

ENOVIA VPLM V5R20 – FACT SHEET

High-Performance Collaborative Engineering



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INTRODUCTION

ENOVIA® VPLM helps companies take more innovative products to market faster by providing scalable Virtual Product Lifecycle Management (VPLM) of complex product, process, and resource (PPR) information and services. By linking key lifecycle processes and knowledge, ENOVIA VPLM improves decision making and removes obstacles to innovation. Stakeholders in medium to large enterprises can leverage real-time PPR information, Web-based 3D navigation, advanced simulation, and collaboration tools to share insights, optimize designs, and reduce development time and costs - anywhere, anytime.

Together, CATIA®, DELMIA®, and ENOVIA VPLM provide a virtual, 3D-collaborative environment where stakeholders from marketing to design, to production planning and support can explore and validate decisions within the context of the rich relationships between PPR knowledge throughout the product development lifecycle.

What distinguishes ENOVIA VPLM from integration-driven PLM systems is our focus on ensuring that product, production, and maintenance data are defined, captured, and managed concurrently to achieve digital Design for Manufacturability and Maintainability. By exploring the rich relationships between product, process, and resource (PPR) objects defined in CATIA and DELMIA, developers and planners can optimize designs and production processes early on in development when the opportunity to innovate is high and the cost of change is low. Validating the product and its production processes before the design is released and before any capital investment is made eliminates costly physical prototypes and significantly reduces development costs and time-to-value. With this new paradigm, “First Built First Sold” products are no longer a dream but a reality.

ENOVIA VPLM places lifecycle engineering, manufacturing, and maintenance information securely at the fingertips of global development stakeholders— whether it is trade studies, sourcing data, digital mock-ups, design reviews, or supply chain production status. This knowledge- rich PLM environment provides the best opportunity for our customers to generate the time and cost savings they need to compete and the continuous innovation they need to win.

Finally, to facilitate flexible and cost-effective integration of our solution with enterprise systems currently in place, ENOVIA VPLM solutions are built on standards-based middleware to support changing market requirements and business growth.

ENOVIA VPLM Delivers:

- Virtual product development environment and lifecycle management of 3D PPR data
- The only integrated PLM platform (based on a common architecture) for digital design, manufacturing, and maintenance
- Leverages CATIA and DELMIA relational design capabilities for concurrent development of design and the virtual production
- Real-time digital mockup validation - from visualization through virtual reality – to drive product optimization
- Connectivity and openness across engineering, manufacturing, and the value-chain
- Sourcing and manufacturing fully immersed in PLM from design through end-of-life

V5R20 AT A GLANCE

- Improved configuration and change management make it easier to determine the potential impact of design changes
- Better replication and reconciliation automation, flexibility and security capabilities simplify collaboration with the extended enterprise and supply chain
- Concurrent engineering process are streamlined thanks to more flexible lock/unlock mechanism
- Improved applications usability and ergonomics enable users to maximize their productivity when using VPLM solutions such as VPM Navigator
- Improved performances provide overall faster response time, better capacity management allows for more scalability

V5R20 OVERVIEW

- Improved configuration and change management make it easier to determine the potential impact of design changes, and to make better, more knowledgeable decisions. It includes an easier search of instances impacted by modifications (add/cut/replace/move/extend); improved display of affected objects with a classification by PRC / Product; reverse filtering enabling to select all the instances that don't match filtering configuration criteria; Ability to create 'child action' in VPM Navigator enabling a more granular change management process. Improvements such as the ability to copy-paste effectivities directly in the modification and configuration editors, as well as to lock affected objects in the action editor, reduces the number of clicks required by users, therefore improving their productivity.
- Better replication and reconciliation automation, flexibility and security capabilities simplify collaboration with the extended enterprise and supply chain. On the database replication side, users can securely control the transfer of ownership of data between sites (intra or extra enterprise) thanks to a wider integration with people and organization settings. Synchronization utilities between databases enable customers to automate error analysis efficiently with the ability to generate structured error logs leveraging the XML format. On the reconciliation side, users can precisely select the design components to be merged from suppliers and OEMs, adding critical flexibility to the process. Assembly structures can be exchanged using specific rules that apply on some instance operations, such as creation and modification, but not others, such as deletion, which is especially relevant when working with different product configurations. Batch utility supports a mode that allows password encryption for optimized exchange security.
- Concurrent engineering processes are streamlined through a more flexible lock/unlock mechanism. It includes the ability for users to add, move, replace and delete design component instances while making 'parent' available to other users. Inversely, it also enables users to move a design component instance even if the 'child' instances are locked by other users.
- Performances are improved when doing operations such as where used and search, open and save of CATIA design data providing an overall faster response time (up to 25% faster when performing a search). Capacity is also improved as administrators can turn off the file introspection utility according to customized rules and specific attributes. This reduces the generation of unnecessary data into the database.

- Overall application usability and ergonomics have been further improved enabling users to maximize their productivity when using VPLM solutions. Examples include the ability for VPM Navigator users to apply color code on the product structure tree based on customer-established attributes for quick identification; further leverage and store customized search queries for more search control; better integration and ergonomics of product views, etc. V5R20 also includes improved filter management enabling explicit selection of item instances or sub-assemblies, combination of and/or operations and control of multi-domain attributes resulting in faster and more relevant results. In addition, the ability to capture and retrieve the most recent CATIA design sessions easily, as well as the ability to insert child instances, significantly improves users' productivity and efficiency.