ENOVIA X-BOM Unit Tracking

Product Objective

ENOVIA® X-BOM Unit Tracking captures the precise as-built and as-maintained bill-of-material (BOM) structure for all its product deliveries from concept to manufacturing and from delivery to retirement. Tracking and managing exact configurations of products shipped enables a business to quickly review product information to resolve issues with production, warranties, and product recalls. While all companies would prefer to catch product deficiencies early in the design process, having visibility to all end product bills-of-material either in manufacturing or already in-service is essential to ensure quality throughout the product lifecycle.

Product Overview

It is expected and often mandated in today's demanding business environment that manufacturers provide proof that products have been built to a specific set of engineering and contract specifications. ENOVIA X-BOM Unit Tracking allows companies to manage all functional aspects related to production builds. Product deliveries are defined as physical end-items comprised of a multi-level structure of traceable sub-components (e.g., Left Wing # 23 to Aircraft # 5). The multi-level structure is modified as maintenance occurs throughout the life of the supported product.

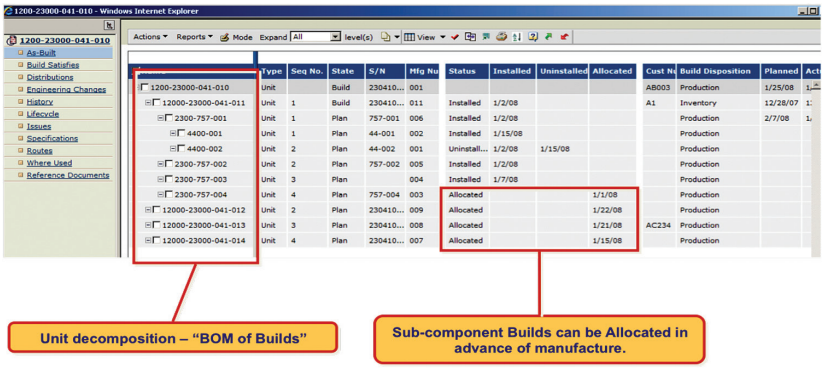
It is critical to track the production builds before they are manufactured in order to validate the design and facilitate the early detection of issues. During the product development process, lower level sub-systems can be assigned to specific end-item builds allowing design engineering to perform analysis on all design changes that may impact production lines and customer deliverables.

Maintaining a record of a shipped product's as-built bill-of-material allows manufacturers to deal with warranty and service issues. As units are returned for service, immediate access to historical records that describe installed and uninstalled serial numbers during the lifetime of the physical product contributes feedback to the design process and enables a closed loop between service and design.

Product Highlights

Unit Part Marking

Engineers can identify and label parts that are tracked by serial number or lot number. Serialized parts may be related to multiple manufactured serialized units. Each serialized unit is installed and tracked on a physical end-item.



Key Customer Benefits

- Capture and plan physical end-item units early in the product lifecycle process
- Maintain a record of shipped products
- Track customer's deliveries relative to committed units in the plan
- Maintain a historical record of both installed and uninstalled serial sub-components in a physical end-unit as-built structure
- Reduce the communication gap between engineering and manufacturing relative to production builds and their allocated designs

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Manage the As-Built BOM
The as-built BOM contains physical end-item units defined as a multi-level structure made up of traceable sub-components. Each unit can be tracked by serial number and can be modified as repairs and maintenance occurs throughout the life of the supported product.

During manufacturing or service maintenance of a physical end-item, manufacturing planners and product planners can install and uninstall serialized and non-serialized sub-systems into the as-built structure, reserve serialized and non-serialized sub-systems to a specific system as-built structure and replace any installed unit with another unit.

Lot Support
Lots represent non-serialized components that are tracked in the as-built bill-of-material structure (e.g., fasteners, bolts, etc). Users can use lots to group non-serialized component parts under a unit marking. Lots can be installed, allocated, and replaced on an end-item unit in the as-built bill-of-material.

Unit Tracking and Allocation
Maintaining and keeping a record of customer ordered end-item units early in the product development process allows planners to communicate the intended production builds to downstream engineering processes. As units get allocated to specific product revisions, a unique unit number is assigned and referenced throughout its development process. As a unit enters the manufacturing process, a serial number is assigned to shippable end-items. The product line is then responsible for identifying all the serialized or non-serialized components, installed, or uninstalled during the manufacturing of the end-item.

The role of ENOVIA V6 and PLM 2.0
ENOVIA X-BOM Unit Tracking 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.

About ENOVIA
ENOVIA is the recognized leader in delivering collaborative PLM solutions. We enable companies from a broad range of industries to dramatically accelerate innovation, time-to-market and revenue generation by collaboratively developing, building and managing products. Our solutions facilitate the sharing of concepts, content and context across product lifecycles and throughout value chains of employees, customers, suppliers and partners.

ENOVIA collaborative PLM solutions help global enterprises bring together people, processes, content and systems to achieve a compelling competitive advantage. Our interoperable solutions unify and streamline processes across the product lifecycle, enabling companies to easily and cost-effectively work on projects within and outside of their enterprises. Our adaptable, scalable technology is built to accommodate the ever-changing marketplace.

About Dassault Systèmes
As world leader in 3D and Product Lifecycle Management (PLM) solutions, the Dassault Systèmes group brings value to more than 90,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire life cycle of products from conception to maintenance. Our offering includes integrated PLM solutions for product development (CATIA®, DELMIA®, ENOVIA®, SMARTEAM®), mainstream product 3D design tools (SolidWorks®), 3D components (Spatial/ACIS®) and SIMULIA®, DS' open scientific platform for realistic simulation. Dassault Systèmes is listed on the Euronext Paris (#13065, DSY.PA) stock exchange.
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For additional information, contact us at:
Dassault Systèmes Enovia Corp. 900 Chelmsford Street, Lowell, Massachusetts 01851
978 442 2500 • ENOVIA.com • 3DS.com

www.3ds.com

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