

# Requirements management

**“Build-in” the voice of the customer by managing, linking and continuously verifying conformance throughout the product lifecycle**

## Benefits

- Facilitate total quality improvement by providing your enterprise with a metrics-driven definition for determining whether the products you deliver comply with customer expectations
- Ensure marketplace success by making certain that your product lifecycle is rigorously and relentlessly driven by the requirements, needs and preferences of your target markets and customer base
- Accelerate time-to-market by allowing you to avoid unexpected problems that might otherwise arise late in your product lifecycle
- Improve product quality by providing developers with immediate feedback when program constraints are in danger of being violated
- Increase cross-discipline collaboration by providing all of the participants in your product lifecycle with a common language for understanding a program’s business objectives

## Summary

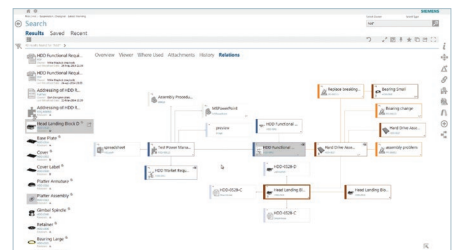
Teamcenter® software’s requirements management capabilities provide your enterprise with a systematic and repeatable solution for defining, capturing, engineering, managing and leveraging product requirements. By allowing you to understand each product in terms of its evolving customer requirements and compliance issues, Teamcenter enables you to build in the voice of the customer and continuously verify conformance to requirements throughout the product lifecycle – thereby facilitating requirements-driven design, systems engineering, design-to-cost and other highly valued business initiatives.

## Connecting requirements across your product lifecycle

By enabling you to understand and evaluate product requirements across every stage in your product lifecycle, Teamcenter allows you to:

- Understand what your target markets and customer wants in terms of documented expectations, preferences, standards and regulations from diverse sources.

- Supplement these requirements with quantifiable constraints that determine the success of your take-to-market programs in terms of their cost and delivery schedules, as well as their ability to satisfy established performance, ergonomic, safety, usability, reliability, maintainability, recycling/disposal and other compliance related metrics.
- Connect these requirements and constraints to fine-grain design elements that trace across the configurations and continually validate the product as it evolves across its various lifecycle states.
- Establish closed loop processes that feed information to product developers and program managers when new requirements arise, when your program constraints are in danger of being violated or when review teams need to understand the requirements related impact of proposed design changes.



The relationship browser provides an easy to understand graphical display to trace requirements and their relationship to other objects across the entire product lifecycle.



### Features *continued*

- Familiar user interface that looks and acts like Windows Explorer/Outlook
- Short learning curves facilitated by Microsoft Office integrations that support “live” viewing/editing through Microsoft Word and Excel
- Multi-user group environment that enables users to view and work on requirements concurrently in a controlled way
- Requirements versioning/variant support
- Requirements-based configuration management, change processes and approval cycles
- “Lock-out” protections that prohibit users from accessing or modifying a requirement when that requirement is already being accessed by someone else

### Use cases

Teamcenter software’s requirements management capabilities can apply to numerous use case scenarios, including regulatory compliance impact analysis, trade studies and the continuous validation of product requirements.

#### “Build-in” regulatory compliance

Teamcenter provides support for regulatory compliance. Regulations, such as the Congressional Battery Act and EEU Directives, which stipulates that manufacturers pay for disposing/recycling their products. Using Teamcenter Requirements Management you can link these regulations into your product design, enabling you to “build in” end-of-life recycling considerations across the product life-cycle – thereby facilitating order of magnitude savings. For example, suppose an automotive manufacturer carries \$150 liability to cover the cost of vehicle disposal. If you can drive the cost of recycling/disposal from \$150 to \$50 and multiply that savings by millions of vehicles, it’s easy to see how companies can save hundreds of millions of dollars by adopting a comprehensive recycling initiative early in the product development cycle.

### Continuously validate requirements

The National Highway Traffic Safety Administration’s (NHTSA) vehicle recalls database reports there are more than 47 million automotive recalls in the U.S. in 2018. Most of these recalls are a direct effect of the failure to validate requirements as the product evolves. Using Teamcenter you can link and continuously validate requirements as the product and requirements evolve enabling everyone to more efficiently and cost effectively plan their work and make more informed decisions. At an average cost of \$100/vehicle companies can save hundreds of millions of dollars by using Teamcenter to continuously validate requirements across the entire product lifecycle, instead of discovering the problem after it’s in the customers driveway.

Siemens Digital Industries Software  
[siemens.com/software](https://www.siemens.com/software)

Americas +1 314 264 8499  
 Europe +44 (0) 1276 413200  
 Asia-Pacific +852 2230 3333