

ENOVIA V5 VPM

ENOVIA - Engineering HUB Product (EPI)

ENOVIA V5R21





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Providing the infrastructure by which Dassault Systèmes' engineering focused product authoring and product structure authoring applications interoperate.

Product overview

As one of the three components in the Dassault Systèmes' PPR solution, the ENOVIA - Engineering HUB Product manages the "engineering-owned" intellectual property gathered during the product life cycle. Using the same product, process and resource data models as found in the DELMIA - Manufacturing Hub and the ENOVIA - Enterprise Hub, the ENOVIA - Engineering HUB Product provides a consistent information infrastructure and supports the complex web of inter-relationships that relate individual data components. The Engineering HUB Product's unique configuration modeler interprets effectivity and option conditions on relationships to allow an unprecedented degree of variability while minimizing data redundancy.

Included in the Engineering HUB Product are interoperability features with CATIA V4/V5, ENOVIAPM, SMARTEAM, and DELMIA. CATIA V5 is built on the same data model as ENOVIA VPM allowing for the engineering knowledge implemented by the product designers such as assembly relations and constraints to be exposed in ENOVIA and utilized for impact analysis and automatic change propagation. The ability to synchronize data coming from ENOVIAPM benefits current ENOVIAPM customers by providing them with the flexibility to migrate over to ENOVIA VPM in a transitional manner. The SMARTEAM-BOM briefcase enables seamless exchanges of product structure and content with the supply-chain. Connection to

DELMIA IPD enables complete "cradle to grave" IP lifecycle management.

What's New ? in V5R21

In this release V5R21 ENOVIA Engineering Hub Product provides the following enhancements:

- ❑ **Partial Save Messages** gives users the ability to identify successfully objects in the event of a partial save operation when saving data in ENOVIA. Along with the messages for the unsaved objects, affirmative messages be displayed for the part version, document revision, and part instance for each saved object.

- ❑ **Save in Exploded Mode** enhances the command Save in ENOVIA VPM enabling the user to select a subset of data loaded in CATIA that will be saved as objects in the ENOVIA VPM database. This gives users the ability to:

- ❑ Manage links between new object(s) and other loaded data
- ❑ Rename new objects on the fly
- ❑ Instantiate newly created data in an existing Exploded Mode Product to allow its use independently

- ❑ **API automates the EV5 Save process,**

enabling customers to automate the process to save a CATIA session.

Customized Attributes in Refresh Panel allows users to view certain document revision (DR) attributes and their values in the refresh document window. The attributes information retrieved from the mask (in the refresh document window) will be the same as the Document Search result information ensuring that the attributes displayed in the refresh window will be in synchronization with the search result window attributes.

Performance Get Exposed reduces server time when assembly structures are in CATIA in design mode from ENOVIA.

Performance Optimize Open with Vault-Cache improves performance by reducing the interactions between vault-cache and vault-server when documents are loaded from the ENOVIA server.

Safe Save provides protection by forbidding some operations (such as instantiation of a PVR inside of any kind CATProducts which is not recognized PVR). Operations that will be CATIA V5 in an ENOVIA V5 VPM context are:

- Creation of instances of a PVR CATProduct inside an exposed structure
- Creation of instances of a PVR CATProduct inside a work package not declared as a PVR
- Creation of instance of ENOVIA V5 part not considered as a work package a PVR

Performance Enhancement reducing the time for saving large volumes of

CATIA data in ENOVIA, resulting in improved user productivity.

Refresh command: rules for BB under exploded objects allows modified documents to be refreshed rules that determine whether a is refreshable. This allows a refresh operation to be performed on a part document that is pointed to by a exploded product document.

Timestamp from PV to Ref during Load/Save process ensures that the time stamps for unsynchronized reference objects and document content will be synchronized so that modifications of data attributes will be available on subsequent openings after a save process.

Cancel Save Operation provides a new API to enable a new user-exit that is triggered after user clicks on Cancel in Save in ENOVIA command panel. allows customers to tailor the Save in ENOVIA command with business that fits their own needs.

U-CATIA objects after Versioning although transparent to an end user, this enhancement ensures that after a versioning during a save operation, objects in CATIA session are consistent with the product model data in ENOVIA.

Ung when loading unsynchronized children enables the user to identify if the imported instances are in unsynchronized state while loading product structure from VPMNav to V5. A message panel notifies the user the early stages of the Open process certain instances to be loaded in the

session are out-of-synch. The user will then have the option to continue loading the unsynchronized item or stop the import process.

Product Highlights

- ❑ Provides object modelers that support interoperability with other Dassault Systemes brands: CATIA, ENOVIA VPLM, ENOVIA SMARTEAM, and DELMIA
- ❑ Relational design in ENOVIA made possible through the availability of CATIA V5 technological links in ENOVIA.
- ❑ Seamless product structure and content exchange between OEMs and supply-chain through SMARTEAM s iXF-based SMARTEAM-BOM briefcasing
- ❑ Capability to send product data to DELMIA-IPD for early manufacturing planning

Product Key Customer Benefits

❑ **Right-first-time design**
Through persistent use of design-in-that includes product, process and data. Tight linkage to CATIA gives the designer the ability to use CATIA functions such as assembly design, DMU simulation, knowledge capture and use without concerning himself with the interface with data management functions

❑ **Accurate project and change**
Through precise impact analysis navigation so that project planners are certain that all aspects of a potential change have been evaluated.

❑ **Distri-**
more product development responsibility to supply-chains

Enabled by SMARTEAM s iXF-based SMARTEAM-BOM briefcasing

❑ **Early manufacturing planning**

With the capability to send product data to DELMIA-IPD

❑ **Open architecture through CAA-**
Multiple user exits and APIs are available to customize the Engineering HUB's modelers, including the standard data structures, to enterprise requirements.

❑ **nced collaboration with the extended enterprise**

Use the SMARTEAM-BOM briefcase to exchange product data, regardless of the product data management systems used by the suppliers. SMARTEAM-BOM briefcase packages a BoM (Bill of Materials) structure, along with all attached documents, into a lightweight executable application (a briefcase) for easy viewing/editing and reconciliation with ENOVIA VPM. As products become increasingly complex and with half of all components typically outsourced, Bill of Materials (BOM) collaboration across the enterprise and its supply-chains is vital to business success.

❑ **ange authorization and change tracking**

Control each SMARTEAM-BOM briefcase export and import using Actions in order that exchanges are properly authorized and changes to the product structure, processed through the reconciliation, are tracked.

ABOUT ENOVIA V5R21

ENOVIA provides companies with integrated solutions to simulate the entire product lifecycle.

www.3ds.com/products/enovia

