

# ENOVIA V6 PRODUCT PORTFOLIO



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# Introduction

As the pace of change increases, companies are depending more on their intellectual capital to keep ahead of the competition. From creators to collaborators to consumers, everyone plays a critical role in bringing the right products to market at the right time.

The 3DEXPERIENCE Platform transforms the way companies “will innovate with people who buy and use their products” by connecting designers, engineers, marketing managers and consumers, in a new ‘social enterprise.’

Enabling 3DEXPERIENCE requires a platform capable of federating all product-related knowledge, and managing easy and secure access to it from anywhere. ENOVIA® V6 is Dassault Systèmes (3DS) next generation platform for enabling 3DEXPERIENCE and harnessing the collective intelligence among communities who conceive, create and consume. 3DEXPERIENCE brings life to knowledge — from idea to product experience —merging the real and virtual in a complete immersive experience.

The ENOVIA V6 portfolio includes products organized by function, serving many user roles in the Enterprise:

- **Governance** allows companies to launch enterprise-wide new product introductions on-time and on-budget.
- **Global Sourcing** allows companies to leverage supply chain capabilities throughout the product lifecycle and make their suppliers an integral part of product development.
- **IP Lifecycle Management** eliminates costly product development errors by enabling improved cross-functional product design, manufacturing planning and performance simulation.
- **Unified Live Collaboration** allows companies to deploy product lifecycle processes across the extended enterprise by providing a single view of IP across all business process domains, powerful collaborative process management capabilities, and an SOA that integrates with other enterprise systems.

Each function is further divided into classifications that include products targeted at enhancing a customer’s competitiveness. These products may be deployed together as part of a single ENOVIA system or separately.

## Governance

- Program Management schedules and tracks all aspects of the product development process in real time as the work is completed (from creator to collaborator to consumer), enabling visibility of milestone progress, resource utilization, project deliverables, and potential risks and issues across the enterprise.
- Requirements Management captures customer needs and drives downstream development by planning new products with the greatest market impact.
- Portfolio Configuration Management determines the optimal mix of product capabilities to meet market demands and minimize engineering costs.
- Compliancy ensures that product development activities comply with government and industry regulations.
- Decision Support Business Intelligence harnesses the organization's collective intelligence in real-time with an immersive 3D environment and dashboards that reveal issues in the product development process.

## Global Sourcing

- Supply Chain Network capabilities allow companies to securely involve supply chain employees in the entire product lifecycle.
- Collaborative Sourcing implements a "design for supply" strategy with repeatable and standardized direct material sourcing processes that provide the latest design information to the supply chain and valuable supplier quotation input to engineering.
- Supplier Performance Monitoring enhances the supplier partnership by designing, implementing and tracking part qualification plans, supplier development plans and scorecards.

## IP Lifecycle Management

- IP Classification & Re-Use decreases costs and promotes knowledge transfer by classifying IP for reuse.
- IP Asset Release synchronizes specifications and bills of material (BOMs) from concept to planning to production, reducing errors and costs while enhancing quality and time to market.
- IP Work-In-Progress manages the iterative vaulting of IP from engineering tools so the latest information is available to design teams and cross-functional collaborators throughout the world and supply chain.

## Unified Live Collaboration

- Data Warehouse and Process Management aggregates IP across all business process domains into a single meta-model so users across the extended enterprise can easily and quickly find product IP based on key words and file content regardless of how it was originally created.
- IP Asset Federation leverages product information from other enterprise systems by federating their IP into the context of product development business processes.
- I-PLM Collaboration Studio provides the administrative tools to manage and deploy the ENOVIA system with flexible tools that lower total cost of ownership while fulfilling unique business needs.

# Governance

## Program Management

**ENOVIA® Program Central™** enables program and project managers to create a competitive advantage by delivering products from concept to market faster. Organizations can concentrate critical resources on the most profitable products while standardizing on best in class business processes across the extended enterprise.

### *Key Customer Benefits:*

- Expose resource bottlenecks in real-time with enhanced management visibility
- Increase resource utilization and reduce conflicts between project managers and functional group managers

**ENOVIA® Program Experience** gives project members visibility to their project assignments and allows them to raise risks and issues to communicate up-to-date status. Project team members can collaborate with other cross-functional team members on project deliverables.

### *Key Customer Benefits:*

- Collaborate on task deliverables with real time reporting on actual status for assigned project tasks along with easily tracking critical tasks
- Mitigate and report status on assigned project risks
- Capture and execute ad-hoc project risks

**ENOVIA® Program Change Control** provides program driven change management to enable the orchestration and breakdown of complex system-wide changes assigned to multiple engineering groups including changes to sub systems provided by partners/suppliers.

### *Key Customer Benefits:*

- Consolidate sources of change information to collect, analyze, plan, and implement product issues, requests and change processes across the enterprise
- Assess the impact of changes to the overall product development schedule with real-time product change dashboards that eliminate manual collection, assessment, and reporting
- Reduce the risk of regulatory or customer non-conformance penalties by ensuring that company standard change processes are followed consistently

**ENOVIA® Aerospace and Defense Accelerator™** for Program Management provides real-time visibility into a project's status in terms of schedule, resources, costs and benefits. Users can create and access ENOVIA data from the most popular Microsoft applications, including Word, Excel®, PowerPoint®, Outlook®, Project, Windows Explorer, and Windows Desktop Search.

### *Key Customer Benefits*

- Improve proposal performance in terms of needed resources, response schedules and proposal win/loss ratio
- Secure program award fees and profits with reliable contract delivery performance
- Increase customer satisfaction as the result of responsive and reliable issue and correspondence management with the customer

**ENOVIA® Aerospace and Defense Accelerator™ for Program Experience** improves project results by enabling project members to effectively communicate real-time status of assigned project activities and collaborate with other project members located throughout the extended enterprise.

**Key Customer Benefits**

- Find all critical program information and submit and manage all deliverables in one central place, reducing non-value-added time
- Substantially reduce the effort of status reporting
- Always obtain the latest iteration of others' work products

**ENOVIA® Life Sciences Accelerator™ for Product Introduction™** enables program and project managers to create a competitive advantage by delivering products from concept to market faster. Organizations can concentrate critical resources on the most profitable products while standardizing on best-in-class business processes across the extended enterprise.

**Key Customer Benefits:**

- Provide real-time access to project pipelines for rapid analysis and decision making
- Embeds compliant best practices and Critical-To-Quality (CTQ) drivers into standard, repeatable project templates
- Provides highly visual views on the deliverables, phases to enable on-time completion of all design control activities

**Requirements Management**

**ENOVIA® Requirements Central™** enables organizations to improve their overall global requirement management process by capturing the "voice of the customer" and translating it into user requirements that define new products. ENOVIA Requirements Central provides a central repository of customer needs and the product requirements that satisfy them.

**Key Customer Benefits:**

- Meet standards and regulations by controlling the requirement management process
- Improve product quality and customer satisfaction because new products are designed and developed that accurately reflect the voice of the customer
- Reduce development costs and rework by bridging the gap between product requirements, design and product launch processes and disciplines

**Portfolio Configuration Management**

**ENOVIA® Variant Configuration Central™** tackles product customization and variety definition early in the "idea" or concept phase of the product development process.

**Key Customer Benefits:**

- Rapidly introduce a family of variant products to market using a logical product structure that allows the reduction in product diversity while still fulfilling market demands
- Maximize the number of valid configurations available to the market
- Increase customer acceptance by eliminating invalid product configurations early in the sales process

**ENOVIA® Variant Configuration Experience** enables product engineering to leverage modular platforms to define new configured products that meet the needs of sales, customers, or to perform a 'what-if analysis' on engineering designs.

**Key Customer Benefits:**

- Reduce unnecessary product diversity and avoid invalid product configurations
- Streamline the product definition and development process
- Maximize part re-use
- Minimize part proliferation

**ENOVIA® Copy and Artwork Central™** provides a holistic copy and artwork management solution, allowing companies to manage their artwork assets as well as the artwork process while taking into account the complexities of multiple products, product variants and languages in a single repository.

**Key Customer Benefits:**

- Manage artwork content as structured data, maintaining the connection between master copy and the local translations
- Manage content in the context of the product hierarchy, providing consistency in the content throughout the brand, between variants and across the product portfolio
- Collaboratively edit, translate and approve artwork content on a "just in time" basis

**ENOVIA® Copy and Artwork Experience** provides simple to use interfaces for managing the final artwork development process and copy authoring based on the structured content defined via capabilities in ENOVIA® Copy and Artwork Central™.

**Key Customer Benefits:**

- Collaboratively edit and approve artwork content on a "just in time" basis
- Comply with United States FDA Part 11 guidelines for audit trails and authentication
- Easily export and reuse approved copy data into the artwork design process utilizing industry standards

**Compliance**

**ENOVIA® Materials Compliance Central™** enables companies to track, analyze, and report a product's environmental compliance. Product compliance engineers can view the material content information in the context of the product bill of materials, and are able to cross reference this data against multiple regulations.

**Key Customer Benefits:**

- Manage material data to meet customer and region specific compliance mandates
- Analyze a product's compliance throughout the product development process
- Maximize the reuse of compliant components

**ENOVIA® Materials Compliance Experience** enables managers to view compliance and supplier reporting status for products and supplied parts in order to ensure an on-time product launch that meets target market regulations.

**Key Customer Benefits:**

- Provide management access to product environmental compliance and supplier reporting data
- View a product's compliance throughout the product development process to determine conformance to industry environmental directives
- View the reporting status of outsourced manufacturer equivalent parts and use this information to make sourcing decisions based on supplier part compliance

**ENOVIA® Materials Compliance Supplier Portal** allows a company's suppliers to submit materials declarations. It comes with a simple Web user interface for suppliers to view their assigned material declaration requests, review the customer's reporting deadlines and upload completed material declarations. It also includes the "Compliance Connect" spreadsheet, which is an industry standard tool for data collection and certification of material composition of supplier parts.

**Key Customer Benefits:**

- Place the responsibility for supplier compliance reporting directly into the hands of suppliers
- Provide a secure environment for suppliers to view parts that need to be reported without exposing proprietary product information
- Allow suppliers to upload completed material declarations directly and, if desired, automatically import them directly into the ENOVIA system

**ENOVIA® X-BOM Materials Compliance** enables "eco-design" (Design for the Environment) by allowing product engineers to view environmental compliance of products, components, and supplied parts. Designers can quickly determine if components meet all the compliance standards and substance thresholds necessary for making changes early in the design process. The net result is delivering innovative and environmentally compliant products that meet global market demands.

**Key Customer Benefits:**

- Analyze a product's compliance throughout the product development process
- Maximize the reuse of compliant components
- Create eco-friendly designs

**ENOVIA® IP Export Enforcement** enforces security rules to prevent unauthorized disclosure of intellectual property (IP) within ENOVIA.

**Key Customer Benefits:**

- Manage and protect all relevant IP in the enterprise with a single PLM system
- Safely share the system with all manner of people regardless of their organization affiliation, nationality or physical location
- Simultaneously achieve compliance with national export regulations, and contractual disclosure obligations

**ENOVIA® IP Export Classification** manages business rules to authorize, and prevent unauthorized, disclosure of intellectual property within the ENOVIA system.

**Key Customer Benefits:**

- Companies can protect electronic IP in a robust and consistent way while minimizing the costs of doing so
- Customers, partners, suppliers and employees can all operate in one PLM environment while protecting each party's IP
- Many kinds of data can be protected with one mechanism yielding more reliable and auditable IP protection

**ENOVIA® Product Quality Central™** manages complaints and non-conformance reports (NCR) so companies can avoid compliance risk, reduce waste and increase the ability to leverage quality information. As a result, product quality improves and the source of problems is removed.

**Key Customer Benefits:**

- Automate and streamline all complaints and non-conformance reporting across the enterprise to improve product information capture
- Scale to handle a high volume of complaints and non-conformance reports for serialized and non-serialized units
- Shorten cycle time and lowers costs by consolidating disparate systems

**ENOVIA® Quality Improvement Central™** provides a company with a global, integrated closed-loop system for corrective and preventative action (CAPA) tracking of production and non-production quality issues and audit management for follow-up.

**Key Customer Benefits:**

- Seamless execution of CAPA processes with the change and product design processes
- Comprehensive CAPA process controls including investigation, root cause analysis, risk assessment and scheduling of action plan tasks
- Accelerated investigation, review, approval and closure cycles

**ENOVIA® Life Sciences Accelerator™ for Change Control** manages modifications to all types of Quality System Regulation (QSR) and International Organization for Standardization (ISO) regulated documents, procedures and specifications— throughout an organization with previously unattainable levels of automation and control. It provides a single, flexible electronic change control process that enables enterprise-wide collaboration to improve operational efficiency and enforces critical business rules to minimize compliance risk.

**Key Customer Benefits**

- Bring industry-leading products to market more quickly and reliably by focusing on the creative aspects of design instead of administrative details
- Enable product teams to collaborate easily with various contributors and stakeholders to plan changes, expedite documentation, and deliver new products
- Enable organizations to respond more quickly to market opportunities by streamlining their change process

**ENOVIA® Life Sciences Accelerator™ for Regulatory Affairs** enables users to efficiently submit documentation and improve collaboration in an effort to expedite the premarket approval from global regulatory authorities. The product facilitates communication between submission team members within the organization, and with agencies such as the U.S. Food and Drug Administration (FDA). ENOVIA Life Sciences Accelerator for Regulatory Affairs helps companies reduce error and application times through improved submission organization, accountability, and communication.

**Key Customer Benefits:**

- Meet the mandates of domestic and international regulatory agencies while reducing overall time-to-market
- Manage regulatory mandates to efficiently move a product through the regulatory approval process
- Reduce time-to-market for new products and time required to re-register existing products

**ENOVIA® Life Sciences Accelerator™ for Product Quality** manages complaints and non-conformance reports (NCRs) so that medical device manufacturing companies can avoid compliance risk, reduce waste, and increase the ability to leverage quality information. As a result, product quality improves and the likelihood of product success is achieved.

**Key Customer Benefits**

- Automate and streamline all complaints and non-conformance reporting across the enterprise to improve product information capture
- Scale to handle a high volume of complaints and non-conformance reports for serialized and non-serialized units
- Shorten cycle time and lower costs by consolidating disparate systems

**Decision Support Business Intelligence**

**ENOVIA® 3DLive™** revolutionizes PLM by putting knowledge at your fingertips and contextually connecting you to the product ecosystem —all within a single environment. The software leverages PLM data into useful business intelligence for better, faster decision-making.

**Key Customer Benefits:**

- Address program and project execution issues instantly, collaborating with stakeholders by visualizing risks and milestones in 3D
- React quickly to compliance issues by enabling program managers to identify in 3D visually the parts and responsible owners for taking action
- Enhance revenue by responding swiftly and accurately to RFQs by sharing PLM component information (costs, delivery date, etc.) with stakeholders

**ENOVIA® Live Similarity** saves users time and effort by integrating a shape-based search of CATIA® V6 data through the contextual menu of the 3D navigation available in CATIA/DELMIA®/SIMULIA® (for part and logical). A shape-based search is an intuitive process that enables easy and quick information reuse through the product lifecycle stages such as design, planning, manufacturing, procurement, and inventory management.

**Key Customer Benefits:**

- Increase productivity and speed up design engineering by viewing and choosing part substitutions in a 3D environment
- Reduce duplicate parts and associated costs by quickly identifying similar parts
- Bring products to market faster by instantly checking part substitutions for design feasibility

**ENOVIA® Live Validation** enables managers, project leaders, and designers to oversee and participate in collaborative digital mockup reviews, packaging, and pre-assembly analyses within ENOVIA® 3DLive™ and CATIA® V6.

**Key Customer 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 track design errors from identification to resolution



# Global Sourcing

## Collaborative Sourcing

**ENOVIA® Sourcing Central™** is a negotiation and request-for-quote (RFQ) management application for engineered products and services. It provides functionality that enables global organizations to streamline collaboration between customers, buyers, and suppliers. The result is better and faster sourcing practices that drive key profit, cost, and time-saving decisions in the design and sourcing of direct materials and engineered goods and services.

### *Key Customer Benefits:*

- Enhance process standardization and the efficiency of the RFQ process
- Improve collaboration between engineering, purchasing, and strategic suppliers by delivering real-time, secure access to documents, specifications, product data and change information
- Lower operational costs, shorten supplier turnaround time on responses and improve bid quality

Note: A dedicated ENOVIA Sourcing Central solution exists for Apparel and Fashion companies.

**ENOVIA® Buyer Analytics** is a decision support tool for buyers to award business to suppliers as part of the RFQ process. It provides capabilities to rank quotations from suppliers using several attributes at once while offering standardization and transparency in the decision making process.

### *Key Customer Benefits:*

- Make total-cost-to-source decisions while awarding bids
- Standardize the RFQ award process using pre-defined templates
- Reduce the acquisition cost of standard items via reverse auctions

**ENOVIA® Quotation Central™** makes it possible for a company's suppliers to participate in the electronic negotiation and RFQ process. As a result, the supplier can more accurately and quickly respond to customer opportunities as well as become an integral development partner.

### *Key Customer Benefits:*

- Make it easier for suppliers to respond to RFQs from a customer in a timely fashion
- Improve the accuracy of quotations by accessing current product related data including drawings, specifications, 3D models, etc.
- Ensure comprehensive responses to RFQs by including information on all requested data elements as well as optional attachments used for additional explanation

**ENOVIA® Apparel Accelerator™ for Sourcing and Production** seamlessly connects global sourcing and production offices to brand and retail headquarters. It enables enhanced collaboration, process control, and risk management within the sourcing and pre-production processes. A broader user base from within and outside of the organization can now participate in the full sourcing process to ensure compliance with corporate growth, business, and financial goals within their global sourcing strategies.

**Key Customer Benefits**

- Improve gross margins by allowing more control over the cost analysis and negotiation with vendors as well as enforcing more structured hand-offs between headquarters, buying offices, agents, and vendors
- Increase management control and reduce risk of unexpected delays by providing visibility beyond product development activities into pre-production and production processes through time and action and quality reporting.
- Optimize merchandise opportunities and cost control through on-line requests for quotes enabling multiple supplier quotations based on volume, delivery dates, trade terms, and alternative components

**ENOVIA® Apparel Accelerator™ for Sourcing Partners** provides an online environment for suppliers and agents to access and update assigned information. Collaboration with supply chain partners occurs electronically during the sourcing and production processes.

**Key Customer Benefits**

- Engage vendors more strategically as they become involved from the beginning of the product development process, often playing key roles in the product definition
- Enable vendors to become an extension of your organization by providing secure, web-based access to the latest information on products placed with them, and receive automated alerts of modifications
- Reduce and eliminate costly inefficiencies caused by managing product development information and processes via documents, spreadsheets, emails and other inconsistent and fragmented communication forms

**Supplier Performance Monitoring**

**ENOVIA® Supplier Central™** allows companies to manage supplier relations and improve supplier qualification throughout the product lifecycle. Secure collaboration capabilities allow suppliers to become an extension of a company's engineering organization.

**Key Customer Benefits:**

- Manage supplier relationships to maximize the quality of the supply base
- Enable secure supplier collaboration by providing them with direct access to real-time product information early in the design process
- Enhance strategic sourcing by having supplier capability, quality and performance information readily available for buyers

**ENOVIA® Supplier Representative** enables a buyer company's suppliers to maximize the value of their business relationship proactively. Suppliers can maintain their organizational information and provide inputs to the quality process. Suppliers are granted secure access to parts and specifications to which the buyer company has assigned them responsibility.

**Key Customer Benefits:**

- Ensure supplier information is accurate and up-to-date through self-administration of organizational information that support supplier collaboration processes
- Improve product quality by accurate and timely submission of deliverables to part quality and development plans
- Stay informed of the latest design progress by providing direct access to their assigned parts' data and related specifications

## IP Lifecycle Management

### **IP-Work-in-Progress**

**ENOVIA® VPM Central™** provides large engineering teams with a single Product Lifecycle Management (PLM) environment to manage complex product design with maximum traceability and flexibility.

**Key Customer Benefits:**

- Manages product IP within the entire development lifecycle with a high level of changes traceability and global access to stored documents
- Leverages company expertise to accelerate evaluation of alternatives and enable knowledgeable decisions
- Represents accurately product variations in engineering and the enterprise to optimize customer value in every market

**ENOVIA® VPM Configured Structure Definition** enables engineers to navigate on product configurations in real time, author in a configured context and define specific configuration effectivities on any product structure updates within the Engineering Work-in-Progress (WIP) environment.

**Key Customer Benefits:**

- Directly integrate the enterprise configuration definition into engineering
- Navigate and filter on any configuration to establish an accurate 3D representation and identify commonality among different variants and evolution states
- Define appropriate variants on product structure components to correctly define product configurations that align to business intent

**ENOVIA® VPM Team Central™** provides design teams and departments with a single Product Lifecycle Management (PLM) environment to efficiently manage, review and reuse V6 work-in-process product information.

**Key Customer Benefits:**

- Manage all products IP within the entire development lifecycle
- Leverage experts' know-how to accelerate evaluation of alternatives and enable knowledgeable decision-making
- Allow concurrent definition to reduce design to manufacturing lead time and foster search for best design alternatives

**ENOVIA® VPM Designer Workspace** allows designers to pursue complex design activities while controlling when changes are propagated between team members to avoid unnecessary interruptions.

**Key Customer Benefits:**

- Enable faster and more intelligent enterprise collaboration by favoring designer innovation in isolated virtual designer workspaces
- Data lifecycle, versioning, configuration and relational design are managed seamlessly to enable asynchronous design deliveries

**ENOVIA® VPM On-The-Go** allows mobile ENOVIA® VPM Central™ users to work remotely without network access while protecting IP and maintaining project data integrity.

**Key Customer Benefits:**

- Allow collaborators and creators to work temporarily without an online connection
- Preserve IP integrity when working remotely without network access
- When traveling, insure IP protection with continuous P&O access control

**ENOVIA® VPM Configured Environment** enables engineers to navigate on product configurations in real time, author in a configured context and define specific configuration effectivities on any product structure updates within the Engineering Work-in-Progress (WIP) environment.

**Key Customer Benefits:**

- Directly integrate the enterprise configuration definition into engineering
- Navigate and filter on any configuration to establish an accurate 3D representation and identify commonality among different variants and evolution states
- Define appropriate variants on product structure components to correctly define product configurations that align to business intent

**ENOVIA® VPM Change Tracking** provides engineers with full control and traceability of modifications made with Dassault Systèmes authoring tools (CATIA®, DELMIA®, and SIMULIA®) within the ENOVIA Work In Progress (WIP) Environment. It governs changes through the various stages of the product development cycle (design, manufacturing, maintenance, etc). It also provides the capability to manage a change process between the various designers/engineers.

**Key Customer Benefits:**

- Execute design modifications through the various stages of the product development cycle (design, manufacturing, maintenance, etc.)
- Execute and monitor design modifications through Engineering Change Actions (ECAs)
- Ensure change traceability under ECA authority

**ENOVIA® VPM Volume Computation** provides the ability to create alternate representations of products or assemblies for size reduction or for the creation of geometry creation better suited to specific contexts.

**Key Customer Benefits:**

- Generate lighter representations of parts by simplifying meshes to a user-selectable level of accuracy
- Generate simplified external representations of parts ensuring confidentiality protection when communicating with suppliers
- Perform space reservation by generating the swept volume of a moving part

**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 Customer 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
- Track design errors accurately from identification to resolution

**ENOVIA® VPM Interference Check** helps companies increase product design quality by enabling designers to detect product interferences and correct errors earlier in the product development process.

**Key Customer Benefits:**

- Find, understand, retrieve, and correct interference issues more effectively and efficiently.
- Improve design quality by discovering issues earlier in the development process.
- Optimize validation processes by storing specifications and results for future use.

**ENOVIA® VPM Interference Management** improves design quality, enhances time to market, and keeps costs in control by detecting, tracking, and managing interferences on complex and large digital mockups.

**Key Customer Benefits:**

- Avoid costly mistakes and lost productivity by performing regular design interference checks on complex digital mockups to identify errors earlier in the product-development process
- Improve design product quality by automating interference verifications, tracking, and resolution, ensuring more efficient management of errors and design changes
- Optimize CPU performance while still handling large data volumes, improving productivity by allowing batch processing for interference computations

**ENOVIA® Designer Central™ for CATIA® V5** provides a multi-site CATIA V5 design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native CATIA V5 user interface.

**Key Customer Benefits:**

- Provides the critical connection between the mechanical computer-aided design (MCAD) process and effective product development
- Provides real-world control of the work-in-progress product design environment
- Provide work-in-process data management for CATIA V5 users

**ENOVIA® Designer Central™** enables designers around the world to manage and collaborate from one application, no matter what design tools they are using. The product eliminates the need for multiple Computer-Aided-Design (CAD) work group managers and the cost associated with supporting each related data manager. The product supports the following electronic computer-aided-design (ECAD) and mechanical computer-aided-design (MCAD) tools:

- CATIA® V4
- Cadence® Allegro
- Mentor Graphics Design Manager
- Mentor Graphics Expedition
- Zuken CR-5000
- Pro/ENGINEER
- Solid Edge
- SolidWorks®
- NX
- Autodesk® Inventor®
- AutoCAD and AutoCAD Mechanical

**Key Customer Benefits:**

- Provide work-in-process data management across all popular mechanical and electrical design tools
- Visually collaborate around the design information or other information related to the design
- Schedule meetings for review at any step in the development process

**ENOVIA® Collaborative Design for AutoCAD** provides a multi-site AutoCAD design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native AutoCAD user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended drawing in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for CATIA® V4** provides a multi-site CATIA V4 design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native CATIA V4 user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended design in the ENOVIA database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for Inventor** provides a multi-site Inventor design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native Inventor user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended design in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for Pro/ENGINEER**

provides a multi-site Pro/ENGINEER design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native Pro/ENGINEER user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended design in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for Solid Edge** provides a multi-site Solid Edge design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native Solid Edge user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended design in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for SolidWorks®** provides a multi-site SolidWorks design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native SolidWorks user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended design in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for NX** provides a multi-site NX design data management solution for the extended enterprise. It allows designers to access and share each other's designs from within the native NX user interface by leveraging the design team collaboration capabilities of ENOVIA® Designer Central™.

**Key Customer Benefits:**

- Maintain accurate representations of the intended design in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations

**ENOVIA® Collaborative Design for Cadence® Allegro** enables companies to accelerate product development and delivery by allowing designers to easily share information regarding their electrical designs throughout the product life cycle. The product facilitates concurrent printed circuit board (PCB) design, resulting in fewer engineering changes, shorter development times and lower production costs. This product is integrated with the following Allegro applications: Project Manager, Design Entry HDL, and PCB Design.

**Key Customer Benefits:**

- Decrease the time to develop PCBs by enabling concurrent schematic and layout design
- Manage complex design projects by enabling team-based schematic design using hierarchical design methodology
- Reduce the number of design iterations by enabling enterprise collaboration throughout the design process between electrical and mechanical designers, purchasing, manufacturing, and partners

**ENOVIA® Collaborative Design for Mentor Graphics Expedition Enterprise** enables companies to accelerate product development and delivery by allowing designers to share information regarding their electrical designs easily throughout the product life cycle. The product facilitates concurrent printed circuit board (PCB) design for Mentor Graphics Expedition Enterprise, resulting in fewer engineering changes, shorter development times and lower production costs.

**Key Customer Benefits:**

- Reduce the number of design iterations by enabling enterprise collaboration throughout the design process between electrical and mechanical designers, purchasing, manufacturing, and partners
- Reduce scrap and re-work costs by minimizing data transfer errors between engineering and manufacturing
- Reduce ramp up production lead times by providing component information to your supply chain earlier in the development process through preliminary BOMs

### **ENOVIA® Collaborative Design for Mentor Graphics**

**Design Manager** enables companies to accelerate product development and delivery by allowing designers to easily share information regarding their electrical designs throughout the product life cycle. The product facilitates concurrent printed circuit board (PCB) design, resulting in fewer engineering changes, shorter development times and lower production costs.

#### **Key Customer Benefits:**

- Reduce the number of design iterations by enabling enterprise collaboration throughout the design process between electrical and mechanical designers, purchasing, manufacturing, and partners
- Reduce scrap and re-work costs by minimizing data transfer errors between engineering and manufacturing
- Reduce ramp up production lead times by providing component information to your supply chain earlier in the development process through preliminary BOMs

### **ENOVIA® Collaborative Design for Zuken CR-5000**

enables companies to accelerate product development and delivery by allowing designers to share information regarding their electrical designs easily throughout the product life cycle. The product facilitates concurrent printed circuit board (PCB) design, resulting in fewer engineering changes, shorter development times, and lower production costs. This product is integrated with System Designer, Board Designer, and Board Producer.

#### **Key Customer Benefits:**

- Decrease the time to develop PCBs by enabling concurrent schematic and layout design
- Manage complex design projects by enabling team-based schematic design using hierarchical design methodology
- Reduce the number of design iterations by enabling enterprise collaboration throughout the design process between electrical and mechanical designers, purchasing, manufacturing, and partners

**ENOVIA® Collaboration for STEP** imports Standard Exchange for Product Model (STEP) data geometry files to leverage expertise throughout the extended enterprise. After it is imported to the DS CGR format, STEP data can be managed with lifecycle controls and accessed by stakeholders with ENOVIA® Live Collaboration or ENOVIA® 3DLive™.

#### **Key Customer Benefits:**

- Collaborate with partners using STEP – a standard and open format.
- Make partner contributions available across the company for global business processes
- Foster design in context creation and design reviews for better product quality and reactivity

**ENOVIA® Collaboration for IGES** imports Initial Graphics Exchange Specification (IGES) geometry files to leverage expertise throughout the extended enterprise. After it is imported to DS CGR format, IGES data can be managed with lifecycle controls and accessed by stakeholders with products such as ENOVIA® Live Collaboration or ENOVIA® 3DLive™.

#### **Key Customer Benefits:**

- Collaborate with partners using IGES – a standard and open format
- Make partner contributions available across the company for global business processes
- Foster design in context creation and design reviews for better product quality and reactivity

### **ENOVIA® Collaboration for Adobe Creative Suite**

creates and accesses ENOVIA-managed data directly from within the native Adobe interface. This enables design teams to manage data within ENOVIA and share that information across the enterprise while not disrupting the established productivity of those teams.

#### **Key Customer Benefits:**

- Simplify access to product and component artwork using the native Adobe interface
- Improve collaboration between design teams by sharing the same data
- Apply enterprise-level data sharing and security without disrupting established end-user work procedures

**ENOVIA® System Functional Logical Definition** enables designers to define the functional and logical aspects of a product and link them to the physical definition of a product, ensuring full traceability from product specifications to the actual 3D design.

#### **Key Customer Benefits:**

- Create product designs that meet market demands by enabling traceability from product validation to customer expectations
- Investigate more design alternatives in a given period of time for increased development agility
- Reduce integration problems in physical design with earlier validation of 3D architecture

### **ENOVIA® VPM Supply Chain Collaborative Engineering**

enables OEMs and suppliers to share PLM information when both are using ENOVIA® VPM Central™.

#### **Key Customer Benefits:**

- Satisfy data exchange requirements with suppliers using 3DXML – a standard, lightweight format readable by a variety of mainstream design applications
- Easily and quickly reintegrate data modified by the supplier chain
- Exchange design data on demand using widely accepted internet collaboration tools

**ENOVIA® Format Converter for ACIS** enables V6 users to reuse or migrate ACIS application data in ENOVIA® VPM Central™.

#### **Key Customer Benefits:**

- Enables V6 users to collaborate on ACIS modeler format and import the ACIS file contents in V6
- Enables customers to migrate from ACIS modeler based applications to V6

**ENOVIA® Format Converter for Inventor** enables V6 users to reuse, or migrate in ENOVIA® VPM Central™ any Inventor application data. Users can import Inventor exact geometry as tessellated V6 representation and leverage it in downstream V6 processes, such as design review, digital mockup review, design in context, and manufacturing.

#### **Key Customer Benefits:**

- Enable V6 users to collaborate on the Inventor Application Format
- Import the Inventor file contents in V6
- Enable customers to migrate from Inventor to V6

**ENOVIA® Format Converter for NX** enables V6 users to reuse or migrate NX application data in ENOVIA® VPM Central™.

**Key Customer Benefits:**

- Enable V6 users to collaborate on NX application format and import the NX file contents in V6
- Enable customers to migrate from NX to V6

**ENOVIA® Format Converter for Parasolid** enables V6 users to reuse or migrate in ENOVIA® VPM Central™ Parasolid application data. Users can import Parasolid exact geometry as a tessellated V6 representation and leverage it in downstream V6 processes, such as design review, digital mockup review, design in context, and manufacturing. Users can also migrate Parasolid exact geometry into a V6 exact geometry representation, thus pursuing fully the design with V6 authoring applications.

**Key Customer Benefits:**

- Enables V6 users to collaborate on Parasolid Modeler Format. Users can import the Parasolid file contents in V6.
- Enables customers to migrate from Parasolid Modeler based applications to V6.

**ENOVIA® Format Converter for Pro/ENGINEER**

enables V6 users to reuse or migrate Pro/ENGINEER application data in ENOVIA® VPM Central™. Users can import Pro/ENGINEER exact geometry as tessellated V6 representation and leverage it in downstream V6 processes, such as design review, digital mockup review, design in context, and manufacturing. Users can also migrate Pro/ENGINEER exact geometry into a V6 exact geometry representation thus pursuing fully a design with V6 authoring applications.

**Key Customer Benefits:**

- Enable V6 users to collaborate on Pro/ENGINEER® and Creo applications format
- Import the Pro/ENGINEER and Creo file contents in V6
- Enable customers to migrate from Pro/ENGINEER® Creo to V6

**ENOVIA® Synchronicity® DesignSync® Data Manager**

is used by semiconductor companies to manage the hardware and software data in their products. Data can be managed at both the detailed file/directory level, and at a “modular” level of abstraction. As such, design data contributed by individual teams can be seamlessly integrated into higher level designs. The product’s SITaR workflow manages design data through its “Submit,” “Integrate,” “Test” and “Release” phases.

**Key Customer Benefits:**

- Connect and manage your entire design chain with a unified DDM system
- Significantly boost design productivity for a rapid payback and strong ROI
- Maximize your ability to reuse existing designs and embedded software

**ENOVIA® Semiconductor Accelerator™ for Team Collaboration** provides a collaborative and secure environment for resolving product development issues and defects amongst geographically dispersed development teams working on complex hierarchical designs. As design data contributed by individual teams is integrated into higher-level designs, the impact of a defect found in a given IP dataset can be widespread and difficult to track and manage.

**Key Customer Benefits:**

- Connect and manage your entire design chain with a unified system
- Significantly boost design productivity for a rapid payback and strong ROI
- Maximize your ability to reuse existing designs and embedded software

**ENOVIA® Synchronicity® for CTS (Custom Types System)** provides design data management for commercial and customer proprietary Electronic Design Automation (EDA) tools beyond those supported by predefined DesignSync interfaces. ENOVIA Synchronicity for CTS extends ENOVIA® Synchronicity® DesignSync® Data Manager and ENOVIA® Synchronicity® DesignSync® Central™.

**Key Customer Benefits:**

- Leverages the complex EDA design data management knowledge of the undisputed industry leader
- Provides a programming interface that allows customization of ENOVIA Synchronicity products to recognize and manage complex data types generated by any EDA design tool

**ENOVIA® Synchronicity® for DFII** provides design data management for Cadence® data, in either CDBA (Cadence® DataBase Access) or OpenAccess formats. It extends the design data management capabilities of both ENOVIA® Synchronicity® DesignSync® Data Manager and ENOVIA® Synchronicity® DesignSync® Central™.

**Key Customer Benefits:**

- Undisputed industry leader in the management of Cadence DFII design data
- Integrated into the Cadence DFII graphical design environment – designers work in the tools with which they are familiar
- Aware of the unique structure of a Cadence data library

**ENOVIA® Synchronicity® for Milkyway** provides design data management for Synopsys Milkyway data. ENOVIA Synchronicity for Milkyway extends ENOVIA® Synchronicity® DesignSync® Data Manager and ENOVIA® Synchronicity® DesignSync® Central™.

**Key Customer Benefits:**

- Undisputed industry leader in the management of Synopsys Milkyway design data
- Integrated into the Synopsys Galaxy Platform design environment – designers work in the tools with which they are familiar
- Aware of the unique structure of a Milkyway database

**ENOVIA® Synchronicity® for Synopsys CD** provides design data management for Synopsys Custom Designer data in Open Access format. It extends the design data management capabilities of both ENOVIA® Synchronicity® DesignSync® Data Manager and ENOVIA® Synchronicity® DesignSync® Central™.

**Key Customer Benefits:**

- By integrating into the Synopsys Custom Designer graphical design environment, designers work in the tools with which they are familiar
- All vaulting operations are executed with a thorough understanding of the unique structure of a Synopsys data library
- Manages Synopsys data, along with non-Synopsys project data, letting companies connect to and manage the entire design chain with a unified DDM system

**ENOVIA® Synchronicity® ProjectSync®** is a Web-based project collaboration and management solution that enhances team productivity by enabling distributed team members to share ideas, bug reports, and engineering change information. Managers can instantly see the state of the whole design and fully understand the open issues.

**Key Customer Benefits:**

- Significantly boost design productivity for rapid payback and strong ROI
- Enable collaborative development of complex electronic products between geographically distributed teams
- Avoid costly mistakes with issue tracking and release management

**IP Asset Release**

**ENOVIA® Engineering Central™** eliminates the significant process and data communication barriers that exist between mechanical, electronics, and software engineering disciplines within the enterprise and the product supply chain.

**Key Customer Benefits:**

- Consolidate part design and related technical document content from multiple engineering tools by providing a single definition of the EBOM
- Increase product innovation through improved communication and collaboration with global development teams leveraging 3D visualization and electronic communication including email and ad-hoc workflow
- Leverage the skills and knowledge of the enterprise and supply chain through the institutionalization of cross-functional product development and engineering processes

Note: ENOVIA Engineering Central exists in different industry flavors including Life Sciences, High Tech and Semiconductor.

**ENOVIA® Engineering Configuration Central™** is used by manufacturers of low volume and highly complex products to define and manage the engineering bill-of-material (EBOM). It provides advanced product unit effectivity configuration management functionality to define the “engineering view” of specific product units.

**Key Customer Benefits:**

- Consolidate part design content from multiple Engineering systems and tools by providing a single definition of the EBOM
- Provide visibility to customer/unit-specific EBOM configurations within a single, consolidated PLM solution
- Leverage the skills and knowledge of the enterprise and supply chain through the institutionalization of cross-functional product development and engineering change processes, which include the ability to manage complex product configuration changes using product unit effectivity

**ENOVIA® X-BOM Cost Analytics** provides manufacturing companies the ability to estimate, track, and manage product costs very early in the product lifecycle. It enables cost analysts, engineers, and buyers to analyze BOMs using standard or actual costs for existing parts and estimated or quoted costs for new or modified parts.

**Key Customer Benefits:**

- Identify opportunities for cost savings earlier in the product lifecycle and drive them to the bottom line faster
- Make better product decisions by understanding the cost impact of change during early product design phase
- Perform product cost and margin analysis with higher confidence level compared to manual methods

**ENOVIA® X-BOM Manufacturing** provides a manufacturing BOM management solution complimenting ENOVIA® Engineering Central™, which manages engineering BOMs and related engineering documentation. The combined solution supports a seamless flow of product development and manufacturing data and processes in support of a global business strategy.

**Key Customer Benefits:**

- Decrease time from design release to manufacturing readiness by implementing a solution that enables concurrent design and manufacturing planning BOM activities
- Reduce manufacturing costs by identifying and resolving manufacturability issues early in the development process
- Reduce errors and decrease time associated with the implementation of engineering changes across several manufacturing locations

**ENOVIA® X-BOM Unit Tracking** captures the precise as-built and as-maintained bill-of-material 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.

**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

**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 Customer Benefits:**

- Derive and synchronize an EBOM directly from a CATIA product structure
- Augment and edit the EBOM for cross-functional use with a web-based structure browser editor
- Improve team communication by providing the ability to route information for feedback and review

**ENOVIA® CPG Accelerator™ for Integrated Product Management** enables Consumer Packaged Goods (CPG) companies to use structured specifications to build and maintain multi-level formula, packaging and other kinds of bills-of-material (BOMs). It provides holistic change order process management, highlighting “where used” impact analysis of materials not only within the targeted BOM but also across product portfolios.

**Key Customer Benefits:**

- Build and maintain multi-level BOM structures from centrally-managed and approved components
- Realize economies of scale across a distributed supply chain through raw material and supplier rationalization
- Enforce quality and regulatory standards on materials and finished goods originating from multiple countries of origin (COO) and being applied in products across multiple countries of sale (COS)

**ENOVIA® High-Tech Accelerator™ for New Part Request and Development** streamlines a company’s part development activities. Companies can manage their development processes for hardware, electrical, and software parts whether designed and manufactured internally, or purchased from suppliers.

**Key Customer Benefits:**

- Deliver market-leading products to market faster and more reliably by managing part implementation and design
- Maximize part reuse and reduce part proliferation by validating all new part requests through a review board
- Streamline and standardize the part development processes from the part introduction to its approval and until its end-of-life

**ENOVIA® Life Sciences Accelerator™ for Engineering Design** provides robust and flexible management of all enterprise design data such as bills-of-material (BOMs), CAD models and related documentation such as drawings, specifications, procedures and quality standards. It is the “single source of the truth” of product information for all of your product development business processes.

**Key Customer Benefits:**

- Bring industry-leading products to market more quickly and reliably by focusing on the creative aspects of the design process instead of administrative details
- Respond rapidly to market opportunities by streamlining product development and change processes
- Complete projects on time and within budget by facilitating the creation and reuse of product data

**ENOVIA® Apparel Accelerator™ for Design and Development** provides a single environment to manage an Apparel company's product, project, color, material, line plan, and vendor data. It executes development tasks across all functional teams to track seasonal line planning calendars, approvals and responsibilities. Companies using the ENOVIA Apparel Accelerator for Design and Development can react quickly to shifts in seasonal requirements, industry trends, and consumer tendencies by leveraging robust and flexible workflow and planning templates visible to all product/project team members.

**Key Customer Benefits:**

- Reduce and eliminate costly inefficiencies caused by managing product development information and processes via documents, spreadsheets, emails, and other inconsistent and fragmented communication forms
- Replace multiple and disconnected systems and isolated documents used to manage product, project, color, material, line plans, vendor and sourcing with a single, global, product lifecycle management system
- Incorporate the expertise and knowledge in your supply chain early in the product development processes so that sourcing agents, vendors, design partners and mills can positively impact decisions and performance related to manufacturing, material trends, cost, and quality decision

**IP Classification & Reuse**

**ENOVIA® Library Central™** enables companies to define product content libraries to improve reuse throughout product development. Because of minimal effort involved, the library's definition can adapt quickly and easily to rapidly changing business needs.

**Key Customer Benefits:**

- Create multiple library classification systems to fit your company's business needs, functional roles, and/or products
- Apply standard attributes to the library taxonomy for robust parametric searches and comparisons of classified data based on different usage models
- Classify existing product content from other ENOVIA products or create new product documents with robust document management capabilities

**ENOVIA® Library Experience** enables companies to achieve a competitive advantage by assisting in accelerated product development and delivery through reuse of existing product content. Users can easily create new documents or locate existing product content to classify and organize in a hierarchy that is tailored to their business environment and products.

**Key Customer Benefits:**

- Work with library classification systems that match their role's unique needs
- Classify existing product content from other ENOVIA products or create new product documents with robust document management capabilities
- Search libraries based on classification parameters in any unit of measure

**ENOVIA® Component Central™** enables companies to define classification taxonomies and manage reusable components in a single centralized location that helps improve reuse and reduce costs when defining the Approved Vendor and Manufacturer Lists (AVL and AML) for the enterprise engineering bill-of-material (EBOM).

**Key Customer Benefits:**

- Improve product quality by managing accurate and real-time component information stored in a single, centralized system for enterprise-wide reuse.
- Manage the full scope of commercial component information, including manufacturer and supplier equivalent parts.
- Define classification taxonomies to enrich component selection without requiring costly data modeling or administrative knowledge of the underlying process.

**ENOVIA® Component Experience** enables design engineers to search and reuse standard parts across the enterprise based on associated manufacturer equivalent and supplier parts (MEPs and SEPs) while defining engineering bills-of-material (EBOMs), thereby helping companies reduce cost and expedite time-to-market for their high-value products.

**Key Customer Benefits:**

- Reduce cost and time-to-market while defining the enterprise EBOM by searching and reusing standard parts
- Build products right the first time by selecting qualified, approved and preferred components
- Reduce proliferation of components and improve component reuse across the enterprise

**ENOVIA® Semiconductor Accelerator™ for IP Management** creates a competitive advantage by improving a company's intellectual property (IP) and design reuse process for faster product development and delivery. The product makes it easy for IP catalog owners to classify and organize data in a hierarchy that is tailored to their company's business environment and products.

**Key Customer Benefits:**

- Work with library classification systems that match their role's unique needs
- Classify existing product content from other ENOVIA products or create new product documents with robust document management capabilities
- Search libraries based on all parameters associated with its classes with automatic unit of measure conversions

# Unified Live Collaboration

## Data Warehouse and Process Management

**ENOVIA® Live Collaboration** provides all required services to support all ENOVIA products and the Dassault Systèmes products for Product Lifecycle Management (PLM), delivered through the CATIA®, SIMULIA®, and DELMIA® brands. ENOVIA Live Collaboration and its optional products establish the necessary environment for end users to collaborate effectively during product development. ENOVIA Live Collaboration's rich business process services enable collaboration between all users with security based on functional roles, and allow management to measure the effectiveness of the overall product development process.

### *Key Customer Benefits:*

- Deploy PLM solutions to solve immediate business problems, and quickly scale to support large global deployments
- Collaborate with external partners, suppliers, and developers as early as possible in the development process
- Consolidate part design content from multiple engineering systems and tools by bi-directionally updating bill-of-material data with non-DS PDM systems

**ENOVIA® Collaboration for Microsoft** allows users to create and access ENOVIA data from the most popular Microsoft applications: Word®, Excel®, PowerPoint®, Outlook®, Windows Explorer, and Windows Desktop Search. This capability enables enterprise-level collaboration while not disrupting the established productivity of end users.

### *Key Customer Benefits:*

- Accelerate Return on Investment (ROI) because of a more rapid adoption of PLM
- Enhance user adoption by simplifying access to product content using the most popular Microsoft applications
- Improve collaboration and decision making throughout the enterprise by leveraging product data

**ENOVIA® Live Connect** provides casual users with required capabilities to search, navigate, and download product and process information. These users are typically not involved in the day-to-day product definition and release process, but do require access to the key product deliverables that are being produced.

### *Key Customer Benefits*

- Deploy PLM solutions to solve immediate business problems, and quickly scale to support large global deployments
- Collaborate with external partners, suppliers, and developers as early as possible in the development process
- Leverage the best practices developed in partnership with some of the world's most innovative companies while retaining your competitive advantage and adaptability

**ENOVIA® File Collaboration Server** allows a customer to deploy file servers closer to end users for improved file upload and download performance in a global, multi-site implementation.

**Key Customer Benefits:**

- Distribute file servers to improve file download and upload performance for better user experience
- Replicate file data across distributed file servers for local access by all enterprise users
- Add custom extensions to support additional services such as DRM and other requirements

**ENOVIA® Knowledge Standardization** allows domain experts to institutionalize how conceptual part features are defined and guarantees established rules are followed to avoid mistakes and rework.

**Key Customer Benefits**

- Tailor ENOVIA Live Collaboration with simple administrative tools not requiring IT skills
- Eliminate inaccurate designs by automating defined standards
- Prevent costly and time-consuming corrections downstream

**ENOVIA® Report Generator** allows users to execute dynamic reports from the information stored in ENOVIA. Reports can include high-resolution images and intuitive charts to simplify a user’s understanding of complex product data. It supports both the formats and the delivery mechanisms that best suit end users from various roles in the in any part of the company.

**Key Customer Benefits:**

- Generate reports formatted in PDF, PostScript, Text, XML or HTML for easy publishing, sharing and printing
- Visualize trends in large volumes of ENOVIA data using charts or formatted tables
- Fulfill their unique business needs without requiring IT to make expensive customizations
- View reports immediately or send them by email, FTP upload, or Java Message Service (JMS) queue

**IP Asset Federation**

**ENOVIA® X-BOM for Oracle Manufacturing** facilitates collaboration between product engineering and manufacturing by enabling real-time, bi-directional data exchange and sharing of part, bill-of-material (BOM), operational, manufacturing cost and inventory data, as applicable between ENOVIA and Oracle Manufacturing.

**Key Customer Benefits:**

- Provide a seamless information flow between ENOVIA and one or more Oracle Manufacturing instances
- Data entry errors eliminated by automatically exchanging “work in process” product information, such as preliminary BOM structures
- Provide product engineering with early access to manufacturing operations data in real time and in the context of their work

**ENOVIA® X-BOM for SAP** enables real-time collaboration between product engineering and manufacturing with bi-directional data exchange and sharing of part, bill-of-material, operational, manufacturing cost and inventory data.

**Key Customer Benefits:**

- Provide a seamless information flow between ENOVIA and one or more SAP instances
- Eliminate data entry errors by automatically exchanging “work in process” product information, such as preliminary BOM structures
- Provide product engineering with early access to manufacturing operations data in real time and in the context of their work

**ENOVIA® Multi-Discipline Exchange for X-PDM** enables a bi-directional data exchange between ENOVIA® VPM Central™ (or ENOVIA® VPM Team Central™) and a non-DS PDM system. The data exchange can occur at any stage of the product development cycle (design, release process, etc.). Either ENOVIA or the other PDM system can be the original master or author of the exchanged data.

**Key Customer Benefits**

- Consolidate V6 product definition with design data from other enterprise systems
- Consolidate and organize the digital mockup made with data authored in V6 and in others PDM systems
- Update other enterprise systems with V6 design data

**I-PLM Collaboration Studio**

**ENOVIA® Studio Modeling Platform** provides the development tools for a company to define configurations that are needed in their production ENOVIA system. It allows implementers to change default ENOVIA behavior easily so the unique development processes of a company can be maintained.

**Key Customer Benefits:**

- Ensure end user acceptance
- Achieve targeted business process improvements
- Maintain a competitive advantage with unique capabilities without compromising the ability to upgrade to newer releases

**ENOVIA® Studio Customization Toolkit** provides documentation and examples for writing custom programs and support web services client development. Documentation for each standard web service is provided along with the Web Service Definition Language (WSDL) file to enable generation of the client code.

**Key Customer Benefits:**

- Extend ENOVIA collaborative business process capabilities with custom code to meet unique use-case requirements
- Use low-level command APIs or higher-level business logic APIs specific to ENOVIA products.
- Reference online documentation for all Java and C++ functions
- Leverage working code samples for commonly used extensions

**ENOVIA® Studio Federation Toolkit** provides documentation and examples for writing custom programs that use the Adaplet® libraries available in ENOVIA® Live Collaboration. An Adaplet is an ENOVIA proprietary technology used to communicate with non-ENOVIA data sources. It represents this third-party data as if it is native to the ENOVIA system. The ENOVIA Studio Federation Toolkit enables customers to extend standard ENOVIA product capabilities to create a Product Lifecycle Management (PLM) federation with other enterprise systems.

**Key Customer Benefits:**

- Access data from multiple systems through a single interface
- Extend legacy systems with additional capabilities that are available in the ENOVIA system such as additional meta-data, workflow, file management, and other services
- Integrate to multiple systems through methods such as transferring ENOVIA data to other systems (e.g. Enterprise Resource Planning) based on triggers that are executed during business processes

**ENOVIA® Studio Schema Analyzer** is an administrative tool that customers use to manage their daily schema development and maintenance activities as they implement new releases of ENOVIA or implement new capabilities on top of their current ENOVIA deployment. Administrators are able to quickly decipher and learn the data model associated with the ENOVIA system using standard graphical and textual reports.

**Key Customer Benefits:**

- Explore the ENOVIA data model using an interactive, offline, user friendly Windows client
- Understand the dependency and relationship between various schema elements to identify where each schema element is used and the impact of changing it
- Use UML methodologies to view and extend the data model.

**ENOVIA® Studio Development Suite** provides a complete set of highly automated software engineering tools ensuring built-in quality to develop custom applications for Dassault Systèmes (DS) V6 authoring products (ENOVIA® VPM Central™, ENOVIA® VPM Team Central™, CATIA®, DELMIA®, and SIMULIA®).

**Key Customer Benefits:**

- Full application development processes coverage
- Full integration with Microsoft Visual Studio 2008
- Seamless Microsoft Visual Studio 2008® project integration with CAA workspaces

**ENOVIA® Studio VPM API** provides programming interfaces to extend ENOVIA® VPM Central™ or ENOVIA® VPM Team Central™ implementations with company-specific processes and functionality. It does not change the behavior of any existing ENOVIA products, but it does enable the addition of new capabilities to the existing products.

**Key Customer Benefits:**

- Extend the standard functionality of VPM-based products to fit specific needs and processes
- Benefit from a seamless user interface for custom programs inserted directly in the ENOVIA application frame
- Use best-of-breed modeler techniques to ensure IP integrity across the various disciplines



## 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

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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](http://www.3ds.com).

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