SMARTEAM
What's New in V5R13

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SMARTEAM V5R13 – WHAT'S NEW

This document is a summary of the new features across SmarTeam's range of products for V5R13. For detailed information, refer to the appropriate product documentation.

V5R13 NEW PRODUCT

SMARTEAM – Program Management

SMARTEAM – Program Management is an out-of-the box, yet customizable, fully web-based collaborative program management solution. It enables the storage and management of a vast amount of program-related information, including multiple projects, timelines, tasks, deliverables and resources, and tightly connects them to product and process-related knowledge, such as Documents and Bills of Material. SMARTEAM – Program Management enables dispersed users throughout the extended Enterprise and across the value chain to easily, efficiently, and securely manage and share these elements in real time through an intuitive, role-based user interface, eliminating error-prone manual data entries, and decreasing costs and time-to-market.

SMARTEAM – Program Management embeds an integration to Microsoft®-Project.

Product Highlights

❑ Unites the management of project and product data in a single, integrated multi-platform environment

❑ Enables project collaboration across the extended enterprise and product value chain on multiple concurrent projects

❑ Provides role-based cockpits for Project Managers and Project Members

❑ Integrates bi-directionally with Microsoft Project

❑ Promotes resource management

❑ Facilitates reuse of unified project and product information

❑ Supports project tracking and reporting, for enhanced decision-making

❑ Connection between tasks, projects and deliverables status using business rules

❑ Automation of project execution through a system of notifications and alerts

❑ Ability to quickly launch a new project based on an existing project or a project template

❑ Out-of-the-box data model and Project templates for project collaboration based on the industry's best practices

❑ Ensures secure project environment through Project-based authorization

V5R13 ENHANCEMENTS

SMARTEAM – Foundation

System Configuration

- ❑ New service designed to centralize all configuration settings for all SMARTEAM applications.
- ❑ Multiple levels of configuration
    - ❑ Easier manageability
    - ❑ Greater security across sites, machines, applications, databases and users from anywhere in the organization.

New Form Designer to support SMARTEAM – Web Editor

- ❑ Supports new **Web Editor Profile Card** format
    - ❑ XML-based
    - ❑ Fully customizable
    - ❑ Supports client-side scripts
    - ❑ Platform and Operating System independent (Windows / IIS, Unix / Netscape / Mozilla
- ❑ **Import of Windows Profile Card GUI to the Web**
    - ❑ An import mechanism enables users to import an existing Windows Profile Card and easily create a similar Web Profile Card with minimum modifications
- ❑ **User interface** emphasizing usability
    - ❑ New and updated interface
    - ❑ Advanced editing capabilities
    - ❑ Attractive toolbar and toolbox
- ❑ **Script support**
    - ❑ The Form Designer supports SMARTEAM –Web Editor users' ability to attach client-side scripts to the web Profile Card.

Configuration Management Capabilities defined in the Data Model

- ❑ **New pre-defined Product behavior –** database level behavior, product classes and product type hierarchy managed by customers

❑ **Product Definition –** R13 introduces a new entity called "Product". Product refers to a representation of a specific manufactured assembly or configuration. Businesses can now access a list of products, in which each product can be linked to the relevant parts of which it is composed. This new capability promotes product reuse, e.g., for a bidding process, as businesses will be able to immediately evoke the set of relevant parts for a specific product for quick RFP and RFQ response.

❑ **Product View Support**

    ❑ Product Views enable businesses to maintain different product representations and extract specific product structure subsets relevant to varying user roles and requirements. SMARTEAM enables users to define, compare and manage different Product Views, e.g., As-Designed, As Manufactured, As-Built enabling them to reuse existing product knowledge, maintaining data integrity, and saving valuable project time.

❑ **Unit Effectivity Support**

    ❑ Effectivity defines the criteria for applicability and validity of items in general as well as in the context of specific product structures. An effectivity range can be specified by a time window, called Date Effectivity, or by the serial numbers for the Products being produced, called Unit Effectivity.

    ❑ To the already existing Date Effectivity, SMARTEAM V5R13 adds Unit Effectivity support to enable users to filter an overall product structure, using numeric values and numeric value ranges, in order to view its diverse product configurations across a product line. Unit Effectivity support simplifies the product model, increases product reuse, reduces data redundancy, and saves design time.

    ❑ Each link and object in the product tree is classified with a unique alphanumeric/numeric code, e.g., E500, 1-10, 200

    ❑ This code specifies the structure/group of products to which this link/object belongs. Unit effectivity can be assigned to parts and links between parts.

❑ **Comparison** – Comparison capabilities have been enhanced. The user can now compare:

    ❑ Different product views

    ❑ Structures with a specific effectivity

❑ **Product/Part Instancing**

    ❑ R13 supports the breakdown of quantity mode into instance mode for a variety of user-defined purposes, such as reference designators, substitute items or operation sequence. For each part quantity, an additional level of detailing, i.e., an instance, can be defined. Instances of a part can be defined as relating to the entire part quantity or to a partial quantity.

❑ **Enhanced Copy Tree Wizard capabilities**

    ❑ The V5R13 enhanced Copy Tree Wizard supports flexible structure copying that is not limited to copying documents to part classes. Supported copying scenarios:

         From document tree structure to part/item structure

         Part structure population – part structure can be copied and then modified (as opposed to creating similar data from scratch)

Product serialization – ability to copy data (not necessarily product data), assign it with an ID such as a serial number in order to create a serialized structure.

The above operations can also be performed through the new product views.

❑ **Authorizations**

❑ **Project-based Authorizations**

Users are able to view, access and manipulate documents according to their user, group and role-based authorizations in a specific project – as defined by the project manager.

Project-based authorizations enable businesses to meet enterprise-wide implementation needs.

The authorization to access information and modify it can be governed by the project(s) to which the object is related.

Simple user interface helps authorized users to easily administrate user access permissions for a project.

❑ **Authorization Denial**

Authorized users/administrators are now able to explicitly deny authorizations from user groups, preventing them from performing a specific operation (such as, check in, check out, view, add, delete).

It enables powerful, yet easy-to-comprehend enforcements of an enterprise security policy.

❑ **Foreign Objects Support**

o SMARTEAM - Foundation now supports the ability to reference foreign objects, i.e., objects that reside in external systems. This capability enables users to access information that is located in external systems without having to actually integrate to them with SMARTEAM or exchange data between the two systems.

SMARTEAM – Editor

Configuration Management Capabilities defined in the Data Model

❑ **New pre-defined Product behavior** – database level behavior, product classes and product type hierarchy managed by customers

❑ **Product Definition** – R13 introduces a new entity definition called "Product". Product means a representation of specific manufactured assembly or configuration. Businesses are now able to have a list of products, in which each can be linked to the relevant parts that compose it. This new ability promotes product reuse, e.g., for a bidding process, as

businesses will be able to immediately evoke the set of relevant parts for a specific product for quick RFP and RFQ response.

❑ **Product View Support**

❑ Product Views enable businesses to maintain different product representations and extract specific product structure subsets relevant to varying user roles and requirements. SMARTEAM enables users to define, compare and manage different Product Views, e.g., As-Designed, As Manufactured, As-Built enabling them to reuse existing product knowledge, maintaining data integrity, and saving valuable project time.

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❑ Each link and object in the product tree is classified with a unique alphanumeric/numeric code, e.g., E500, 1-10, 200

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❑ Different product views

❑ Data selected according to various effectivity parameters

❑ **Product/Part Instancing**

❑ R13 supports the breakdown of quantity mode into instance mode for a variety of user-defined purposes, such as reference designators, substitute items or operation sequence. For each part quantity, an additional level of detailing, i.e., an instance, can be defined. Instances of a part can be defined as relating to the entire part quantity or to a partial quantity.

❑ **Enhanced generic copy tree for knowledge reuse**

    ❑ R13 introduces new "Copy From" functionality that enables copying of the current product view to another structure. The copied product view assumes the structure and links of the product view to which it has been copied. This function represents a significant improvement in the user's working environment. It is not necessary to create new links or new structures, they can simply be copied.

    ❑ The new Copy Wizard supports flexible structure copying that is not limited to copying documents to part classes. Supported copying scenarios:

        From document tree structure to part/item structure

        Part structure population – part structure can be copied and then modified (as opposed to creating similar data from scratch)

        Product serialization – ability to copy data (not necessarily product data), assign it with an ID such as a serial number in order to create a serialized structure.

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        It enables powerful, yet easy-to-comprehend enforcements of an enterprise security policy.

SMARTEAM – Web Editor/Navigator

Platform and operating system independent

❑ SMARTEAM – Web Editor is now available for users regardless of the operating system and Internet browser in use.

Solution-centric Cockpits

❑ SMARTEAM – Web Editor presents solution-centric cockpits that can be tailored to meet specific solution needs, highlighting selected types.

Profile Cards

❑ **Supports SMARTEAM Editor's (Windows®) Profile Card Look and Feel**

    ❑ In R13, Windows- and Web-based SMARTEAM Profile Cards can easily share the same look and feel. With minimum effort, organizations can create an identical Web Profile Card Graphical User Interface (GUI) as their (SMARTEAM – Editor's) Windows Profile Card.

❑ **Full profile card customization**

    ❑ Profile Cards are fully customizable and allow organizations to create a clear display of the data.

    ❑ Profile Cards support client side scripts over the web.

Authorizations

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Configuration Management Capabilities defined in the Data Model

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❑ **Product View Support**

> ❑ Product Views enable businesses to maintain different product representations and extract specific product structure subsets relevant to varying user roles and requirements. SMARTEAM enables users to define, compare and manage different Product Views, e.g., As-Designed, As Manufactured, As-Built enabling them to reuse existing product knowledge, maintaining data integrity, and saving valuable project time.

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❑ **Single level BOM editing over the Web**

  ❑ Users are able to view and edit a single level product structure (Bill of Materials (BOM)) over the Web simplifying the BOM review process and apply various filters in a more intuitive manner.

❑ **Supports SMARTEAM – Program Management**

  ❑ Unites the management of project and product data in a single, integrated multi-platform environment.

  ❑ Enables project collaboration across the extended enterprise and product value chain on multiple concurrent projects.

  ❑ Integrates bi-directionally with Microsoft Project

  ❑ Promotes resource management

  ❑ Facilitates reuse of unified project and product information

  ❑ Supports project tracking and reporting, for enhanced decision-making

  ❑ Automation of project execution through a system of notifications and alerts

  ❑ Ability to quickly launch a new project based on an existing project or a project template

  ❑ Out-of-the-box data model and Project templates for project collaboration based on the industry's best practices

  ❑ Ensures secure project environment through Project-based authorization

  ❑ Availability of other integrations offered through SmarTeam services

Improved UI emphasizing usability

- ❑ Integrated quick search

- ❑ Back button, URL accessibility

- ❑ Breadcrumb support for user orientation

- ❑ SMARTEAM – Web Editor enables users to easily orient in the total information structure by displaying a path of web pages from the top level to the current page.

- ❑ Each level of the hierarchy is labeled and functions as a link to that level. For example: Home > Search > Favorite Searches > CATIA Products > Search Results

- ❑ Improved "Search" functionality

- ❑ Customized menu options

- ❑ Flexible super class displays

    - ❑ SMARTEAM – Web Editor enables users to easily display the related objects of a given Super Class according to pre-defined structures defined by the administrator.

- ❑ Multiple object operations

Script Support on client and server side

- ❑ Client-side scripting in the Profile Card (including buttons)

- ❑ Server-side hooks (as in SMARTEAM – Editor)

- ❑ User-defined tools

- ❑ Workflow "before send" events in flowchart

Supports SMARTEAM – Program Management

- ❑ Tightly connects project and product data

- ❑ Enables organizational-wide collaboration on various project data at all levels

- ❑ High-level views of multiple project and task statuses to enable and support decision-making

- ❑ Connection between tasks, projects and deliverables status using business rules

- ❑ Automation of project execution through a system of notifications and alerts

- ❑ Out-of-the-box data model and Project templates for project collaboration based on the industry's best practices

- ❑ Integration with Microsoft-Project (as a primary authoring and analyzing tool)

Configuration Management Capabilities

- ❑ **Supports the new pre-defined Product behavior –** database level behavior, product classes and product type hierarchy managed by customers

❑ R13 introduces a new entity definition called "Product". Product means a representation of specific manufactured assembly or configuration. Businesses are now able to have a list of products, in which each can be linked to the relevant parts that compose it. This new ability promotes product reuse e.g. for a bidding process, as businesses will be able to immediately evoke the set of relevant parts for a specific product for quick RFP and RFQ response.

❑ **Product Views**

❑ Users now have the ability to view different product representations. A Product View extracts specific subsets of a product structure, such as, "As-Estimated", "As-Design", "As manufactured", "As-Built". This allows for different link structures between items in the product in accordance with the user's requirements, and enables a quick product knowledge reuse for additional product development.

❑ **Unit Effectivity enhancement to the existing date effectivity**

❑ A Product structure can be filtered by using "unit effectivity", as well as by the already existing "date effectivity", to view different "product configurations".

❑ For each link and object in the product tree, a unique alphanumeric/numeric code can be defined, e.g., E500; 1-10; 200

❑ This code specifies the structure/group of products to which this link/object belongs.

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❑ **Single level BOM editing over the web**

    ❑ Users are able to view and edit a single-level product structure [Bill of Materials (BOM)] over the web – thus simplifying the BOM review process – and apply various filters in a more intuitive manner.

Improved UI Emphasizing Usability

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❑ Client-side scripting in the Profile Card (including buttons)

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❑ Workflow "before send" events in flowchart

Section 508 Accessibility Requirements

❑ Section 508 of the Rehabilitation Act Amendments of 1998 is the most extensive law with the most immediate effect. It requires all US federal agencies to make their information technology accessible to their employees and customers with disabilities.

❑ SMARTEAM - Web Editor now supports this section. For more information on Section 508, refer to:

> ▪ http://www-3.ibm.com/able/guidelines/software/accesssoftware.html
> ▪ http://www.section508.gov/

SMARTEAM – BOM

Product View Support

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Instance Model

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SMARTEAM – CATIA Integration

❑ **Supports Project-based Authorizations**

❑ Users are able to view, access and manipulate documents according to their user, group and role-based authorizations in a specific project – as defined by the project manager.

SMARTEAM – CATIA Integration Xtended

❑ A web-based, intuitive, thin client, Product Lifecycle collaboration solution for CATIA V5 and ENOVIA DMU Navigator users. Whether within the enterprise, dispersed in remote sites, or even external to the company as an authorized supplier, SMARTEAM – CATIA Integration Xtended enables local use within the Enterprise over the Local Access Network (LAN), or remote use outside the LAN and across the firewall.

SMARTEAM – AC Integration

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SMARTEAM – MD Integration

❑ **Supports Project-based Authorizations**

❑ Users are able to view, access and manipulate documents according to their user, group and role-based authorizations in a specific project – as defined by the project manager.

SMARTEAM – IN Integration

❑ **Supports Project-based Authorizations**

> ❑ Users are able to view, access and manipulate documents according to their user, group and role-based authorizations in a specific project – as defined by the project manager.

SMARTEAM – SE Integration

❑ **Supports Project-based Authorizations**

> ❑ Users are able to view, access and manipulate documents according to their user, group and role-based authorizations in a specific project – as defined by the project manager.

SMARTEAM – MI Integration

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SMARTEAM – P Integration

Supports Pro/Engineer Layout Files

A Pro/ENGINEER Layout object is a two-dimensional conceptual sketch, which is generally used to establish parameters and relations, and automate the assembly process. While they are used to maintain design intent in solid models, Layouts are not precision-scaled drawings, and are not associative with three-dimensional model geometry. SMARTEAM – P Integration supports the management of Layout files by allowing users to perform lifecycle operations on these objects and by detecting and establishing the relationships between Layout objects and other Pro/ENGINEER entities within SMARTEAM.

Knowledge Reuse for Quick Start of a New Project through "Design Copy"

SMARTEAM – P Integration provides a full Design Copy capability, enabling users to reuse existing models for quick and easy creation of new designs by fully copying components and all corresponding relationships. Users can then modify the new design as necessary.

The Design Copy feature includes:

- ❑ Intelligent, multi-selection copy of multiple shared components: SMARTEAM identifies multiple identical components and copies the same components only once.
- ❑ Preservation of all relationships associated with any copied component.
- ❑ Attribute change based on company rules.
- ❑ No duplication of standard parts.

Supports External References

SMARTEAM - P Integration maintains the parent-child relationships created between parts both in cases where an external reference is created in an assembly, as well as in skeleton models.