

DIGITAL

ENOVIA VPM Digital Validation



ENOVIA® VPM Digital Validation enables engineering managers and project leaders to oversee and participate in collaborative digital mockup reviews, packaging, and pre-assembly analyses.

Key Benefits

- Shorten the review process by sharing identified problems with team members for faster resolution.
- Identify and resolve design issues earlier in the product development cycle.
- Accurately tracking designs errors from identification to resolution.
- Turn brainstorming ideas into reality by making contextual changes in 3D real-time.
- Communicate solutions clearly with annotations that explain concerns.
- Answer questions in real-time using technical analysis tools that reveal important details.
- Optimize clarity and understanding with carefully placed geometry.
- Ensure intellectual property is secure on screen, online or in print.

Product Overview

For many companies, reviewing and validating designs can be a challenging process with many steps to consider, from locating parts to building an assembly for participants to review and record any issues. Parts can be out-of-date or be incorrect for an assembly, review teams can be missing critical roles or include individuals who are not collaborative, and reviews can be conducted haphazardly with no consensus on issues or follow-up actions.

ENOVIA VPM Digital Validation captures the complete picture of how development decisions are made, storing all design review information together in one location for further reference. With ENOVIA VPM Digital Validation, users access tools that optimize visualization, navigation, analysis, and communication. Users can analyze product consistency, display review presentations, execute design validation meetings, and make better informed decisions. ENOVIA VPM Digital Validation offers enhanced design change traceability and visibility by enabling the creation and tracking of Engineering Change Actions (ECAs) directly linked to identified design issues.

Design validation meetings have their own challenges — out of date parts, incorrect assemblies, minimal collaboration, no review preparation, manual note-taking, and lost or misunderstood issues that fail to be resolved. As such, there are five important elements of any design validation meeting:

- Locate the parts
- Build the assembly
- Gather the participants
- Review the prepared context
- Record open issues

To make the best decisions possible, meeting attendees need access to accurate, real-time, in-context information. In addition, meeting presenters need to “present” their information in a quick and easy to understand format.

A good design validation solution should:

- Use digital simulation tools to validate the fit, form, and function of virtual assemblies
- Highlight key features during the formal reviews
- Record vital information shared during the review for follow-up
- Provide traceability to ensure completion of ECAs.

Product Highlights

Manage a Formal Collaborative Decision Management Design Review Process

ENOVIA VPM Digital Validation enables design managers and project leaders to set up, execute, and manage a formal collaborative Decision Management Design Review (DMDR) process. The process – which provides a structured approach for review and validation across different product-development disciplines – allows development teams to build a design review environment digitally in real time and analyze the digital mock-up to gain early insight into key factors that determine quality, performance, and cost.

The DMDR process offers a complete environment that includes the ability to:

- Access design analysis results (interferences, Finite Element Analysis, etc.)
- Identify design inconsistencies
- Prepare review presentations
- Execute review meetings
- Make decisions on design changes, dispatch actions, and manage issues

The DMDR process requires defined parameters such as review requirements and a design context. Users can perform reviews, adding information and feedback related to issues, replying to previous reviews or other participants’ comments —without ever exiting ENOVIA VPM Digital Validation. These capabilities enable better decision-making by stakeholders, leading to faster time to market, quality improvements, and lower costs.

Create User-Defined Validation Information for Knowledgeable Decision Making

With ENOVIA VPM Digital Validation users create ‘validation’ objects that remain fully associative throughout the product development lifecycle. Validations contain various information enabling knowledgeable decision making including design context, product requirements, etc. Validations can be quickly accessed at any time to refine reviews and/or understand decisions made previously. Review tools enable users to access this information and create slides, and to add text and annotations for accurate design analysis and information sharing.

Identify Changes and Track Traceability from Discovery to Resolution

When design problems are identified, ENOVIA VPM Digital Validation makes it easy to create an ECA and establish a link from a design issue to an action. This streamlines the review process by shortening the time between the discovery and resolution of a design issue. This also allows an accurate traceability of changes to be made, from identification to completion.

Manage Material Specifications

ENOVIA VPM Digital Validation enables designers to specify the core material of an object as well as specifying any covering material (e.g. – any thin layer of matter assigned to the external boundary of the object such as paint, plastic, rubber, or some other coating). The material(s) of an object have specific attributes that are considered when the object is subjected to various design applications (such as real-time rendering, generating a drawing, analysis, or simulation). This gives designers an improved ability to manage and store the material specifications of an object, which are managed as a key element during the product development lifecycle.

Develop 3D Animation of Simulations

ENOVIA VPM Digital Validation provides users with the ability to visually enhance different kinds of simulations (ranging from simple trajectory moves to complex kinematic moves). Users can apply the following types of behaviors to simulations:

- Color change
- Visibility change (show / hide)
- Viewpoint animation
- Text output

These visual enhancements can be compiled into animations that can be replayed in ENOVIA® 3DLive™ applications, exported into 3DXML, or generated into videos.

Benefit From a Comprehensive Infrastructure and Intuitive User Experience

ENOVIA VPM Digital Validation takes full advantage of the Dassault Systèmes V6 infrastructure and user experience. The product offers user-friendly navigation, quick access to product information, monitoring of the design review environment, and tracking of changes and communications.

With ENOVIA VPM Digital Validation, design teams can collaborate on digital mockup reviews, and packaging and pre-assembly analyses. These capabilities help minimize product development time, enhance productivity, and secure intellectual property.

Collaborate in ENOVIA Live Validation

ENOVIA VPM Digital Validation users can switch to the ENOVIA® Live Validation user interface to attend or organize 3D Instant Collaborative Meeting. Users can review product structure, interference results, and/or the systems structure (functional and logical data). This capability is provided to ENOVIA VPM Digital Validation users without a need for an ENOVIA Live Validation license.

ENOVIA OOTB Setup compliancy

When ENOVIA VPM Digital Validation 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.

The Role of ENOVIA V6 and PLM 2.0

ENOVIA VPM Digital Validation supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values, which are:

- Global collaborative innovation
- Single PLM platform for intellectual property (IP) management
- Online creation and collaboration
- Ready to use PLM business processes, and
- Lower cost of ownership.



Delivering Best-in-Class Products



Virtual Product



Information Intelligence



3D Design



Virtual Planet



Realistic Simulation



Dashboard Intelligence



Digital Manufacturing



Social Innovation



Collaborative Innovation



3D Communication

Dassault Systèmes, the **3DEXPERIENCE** Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 150,000 customers of all sizes, in all industries, in more than 80 countries. For more information, visit www.3ds.com.

Europe/Middle East/Africa

Dassault Systèmes
10, rue Marcel Dassault
CS 40501
78946 Vélizy-Villacoublay Cedex
France

Asia-Pacific

Dassault Systèmes
Pier City Shibaura Bldg 10F
3-18-1 Kaigan, Minato-Ku
Tokyo 108-002
Japan

Americas

Dassault Systèmes
175 Wyman Street
Waltham, Massachusetts
02451-1223
USA

Visit us at
3DS.COM/ENOVIA

