



SIEMENS

 **GEOMETRIC
SOLUTIONS**

Siemens PLM Software

Process execution

Using Teamcenter to reduce cycle times and improve productivity

Benefits

- Reduce cycle times with process automation
- Improve productivity with the right information at the right time
- Reduce costs with less manual effort to execute your processes
- Ensure consistency and completeness by standardizing best practices
- Take control of your complex processes with integrated project planning and execution
- Improve coordination with integrated program planning

Summary

Teamcenter® software from Siemens PLM Software delivers capabilities that make simple and complex processes easier to plan, manage and execute. It's all about effectively managing the work that people perform: making sure that the right work is delivered to the right person with the right data at the right time at the right location with the proper authority to do that work with the greatest efficiency and accuracy.

Business challenges

Getting the right products to market at the right time involves careful coordination across an intricate web of people and data: from choosing the right projects, to planning projects, to executing what was planned and effectively managing change during the life of the product.

At the most basic level, you need to manage work execution. What is my task? When is it due? What other information do I need

to complete it? Many companies still rely on paper-based, manual and/or poorly automated processes to deliver work. This leaves users wasting time searching for data and deliverables or working on the wrong tasks at the wrong time, ultimately resulting in errors, rework and missed delivery dates. In addition, lack of or ineffective automation makes it difficult to enforce business practices.

To remain competitive, many companies must go beyond management of work processes to include the planning, management and execution of projects and programs. This introduces a major challenge; how to connect planning with the actual execution of the required work. All too often, project management is a stand-alone system, disconnected from the data and process required to execute projects and programs. This increases overhead (support for multiple systems) and results in poor planning, missed delivery dates,

Process execution



Benefits continued

- Implement change quickly, accurately and comprehensively to reduce risk
- Increase revenue and margins by bringing the right products to market

cost overruns, as well as over AND under-utilization of resources. In addition, users waste time updating status reports. Leaders find it difficult to coordinate cross-functional teams and waste time tracking down the status of deliverables and reconciling data between work management and work execution systems.

Another major process challenge is effective management of change. One of the biggest obstacles to effective change management is understanding the scope of data, people and processes affected by a change. Compounding that issue is the fact that many change processes are inconsistent and manual. These issues lead to decisions that are made too late in the process to have a positive impact on cost or productivity. There are also an increasing number of regulations to adhere to, which can be time consuming to track, and costly to violate.

Companies have no easy means to evaluate which projects to work on. Most use Excel spreadsheets to collect data from various sources, leading to decisions based on out-of-date or incomplete information. There is no consistency in evaluating ideas or potential projects and no visibility into the impact of portfolio decisions on resources

or timelines. This often leads to too many project approvals, which negatively impacts them all.

Defining Teamcenter process execution capabilities

To enable you to address these issues, Teamcenter can be used to help you effectively plan, manage and execute your processes, no matter how simple or complex. Key capabilities include:

- Workflow management
- Program and schedule management
- Change management
- Portfolio planning and execution

Workflow management

Digitize, optimize and standardize your processes. Workflow management in Teamcenter enables you to automate any business process, no matter how simple or complex. With the flexibility of built-in business logic, you can dramatically reduce cycle times by reducing delays between process steps, ensuring activities start when necessary and reducing time spent completing and re-doing tasks. Teamcenter is designed to support all process participants, whether they are frequent contributors from core design and

The screenshot displays the Siemens Teamcenter interface for a specific item revision. The main header shows the item ID 'PE-NO00478/A;1-018000_asm' and the user 'Ed Engineer (ed)'. Below the header, there are tabs for 'Overview', 'BOM', 'Where Used', 'Attachments', and 'History'. The 'Workflow' tab is active, showing a process flow diagram with steps: 'Start', 'Create Design and Data', 'Review Design', 'Add Release To Mfg Status', and 'Notified'. The 'Create Design and Data' step is highlighted. On the right side, there is a 'Relations' panel with 'Create Design and Data' selected, showing 'Overview' and 'All Targets'. The 'Properties' section includes details like 'Name: Create Design and Data', 'Description: Create Engineering Design, Create and Attach all the related data.', 'Responsible Party: Ed Engineer', 'Task State: Started', 'Last Modified Date: 18-Sep-2014 12:46', 'Last Modifying User: Ed Engineer (ed)', and 'Due Date:'. The 'Targets' section lists related items: '018000_asm', 'Snowblower Cab Test ...', and 'Snowblower CAB Desi...'. The Siemens logo is visible in the top right corner.

Features

- Digitize, standardize and optimize manual processes
- Link work planning and management to execution
- Coordinate resources across projects to drive deliverables that meet strategic objectives
- Understand and manage the complete scope of change
- Capture process history for audits and compliance
- Prioritize investments, balance resources and drive execution to bring the right products to market at the right time

engineering teams, or occasional contributors from other parts of the organization, such as production, sourcing, quality, finance, legal and others. Audit and history trails help you identify and eliminate bottlenecks.

Every user can be more productive when they have the right information and the right time to get their job done. The automated communication of tasks and data at the correct time requires less manual effort to execute. Users spend less time looking for task-related information, figuring out which process steps to follow and who are the other participants. In addition, you can define templates for re-use to standardize best practices. This helps to ensure consistency and completeness, ultimately reducing errors and eliminating costly fines.

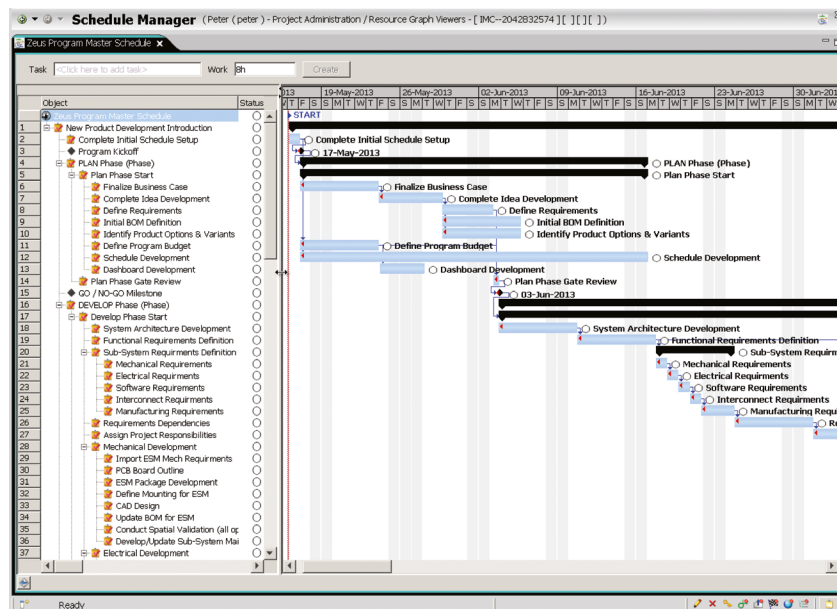
Program and schedule management

Make complex processes easy, and easy processes easier. Teamcenter provides much of the functionality of a standalone project management system, such as managing tasks and dependencies, milestones, templates, baselines, work breakdown and budgeting. What makes this solution different than a standalone system is that it

provides easy-to-use, robust capabilities that enable you to effectively plan schedules in the same PLM tool that you use every day. It's easy enough to understand so that you don't have to be a project management expert, yet powerful enough to manage your most complex programs and projects. With schedule management as part of your PLM environment, you have access to accurate, up-to-date information on resource availability. This improves predictability of execution and helps you to more consistently meet target launch dates. Schedule tasks can be directly connected with other PLM data, such as deliverables, product data, documents, parts, changes and more.

Another key advantage to managing programs and schedules in Teamcenter is that you can automate the execution of schedule tasks via workflow. Work assignments and key data are communicated at the right time, and the status of tasks is automatically updated as work progresses. Deliverables and the status of those deliverables are also automatically tracked. Team members will be able to concentrate on tasks instead of updating schedules, and leaders have an accurate view of progress at all times. Out-of-the-box reports include monitoring against cost, schedule and resource objectives, enabling you to eliminate surprises.

Using Teamcenter enables you to do more than just manage projects; you'll be able to link the entire schedule chain together. Each manager will be able to quickly and easily see how their team's schedule fits into the overall program. Using Teamcenter will enable you to coordinate resources across projects to drive deliverables that meet strategic objectives; facilitating the execution of activities with unified goals, gates, timelines and targets. You'll have a clear understanding of the impact of those activities across your projects and programs to enable better forecasting of schedules and timing, as well as manage risks and increase execution predictability.

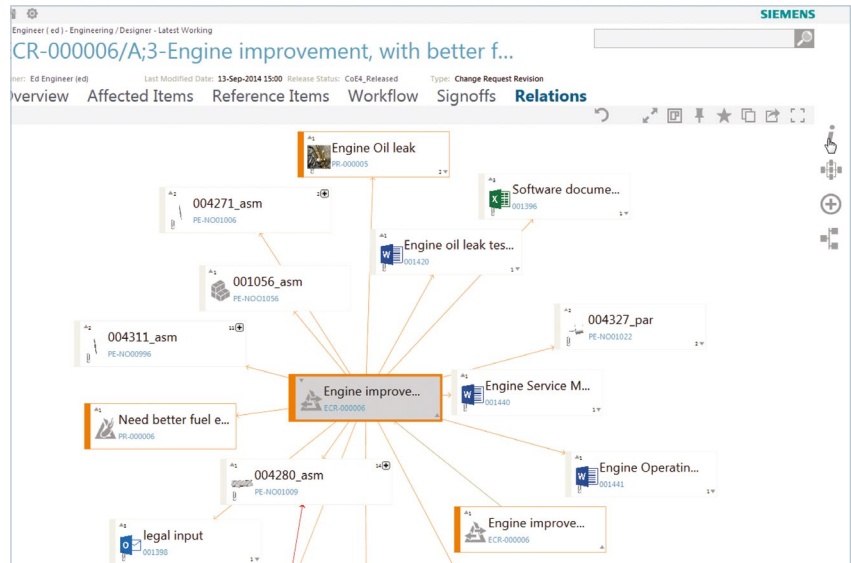


Change management

Teamcenter provides a comprehensive view of the impact of change, and enables you to plan and implement change quickly, accurately and comprehensively. This enables you to fully understand the ramifications of change for data, people and processes so that you can make the best decisions. In some cases, the best decision might be that a change is not required, or can be streamlined. Other changes might require coordination across your entire organization. It is critical to make accurate decisions so that you don't execute an unnecessary change.

Teamcenter provides visibility into all changes for a given part or product, and enables you to plan simultaneous changes in the most efficient manner.

Teamcenter enables you to provide consistent processes that help you standardize and synchronize simple and complex changes across all affected products, timelines and resources, including your suppliers and partners. This enables you to do it right the first time, spend less time implementing and administering change and, ultimately, decreasing cycle times and improving productivity. You can leverage change history to drive continual improvement loops, as well as improve traceability for compliance purposes.



Portfolio management

Optimize your portfolio with a holistic view of information. Leverage a best-of-breed portfolio management solution to provide consistent discipline for investment decisions and align your product portfolio with strategic objectives. You can push a top-down execution of programs best suited to meet your portfolio goals.

Many portfolio solutions end there, with a push for what should be executed. Teamcenter helps you make smarter decisions with the clear understanding of what can be executed. This bottom-up approach enables you to ensure that you have the people, time and money to meet your targets based on different scenarios. This combined approach (both top-down and bottom-up) provides a holistic view of your portfolio.

Contact

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