



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

### **Product Overview**

ENOVIA® Collaborative Design for Pro/ENGINEER puts access to ENOVIA capabilities in the Pro/ENGINEER user interface, allowing designers to effortlessly access, manage, share, and store CAD design data without leaving their preferred environment. ENOVIA Collaborative Design for Pro/ENGINEER facilitates process workflow, increases data integrity, and improves configuration management. From Pro/ENGINEER, users can search and browse the ENOVIA system, and lock and checkout design or drawings to their local drives. After modification, users can upload changes to the ENOVIA system.

### **Product Highlights**

ENOVIA Collaborative Design for Pro/ENGINEER connects the Pro/ENGINEER application and ENOVIA® Designer Central™. It provides the CAD user with a rich set of design data management tools accessible from within the CAD application. ENOVIA Collaborative Design for Pro/ENGINEER organizes the native types of parts, assemblies, attributes, etc. in Pro/ENGINEER and maps those entities to associated items in the ENOVIA system that the entire corporation will understand.

### **Microsoft Windows Explorer-based Interface for Workspace Management**

A Microsoft Windows Explorer-based interface lets users access their local workspaces to perform lock/unlock, open, and refresh operations. Access is also available to ENOVIA workspaces and folder content, "My Locked Objects," "Collections," and "Recently Checked in Files." All ENOVIA managed data is represented to the user as if it is stored locally on the client. Users are able to utilize standard Explorer user interaction techniques to perform lock/unlock and open designs operations.

### **Product Structure Data Integrity**

The combination of ENOVIA Collaborative Design for PRO/ENGINEER and ENOVIA Designer Central provides a powerful solution in maintaining the integrity and timeliness of PRO/ENGINEER data in the Product Lifecycle Management (PLM) system. ENOVIA Collaborative Design for PRO/ENGINEER controls the relationships between PRO/ENGINEER entities and how they are presented in the database. When a drawing is created, it becomes the parent by the very nature of the internal reference to the part. Another example is when a structure is being checked out for loading in the CAD application. ENOVIA Collaborative Design for PRO/ENGINEER controls what must be checked out for proper assembly in the CAD application while ENOVIA Designer Central capabilities provide the user interface and business process accesses for the operation to be performed. Once files are checked out, data integrity issues may occur prior to checking the file back in to the ENOVIA system. ENOVIA Collaborative Design for PRO/ENGINEER provides an auto-recognition capability that gives the user confidence that on check-in the file will be associated with the proper revision/version stream in from which it was checked out. Another aspect of maintaining data integrity is the synchronization between the CAD designs and the objects stored in the PLM database.

### **Product Driven Designs**

Utilization of ENOVIA Collaborative Design for Pro/ENGINEER and ENOVIA® Engineering Central™ allows the automatic synchronization of a CAD design structure to an Engineering Bill of Material (EBOM). This link is critical to the correct representation of the intended design. "Start Design Templates" associate engineering parts during design check-in and creation. The CAD design is available immediately to the engineering community as a specification to the engineering part. Engineers may view a graphical representation of the associated specification.

### **Key Customer Benefits**

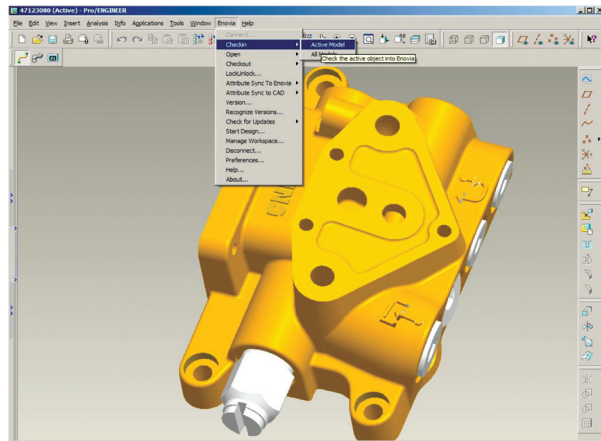
- Maintain accurate representations of the intended design in the PLM database
- Achieve centralized management of all CAD files
- Control work-in-process, engineering changes, data, documents, and dynamic configurations
- Give non-engineering personnel direct, task-specific access to current CAD data
- Reduce the possibility of redundant, inaccurate, or out-of-date product information
- Increase information sharing while protecting intellectual property from unauthorized access
- Achieve ISO compliance
- Improve design control and business process management to realize truly functional product development and delivery



### Quick Access

ENOVIA Collaborative Design for Pro/ENGINEER has been designed to allow 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 update the system frequently with their latest design versions, ENOVIA Collaborative Design for Pro/ENGINEER maintains a list of recently accessed designs that users can quickly reference for future download.

An additional menu is available from the ENOVIA menu in the CAD application that allows for search based on most recently accessed designs. Checkout is available directly from the display.



### Multi-Level Simplified Representations

Users that develop large structures utilize simplified representation. ENOVIA Collaborative Design for Pro/ENGINEER users may now utilize these representations at any level in the structure. As users check in/out structures, the relationships are maintained for each level.

### Attribute Synchronization for Large Structures

Updating metadata from ENOVIA to Pro/ENGINEER is often needed when loading large structures into Pro/ENGINEER. This is a time consuming process when there is interest initially in only a few components. When loading designs from the local disk into Pro/ENGINEER is attempted, ENOVIA Collaborative Design for Pro/ENGINEER checks for a live connection to the ENOVIA database. If a connection exists, the design is loaded into a session and the attributes are updated. If there is no connection, the user is prompted to connect, allowing for the metadata update; or to proceed without connecting, and loading the design without the metadata update.

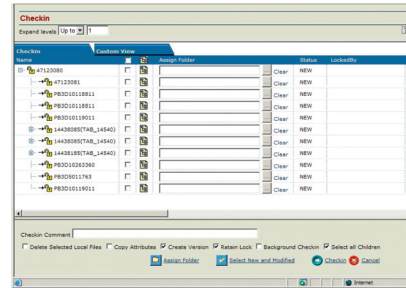
### Product Structure Maintenance

ENOVIA Collaborative Design for Pro/ENGINEER represents and maintains accurate, complex product structures throughout the product's lifecycle. The product maps and maintains relationships among assemblies, parts, and other application-specific items as users check-in and check-out items, or users browse the ENOVIA Designer Central vault contents. In addition, ENOVIA® Designer Central™ can store previous configurations to permit baselining and rollback. This also allows for virtual structure management through direct access to previous revisions/version combinations stored in the database.

### Revision Control

Organizations can maintain multiple revision trees of designs within ENOVIA Designer Central without manually creating new subdirectories or changing filenames. When ENOVIA Collaborative Design for Pro/ENGINEER users create a new revision, ENOVIA Designer Central

automatically saves it as a new business object, adds the sequential revision code to the item name, and relates it to the previous release. There is no need to propagate name changes interactively in the CAD application across files that reference the revised item.



### Design Team Collaboration

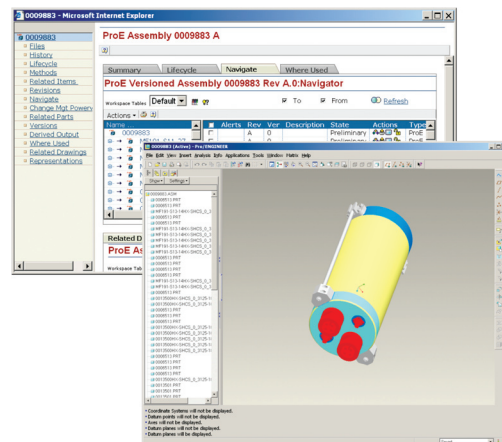
ENOVIA Collaboration Design for Pro/ENGINEER benefits from the following collaboration features in ENOVIA Designer Central:

- CAD structure and EBOM synchronization validation
- Advanced CAD structure management in ENOVIA
- Design data workspaces
- Quick access to most-recently used design data
- Mixed design flows between mechanical and electrical disciplines
- Notification of design modifications of interest
- Online collaboration meetings
- Web based design visualization without native CAD tool

ENOVIA Collaborative Design for Pro/ENGINEER provides the critical connection between the mechanical computer-aided design (MCAD) process and effective product development. By uniting the management power of ENOVIA Designer Central with the design and engineering power of ENOVIA Collaborative Design for Pro/ENGINEER, users are provided real-world control of the work-in-process product design environment.

### The Role of ENOVIA V6 and PLM 2.0

ENOVIA Collaborative Design for Pro/ENGINEER 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.



For additional information, contact us at:  
Dassault Systèmes ENOVIA Corp. 900 Chelmsford Street, Lowell, Massachusetts 01851  
978 442 2500 • ENOVIA.com • 3DS.com