DASSAULT SYSTEMES

ENOVIA

EDITOR

ENOVIA Team BOM Editor

ENOVIA® Team BOM Editor provides part and Engineering Bill of Material (EBOM) management capabilities as a logical extension of the CATIA® design environment. For many companies, product engineers perform both design and engineering BOM management tasks. ENOVIA Team BOM Editor provides engineering BOM capabilities for the CATIA designer. EBOM synchronization and navigation is initiated directly from the CATIA user interface

Key Benefits

- Derive and synchronize an EBOM directly from a CATIA product structure.
- Augment / edit the EBOM using the web-based structure browser editor
- Improve team communication by providing the ability to route information for feedback and review
- Make improved product development decisions with analysis reports that quickly identify component usage, highlight differences between assemblies, and summarize design changes over time
- Decrease purchasing delays and errors by providing a quantity roll up of parts from a multi-level EBOM

Product Overview

Many companies streamline the design and engineering process by having product engineers perform product design and engineering tasks. In addition the design engineer needs capabilities to electronically communicate and collaborate on product development ideas and issues. ENOVIA Team BOM Editor creates a competitive advantage by addressing key product design and engineering business challenges such as:

- Improved communication and collaboration with product development teams.
- EBOM management capabilities, derived directly from a CATIA product structure, which provides a consistent BOM definition required to feed downstream business processes and systems.
- A design and engineering information platform that provide the right information to the right users at the right time.
- EBOM synchronization and navigation is initiated directly from the CATIA user interface. When the CATIA Designer navigates the Parts / EBOMs in Team BOM Editor, the access to the objects are controlled / restricted based on the P&O context.

Product Highlights

ENOVIA Team BOM Editor provides part and EBOM management capabilities as a logical extension of the CATIA design environment. For many companies, product engineers perform both design and engineering BOM management tasks. ENOVIA Team BOM Editor provides EBOM capabilities for the CATIA designer. EBOM synchronization and navigation is initiated directly from the CATIA user interface.

Key features and capabilities include:

Development Team Communication and Collaboration

ENOVIA Team BOM Editor is built upon the ENOVIA platform, which provides collaboration capabilities including data security, and formal and ad hoc process support.

When ENOVIA Team BOM Editor is deployed along with ENOVIA® VPM Team Central™ or ENOVIA® VPM Central™ using the available ENOVIA OOTB Setup, the applications can be used immediately in production. This eliminates the need for specific customizations and reduces the time and effort for enterprise deployments.

Part Management

ENOVIA Team BOM Editor provides part management capability in development lifecycles for managing work-in-progress designs. Parts that do not have a 3D definition can be defined as "local part" to EBOMs so they will not be synchronized to CATIA. To manage parts in a design centric approach, parts will have limited edit access with ENOVIA Team BOM Editor when they are associated with the CATIA products (marked as "VPM Controlled") to the ensure CATIA Product is the master. In addition, the access to parts is controlled based on the secured P&O context configured in the ENOVIA VPM Team Central Administration console. Users logged into the system with specific P&O context can view and manage the parts that are created in that specific project in both private and public workspaces. Users will also be able to see the public parts from other projects.

Parts in ENOVIA Team BOM Editor can be identified by a unique auto-numbering scheme or by user-entered names. Part revisions can be created for managing the evolution of design and changes for an item if the current part number corresponds to a released part (e.g. -- tooling or production). Each new part revision must be form, fit, and function ("FFF") compatible with all of its predecessors. "FFF" is a description of an item's identifying characteristics as defined below:

- Form is the shape, size, dimensions, mass and/or other visual parameters which uniquely characterize an item. This defines the "look" of the part or item. Sometimes weight, balance and center of mass are considerations in 'form.'
- Fit is the ability of an item to physically interface or interconnect with or become an integral part of another item or assembly. This relates to the associativity of the part in relation to the assembly, or to other parts, and includes tolerances.
- Function refers to the action[s] that an item is designed to perform. This is the reason for the item's existence, which also includes secondary applications.

If the specifications or criteria, for form, fit and function of a particular item are met, all other attributes, from an engineering design process perspective are moot or extraneous. Interchangeability on an item in a system is mainly determined by physical, functional, and performance characteristics or specifications that uniquely identify a component or device.

EBOM Management

ENOVIA Team BOM Editor provides development teams with a single, persistent definition of product engineering bills of material (EBOMs). This reduces data errors and time delays. By defining the EBOM with parts of specific types, users can capture specific business behavior and attributes. Users can structure EBOMS for even the most complex products with thousands of parts organized across many levels of hierarchy. An integrated structure browser allows users to navigate and edit multiple levels easily. Users can create and add multiple new parts to an EBOM in one operation or add multiple, existing parts by search or explicitly entering the part name.

EBOM Editing

Comprehensive EBOM editing capabilities include the ability to copy parts to and from existing assemblies, and replace, add, remove, and re-sequence parts in the EBOM. Differences between EBOMs can be listed in a detailed text format or an intuitive highlighted side-by-side format. Multi-level where used capabilities enable users to quickly determine affected items, raise change requests and perform complex mass change operations such as replace, add, remove or edit.

EBOM Data Packages

Users of ENOVIA Team BOM Editor can generate and download a "data package" of EBOM related data. The package of data files can be in either a Microsoft Windows ® or UNIX ® ZIP file format. Users can specify BOM levels to include in the package, select specific documents for the package, download the package and store it in a workspace folder.

Synchronization with Design Work-in-Progress and Visualization

ENOVIA Team BOM Editor works with ENOVIA VPM Team Central seamlessly with bi-directional synchronization capability. This enables CATIA V6 data to be available in the context of the EBOM and it provides consolidated document and EBOM views outside the CATIA session in the web environment.

Parts and assemblies can be visualized in ENOVIA Team BOM Editor with the 3DVIA® Viewer, which is available as part of the ENOVIA® Live Collaboration license. The user simply clicks on the 3DVIA Viewer icon from the EBOM page and 3D image of the part will be displayed. Users can review the 3D image with functions such as rotate, zoom and panning.

Product Development Change Processes

ENOVIA Team BOM Editor is delivered with a development engineering change process (DECO) which is used to manage the maturity of parts during the concept phase of product development. ENOVIA Team BOM Editor's change process can be configured with approval and notification templates. The development engineering process promotes the affected parts to a development phase "complete" state indicating the part is ready for the next phase of product development.

BOM Reporting

ENOVIA Team BOM Editor has many out-of-the-box reporting capabilities tailored to meet the needs of BOM compare functional areas. These reports provide valuable product information for cross functional groups to make informed and timely decisions thus contributing to overall product development and planning efficiency and quality. Reports can be formatted in a printer friendly format or exported to Microsoft Excel®.

Multi-Level EBOM

Any number of EBOM levels can be expanded and included in the multi-level EBOM report.

EBOM Comparison

This report improves part reuse and product quality by providing the ability to compare bill of material differences.

Part Where Used

This report provides a part's single or multi-level parent usage, which is very useful in analyzing the scope and impact of engineering changes.

Consolidated EBOM

This report improves purchasing response time and reduces errors by providing a quantity roll up of parts from multiple levels of an EBOM.

Engineering Effectivity

The engineering effectivity report provides the ability to view an EBOM based on an historical date. This report enables the user to see the "effective" EBOM at a select date in the past.

View EBOM in Expanded Format

The EBOM view can be "expanded" by displaying each reference designator value as a single EBOM record. This is particularly useful for consistently displaying electronic or location-specific items in the EBOM. For example, an EBOM record with a reference designator value of R1-R3 and a quantity value of 3 would be expanded to display three separate EBOM records with reference designator values R1, R2, R3 and with a quantity of 1 for each. The inverse view can also be calculated where an expanded view can be consolidated.

Technical Document Management

Any document type, including Microsoft Office, can be managed independently or associated to parts. This improves inter-department communication and company knowledge capture such as best practices and industry standards. Documents can be connected to parts, specifications or changes objects as reference documents or supporting documents as needed.

The Role of ENOVIA V6 and PLM 2.0

ENOVIA Team BOM Editor supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values: global collaboration innovation, single PLM platform for intellectual property (IP) management, online creation and collaboration, ready to use PLM business processes, and lower cost of ownership.

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