process; Teamcenter users are unable to update the data within DOORS unless it is part of your integration process.

When an integration is implemented, users analyze both the DOORS and Teamcenter schemas and establish a mapping set. This mapping set will determine what items are included on the basis of whether the data structure, known object types or certain attributes are being met.



Attributes can be mapped to existing Teamcenter properties so they can be searched and reported upon within your normal Teamcenter working processes.

Features *(continued)*

- Ability to map the data you want to view in Teamcenter while omitting data you don't need
- Synchronization by automated service or manually initiated operations

Images from DOORS are converted and imported into the Teamcenter object so that Teamcenter users can see the full detail around the requirements that need to be met.

DOORS links are also created as trace links. As a result, you can link the DOORS data to Teamcenter items, as well as view the impact on other customer requirements directly within Teamcenter.

DOORS changes can be recognized at periodic points in time. Then, after analysis, they can be imported into Teamcenter to create new structures or add new revisions to existing items.

The integration's data exchange capability utilizes a business strength client server architecture to ensure your integrations are managed and controlled effectively. Once data has been imported, you can start to manage change between the Teamcenter and DOORS environments either as a closely coupled direct integration or via an air-gap approach where a shared infrastructure is not permitted.

An analyzer screen enables you to review exchanged data quickly and easily to see if there are new, amended or deleted DOORS items that have changed since the last time you performed an update or since the initial data migration.

Changes also can be exchanged between DOORS and Teamcenter. If these are new items, they will be placed at the correct hierarchical level; if they are amended objects, they become new revisions; if these are deleted items, they will not be deleted in Teamcenter. A property flag can be automatically set to determine the status of the DOORS changes as well.

Administration and control

The Teamcenter integration for DOORS is a separate application that can be installed based on specific server IDs which enable as many integration users as you need. Creating the configuration will consume a user license and the integration will only facilitate access on the basis of permissions granted to individual users. A mapping set and integration templates can be re-used and shared so that all subsequent integrations conform to an established configuration.

Synchronization either can be a manually started event for a given event (such as a new DOORS baseline) or it can be scheduled to run at a certain time of day. All synchronizations will provide a details report of the outcome. Once an integration is deployed, it can be shared among different teams with different permissions ensuring that the flow of data is controlled and accessed only by those permitted.

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