ENOVIA Designer Central
for CATIA V5

Product Objective

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. Through its unique and open architecture, ENOVIA Designer Central for CATIA V5 can be deployed and supported from a central location, while the file locations can be distributed and controlled around the world to provide end users with expected performance during file downloads and uploads. Product designs can be synchronized to the parts in the Engineering Bills-of-Material (EBOMs) so that the overall product development process stays coordinated. ENOVIA Designer Central for CATIA V5 provides collaboration tools to communicate synchronously or asynchronously across the globe. Through its collaboration capabilities, needless design iterations can be eliminated, and real-time viewing and markup of designs can occur. Meetings can be scheduled with design content securely provided as part of the meeting, while discussion threads and markups allow for the capture of innovative thoughts in a natural, informal way without restricting end user creativity.

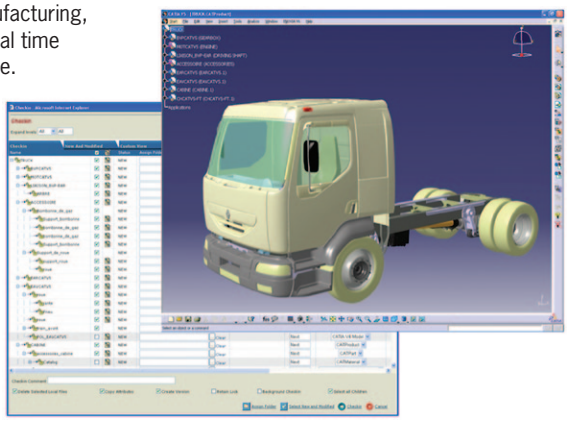
Product Overview

With ENOVIA Designer Central for CATIA V5, companies can collect, track, protect, and deliver CATIA V5 design data seamlessly to business processes within the enterprise.

Managed work-in-process (WIP) model data supports the entire product development process by giving early visibility to design information, and allows the enterprise to collaborate before final product decisions are made. The immersive integration capabilities allow users to browse, query, check-in and check-out drawings, parts, assembly structures, and other items directly from within the CATIA V5 session. Access status can be checked directly from the CATIA tree, which provides users visual confirmation directly from their design session.

ENOVIA Designer Central for CATIA V5 allows users to:

- Grant access to other stakeholders across the company (product engineering, manufacturing, purchasing, etc.) to design data in real time throughout the entire product lifecycle.
- Have project leaders create team workspace folders, defining access level for members and making design information easy to find.
- Provide collaboration capabilities such as workflow, online meetings, subscriptions and discussion threads making it possible for dispersed design teams to collaborate productively on the same design.



Key Customer Benefits

- Provide work-in-process data management for CATIA V5 users
- Schedule meetings for review at any step in the development process
- Securely provide design information to suppliers and customers
- Create private and public workspaces for organizing and sharing designs
- Manage local workspaces in the context of the ENOVIA system
- Upload complex, multi-tiered, design hierarchies into ENOVIA
- Recursively check out complex, multi-tiered, designs into CATIA V5 or onto disk
- Apply full revision and version control to all design models
- Synchronize the CATIA V5 design data with the engineering bill of materials to eliminate BOM accuracy issues
- Pursue a 24X7 product development strategy by allowing designers and suppliers to securely create, modify, and review CATIA V5 designs anywhere in the world
- Alert users with design change notifications to their current work
- Create ad-hoc routes for asynchronous review of design content
- Capture discussion threads containing design suggestions and improvements
- Decrease the time to develop new products by enabling concurrent design across multiple disciplines
- 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 bills-of-material (BOMs)

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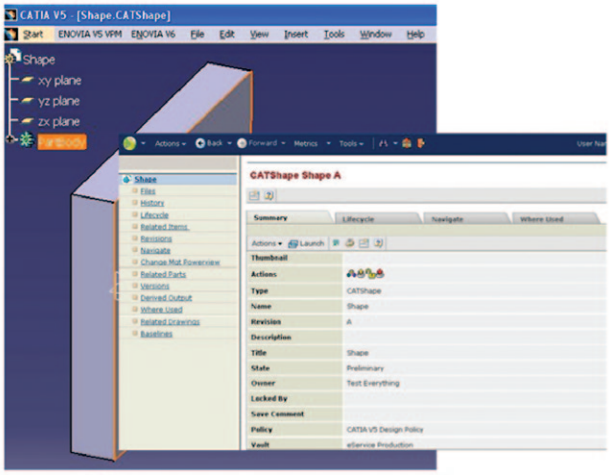
Project managers, product engineers, manufacturing engineers, purchasing, document controllers, etc. may contribute through real-time collaboration using such capabilities as on-line meetings, 3D design reviews, downloading of derived outputs for subsequent downstream analysis and/or consumption of data into other post design applications. ENOVIA Designer Central for CATIA V5 provides a means for these users to complete these activities successfully without direct access to native CATIA V5 design files.

Product Highlights

ENOVIA Designer Central for CATIA V5 provides a comprehensive environment for day-to-day design management. Additionally, ENOVIA Designer Central for CATIA V5 has in-depth collaboration capabilities, which allow designers to work with team members around the world.



CATIA V5 Data Management

With ENOVIA Designer Central for CATIA V5, companies can collect, track, protect and deliver CATIA V5 design data seamlessly to business processes within the enterprise. Managed work-in-process (WIP) model data supports the entire product development process by giving early visibility to design information, and allows the enterprise to collaborate before final product decisions are made. The ENOVIA Toolbar provides users quick access to frequently used commands through visual icons. The immersive integration capabilities allow users to browse, query, check-in and check-out drawings, parts, assembly structures and other items directly from within the CATIA V5 session. Access status can be checked directly from the CATIA tree providing users visual confirmation without accessing additional windows.

Manage CATIA V5 Multi-Model Links (MML)

As part of check in/out, the integration will recognize contextual and geometric links. Management and display of the links helps the user understand what components are referenced and how they are used in the assembly.

Local Directory Administration (DLNAME) Support

CAD Administrators can set options to recognize specific storage directories for each user community and the projects they are working on. Support of DLNAME eliminates the need to have users remember or use unmanaged local disk area.

Unique Identifier (UUID) Recognition

Unique Identifiers are recorded in each CATIA V5 file to ensure that the file that exists in the ENOVIA system is also the same file the user is trying to check in after modification. UUIDs are compared on checkin to be sure that the same file is going to the proper revision and version.

CATIA V5 Tree Status

From within the CATIA V5 application, the user can see icons in the CATIA V5 model tree which show the specific status of any given design currently in session as compared to what is stored in ENOVIA. The icons indicate lock status which helps the user understand if they have write access to any given file. In addition, when a partial checkout operation has been performed a special icon in the CATIA tree indicates that the node is a broken link. However, ENOVIA Designer Central for CATIA V5 will automatically recognize the node and associate it to the correct design in the ENOVIA database during a checkin. Users can use the visualization mode during checkout to see which designs should be opened for edit and which are “view only.” Large structure performance is greatly enhanced, in that referenced items are represented in a light weight form but still available to the user for in-assembly context editing.

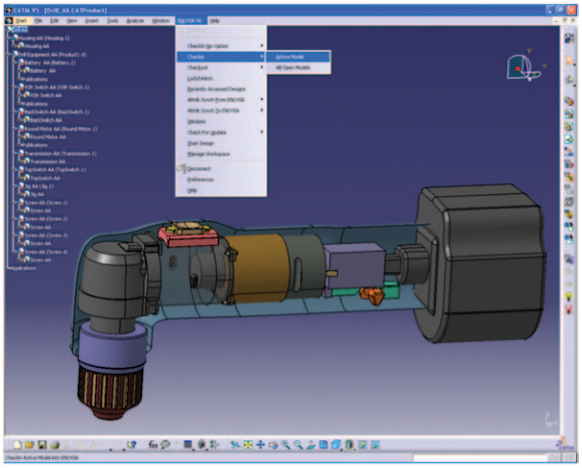
CATIA V5 CGR and 3D XML Generation

ENOVIA Designer Central for CATIA V5 allows the user to create CGR or 3D XML out as part of the check in operation. These additional formats can then be viewed by 3DLive or 3D XML Player, which allows users other than designers to visualize part information.

Product Driven Design and EBOM Synchronization

Companies that have chosen to utilize ENOVIA Engineering Central can now closely associate the CAD designs with engineering parts. During the initial creation of CATIA V5 designs, users can associate engineering parts to their CATIA V5 model templates before CAD work begins. An optional process allows the users to select an existing engineering part as the defining name of the CATIA component being checked in. Either approach allows CATIA V5 structures to be dictated from the engineering product designs. As the design process progresses, changes between the model structure and EBOM are inevitable. At any point in the process, the two structures can be synchronized. As part of this synchronization process additional metadata such as the CATIA version, component mass, bounding box and design moment and center of inertia are transferred to the associated engineering part. A visual display graphically depicts what changes/updates are to occur before the transaction is committed so users have the ability to verify that the actions to be taken are expected and to solve any discrepancies.

Quick Access
ENOVIA Designer Central for CATIA V5 allows users to manage their CAD files with minimal effort. Users have the option to bypass additional menus during checkout operations using default parameters. In order to encourage users to frequently update the system with their latest design versions, ENOVIA Designer Central for CATIA V5 maintains a list of recently accessed designs that users can reference quickly for future download. In addition, designers can search from the CAD tool for the most recently accessed designs. Checkout is available directly from the display. Users are also encouraged to save their latest design modifications to the database by executing the "Quick Checkin" function. ENOVIA Designer Central for CATIA V5 automatically recognizes the new and modified designs, and without further interaction from the user, updates the database with the new design versions, ensuring that other team members have ready access to the latest available component design changes. ENOVIA Designer Central for CATIA V5 automatically assigns the appropriate type designation to CATIA designs, and prompts the user to execute a local save of the design file before saving into ENOVIA. This ensures that the new local designs are production designs and not test or widget parts used in the design creation process.



Advanced CATIA V5 Structure Management
Utilization of the common product structure editor within ENOVA Designer Central CATIA V5 allows users to generate new structures from existing designs stored in the ENOVIA database. Users can manipulate work-in-process structures through query of the database to find the latest available component or suitable replacements for designs in their active structure. The structure modifications are made in a markup state until the user commits the changes. These new/modified structures may then be checked out into CATIA V5 for further modification. It is also common that structure modifications are required that do not affect form, fit or function. These types of design changes typically do not require an official Engineering Change Order (ECO) but still require strict management. An advanced user designated by a special role may make released Computer-Aided-Design (CAD) bill of materials (BOM) changes without the benefit of an associated ECO.

Create and Manage Design Data Workspaces from the CAD Tool
ENOVIA Designer Central for CATIA V5 allows users to create workspaces for project teams or for simple, ad hoc collaboration. From the native design application, designers can easily access data that is vaulted in the highly scalable ENOVIA Collaboration Platform. Users can create folders within each workspace with access privileges for secure content sharing with other team members. Administrators may assign default or "Home" folders for each user. Pre-defined folders may also be accessed through a pull-down menu. Local workspace management on the users' desktop allows users to easily compare their work-in-progress to the master designs in ENOVIA. Operations such as "delete," "move," and "copy" are part of the local workspace management feature set. Subscriptions allows designer to be notified when a design of interest is checked-in by another team member. ENOVIA Designer Central for CATIA V5 keeps track of the relationship between associated documents, such as schematics and layout, so traceability is never lost even when working with third party designers.

Notification
Rapid review of change ideas leads to faster design throughput. Users of ENOVIA Designer Central for CATIA V5 have the ability to subscribe to a design and set events for notification. When any user changes design in a work-in-process environment, all users that have subscribed to that design are automatically notified of the change, reducing last minute mistakes. Design change reports include status of new and modified designs as well as design that have been renamed.

Meeting capabilities
ENOVIA Designer Central for CATIA V5's online meeting capability enables design teams to review and collaborate on design data in real time. Discussion threads and markups are captured as part of the meeting and can be referenced at any time in the future.

Workflow
ENOVIA Designer Central for CATIA V5's workflow (or route) capability enables a designer to obtain feedback when an online meeting is not possible. Routes can be defined with serial or parallel tasks for review and/or approval of design content.

Visualization
Having the ability to work on designs independently of the authoring tools improves communication and reduces the likelihood of late changes in the design process. ENOVIA Designer Central for CATIA V5 includes a web-based visualization component. This capability, supporting a variety of document formats as well at native file formats, or for larger data sets, can be sent to a background process for translation in anticipation of future use. No files are downloaded to the client side, ensuring a secure work environment. In addition thumbnail images are also available in certain displays to aid users in distinguishing different versions of the same design.

CATIA Access Within ENOVIA
In order to facilitate the opening of a design found while in ENOVIA, users can directly start CATIA from the ENOVIA user interface. Once CATIA is active, the user simply selects a design for checkout.

The Role of ENOVIA V6 and PLM 2.0

ENOVIA Designer Central for CATIA V5 supports PLM 2.0, product lifecycle management online for everyone, and the ENOVIA V6 values: global collaboration innovation, single PLM platform for intellectual property (IP) management, online creation and collaboration, ready to use PLM business processes, and lower cost of ownership.

About Dassault Systèmes

As a world leader in 3D and Product Lifecycle Management (PLM) solutions, Dassault Systèmes brings value to more than 115,000 customers in 80 countries. A pioneer in the 3D software market since 1981, Dassault Systèmes develops and markets PLM application software and services that support industrial processes and provide a 3D vision of the entire lifecycle of products from conception to maintenance to recycling. The Dassault Systèmes portfolio consists of CATIA for designing the virtual product — SolidWorks for 3D mechanical design — DELMIA for virtual production — SIMULIA for virtual testing — ENOVIA for global collaborative lifecycle management, and 3DVIA for online 3D lifelike experiences. Dassault Systèmes' shares are listed on Euronext Paris (#13065, DSY.PA) and Dassault Systèmes' ADRs may be traded on the US Over-The-Counter (OTC) market (DASTY).
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About ENOVIA

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

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

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