ENOVIA VPLM V5.17 powers global collaboration

Overview
ENOVIA V5 VPM increases the flexibility and power of the collaborative Product Lifecycle Management (PLM) engineering desktop by delivering powerful new capabilities that allow engineers additional flexibility to define configuration filters on a combination of date, range, milestones or specifications. Engineers can rapidly build design context and display configuration information on parts to provide efficient design optimization processes.

ENOVIA V5 VPM provides robust customization options that maximize environment flexibility and ease of use to accelerate the ability of users to effectively leverage and optimize relational design processes.

ENOVIA DMU delivers enriched interference detection and analysis features to its real time Digital Mockup & Decision Support capabilities. This ensures the spatial integrity of the mock-up and provides users with more accurate analysis on specific product configurations. Enhancements to ENOVIA DMU deliver a more natural and fluid human manikin to product and environment simulations to enable more efficient and more accurate studies.

ENOVIA LCA provides more flexible business process support through real-time process optimization via ad hoc review and dynamic participants with E-PM based processes.

Additional Web services provided by ENOVIA LCA and ENOVIA V5 VPM enable deeper, process-based integrations, providing openness and scalability to optimize business agility.

Additional collaboration and access through 3D XML data leverages and extends the power of 3D across non-design activities and helps customers extend their global 3D collaborative environment.

Key prerequisites
ENOVIA VPLM runs on selected system levels of:
- Microsoft® Windows®
- IBM AIX®
- Hewlett Packard HP-UX
- SGI IRIX
- Sun Solaris

ENOVIA VPLM requires a properly sized database that uses either DB2® or Oracle.

Program number: For details, refer to the Program number section in this announcement.

Planned availability dates
- September 29, 2006, ENOVIA VPLM V5.17
- October 13, 2006, ENOVIA VPLM V5.17 (Japan)
- October 20, 2006, ENOVIA VPLM Web-based Learning Solutions V5.17

At a glance
ENOVIA VPLM V5.17 delivers the following features and benefits:
- Embeds advanced effectivity and configuration management in a single immersive workspace, dramatically improving designer productivity.
- Streamlines navigation and enhances GUI customization to search, understand and evaluate product and change impacts, improving ease of use and the ability to interpret relationships and changes.
- Deepens analysis and digital validation processes through more accurate and robust measurement and sectioning, and enhances the flexibility and reporting of the human builder.
- Manages, optimizes and standardizes business processes, allowing the organization to respond more rapidly to the demands of global collaboration and competition.
- Provides additional collaboration and access through 3D XML data to leverage and extend the power of 3D across non-design activities.
**AP distribution**

TO ALL ASIA PACIFIC COUNTRIES FOR RELEASE.

CTRY/Region  ANNOUNCED

ASEAN  Yes
AUSTRALIA  Yes
HONG KONG  Yes
PRC  Yes
MACAO  Yes
TAIWAN  Yes
KOREA  Yes
JAPAN  Yes
NEW ZEALAND  Yes

* Bangladesh, Brunei, Myanmar, Sri Lanka, India, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam

**Description**

For new and enhanced product descriptions, refer to the Additional information section.

**Accessibility by people with disabilities**

Owing to the graphics-intensive nature of its engineering design applications, this product has been granted a deviation for 2006.

**Product positioning**

ENOVOIA VPLM addresses the management and exploitation of intellectual property accumulated during the complete product development process, from product specification and definition through manufacturing process and resource definition and simulation. The development of all products is based on observed industry best practices such as widespread use of 3D, interference management, relational design, early manufacturing involvement and target-based development. The best practices are based on Dassault Systemes’ V5 architecture and make extensive use of rich product, process and resource (PPR) information.

There are four product lines available.

**ENOVOIA V5 VPM**

ENOVOIA V5 VPM helps enterprise users evaluate changes and improve decision making by leveraging real-time knowledge of the cause and effect relationships needed to optimize product quality, cost, and performance.

ENOVOIA V5 VPM offers a comprehensive, streamlined approach to managing the creation and maturation of the virtual product definition from the highest level of product hierarchy (product lines) to the lowest level of feature usage (geometric substitutes and alternatives).

With ENOVIA V5 VPM, engineers are able to extend the power of CATIA V5 knowledgeware and Relational Design with the assembly or entire portfolio in mind, eliminating part interference and increasing commonality across product lines and variants. Globally dispersed teams can engage in intense multidiscipline engineering collaboration 24/7, producing more designs in less time that are optimized for both manufacturability and market acceptance.

To increase the likelihood of market success, ENOVIA V5 VPM effectively allows development organizations to front load the design and validation of all possible product configurations and, if necessary, withhold critical go-to-market decisions until late in the life cycle to deliver precisely the product the market expects and the margins the company requires.

**ENOVOIA LCA**

ENOVOIA LCA helps global manufacturing organizations manage the complexity of product development processes across distributed value chains and the entire product life cycle —from concept to obsolescence.

ENOVOIA LCA delivers a unique set of integrated applications spanning engineering and manufacturing that supports the life-cycle management of the PPR definition in ENOVIA V5 VPM and DELMIA V5. The integrated development and validation of the virtual product and virtual factory helps manufacturing companies reduce design rework and costs, while significantly improving time-to-market.

Built upon flexible process-modeling middleware that integrates data and processes across PLM, enterprise resource planning (ERP), legacy, and other critical enterprise systems, ENOVIA LCA supports unique and changing business requirements of global manufacturing organizations. Having a consolidated view that includes all these functional aspects is crucial to increasing business agility and optimizing production schedules and development resources.

ENOVOIA LCA helps development organizations meet shrinking market windows by placing the latest product and process information such as configurations, maturity, where-used, 3D representations, and so on in a collaborative, Web-based environment that is always open for business, enabling real-time decision making across global value-chains.

**ENOVOIA DMU**

ENOVOIA DMU enables digital product simulation, analysis and validation. It improves product quality and accelerating decision making by providing real-time insight into real world product performance.

ENOVOIA DMU enables real-time visualization and review of the 3D product as it evolves, streamlining collaborative review and decision-making. It allows design teams to digitally build the product mock-up and its environment, and then analyze it to gain early insight into key factors determining design quality, product performance, and ultimate market success.

Using ENOVIA DMU testing and analysis tools, engineers can reduce and even eliminate the time and cost invested in building physical prototypes. More importantly, it allows them to spend more time innovating.

Seamlessly integrated within Dassault Systemes PLM solutions and designed for multiCAD environments, ENOVIA DMU facilitates digital mock-up validation and simulation from detailed design to maintenance. It provides extensive support for engineering processes such as interference detection and analysis, hybrid mock-up review, packaging and product synthesis, human ergonomics analysis, engineering data visualization and technical publication.

When ENOVIA DMU is used in conjunction with ENOVIA V5 VPM, the benefits and savings increase exponentially. It enables global organizations — from marketing to design to maintenance — to collaborate in real time using configurable 3D mock-ups, and to rapidly validate product variants during testing of design alternatives. With ENOVIA DMU, development teams can transform product information into business intelligence, improving decision-making and enabling faster time-to-market.
making and product quality across the enterprise value
chain.

**ENOVIA 3d com**

Leveraging both Web and 3D technologies, 3d com products are the ideal solution for anyone within a company who needs to have a single point of access federating all extended enterprise information to facilitate decision making, collaboration and access to the product life cycle pipeline. They target an extended enterprise-wide deployment level including those who are nonCAx users.

Alongside CATIA and DELMIA, ENOVIA is delivering an integrated and open PLM vision that is the cornerstone of product development for innovators throughout the world. ENOVIA customers are comprised of global leaders across an array of industry segments including aerospace, automotive, heavy machinery, industrial products, shipbuilding and petroleum, plant and chemical.

**Product positioning — Globalization**

ENOVIA VPLM program integrated information (PII) and softcopy product information are available in:

- French
- German
- Japanese
- Chinese
- Korean

4 ENOVIA 3d com, ENOVIA LCA, and ENOVIA V5 VPM only

PII is stored in compressed unicode format (UTF-8) for worldwide exchange without the loss or misinterpretation of characters.

**Hardware and software support services**

*SmoothStart™/installation services*

IBM SmoothStart and Installation Services are not provided.

**Reference information**

For information about PLM V5.17, refer to Software Announcement AP06-0194, dated September 5, 2006.

For information about CATIA V5.17, refer to Software Announcement AP06-0195, dated September 5, 2006.

For information about ENOVIA VPLM ENOVIAPVM V1.6, refer to Software Announcement AP06-0199, dated September 5, 2006.

For information about CAA RADE V5.17, refer to Software Announcement AP06-0198, dated September 5, 2006.

For information about ENOVIA SMARTTEAM V5.17, refer to Software Announcement AP06-0197, dated September 5, 2006.

**Availability of national languages:** ENOVIA 3d com, ENOVIA LCA, and ENOVIA V5 VPM are available in:

- French
- German
- Japanese
- Chinese
- Korean

ENOVIA DMU is available in:

- French
- German
- Japanese

Product integrated information (PII) is included on the code CDs at general availability. Softcopy publications are available as follows:

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<thead>
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<th>Feature</th>
<th>Description</th>
<th>Language</th>
<th>Feature number</th>
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<tr>
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<td>French (SK3T-0617)</td>
<td>7101</td>
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<tr>
<td>ENOVIA VPLM WLS for DMU is available in:</td>
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<td>French (LCD4-7859)</td>
<td>7132, 7133</td>
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<td></td>
<td>French (LCD4-7859)</td>
<td>7132, 7133</td>
</tr>
</tbody>
</table>

National language deliverables are available after general availability.

Refer to the ENOVIA Packaging section for a complete list of national language deliverables.

**Program number**

- **ENOVIAPLM**
ENOVIA -- MultiPDM -- OP Plug-In 5691-OGL
ENOVIA -- MultiPDM -- SMARTTEAM Plug-In 5691-SML

ENOVIA add-on products (AOPs)

ENOVIA -- DMU Digital Plant & Ship Review 1 5693-PR1
ENOVIA -- VPM Supply Chain Engineering Exchange 5693-WPE
ENOVIA -- VPM Electrical Cable Route Management 5693-ECV

Common products

Can be ordered with CATIA and/or
ENOVIA VPLM configuration orders:

DMU Fitting Simulator 2 5691-FIT
DMU Kinematics Simulator 2 5691-KIN
DMU Optimizer 2 5691-DMO
DMU Engineering Analysis Review 2 5691-ANR
DMU Fastening Review 2 5691-FAR
Photo Studio 2 5691-PHS
Photo Studio Optimizer 2 5691-PSO
Human Builder 2 5691-HBR
Human Measurements Editor 2 5691-HME
Human Posture Analysis 2 5691-HPA
Human Activity Analysis 2 5691-HAA
Real Time Rendering 2 5691-RTR
MultiCAx -- ID Plug-In 5691-IDL
MultiCAx -- UD Plug-In 5691-UDL
MultiCAx -- SolidWorks Plug-In 5691-DWL
MultiCAx -- SE Plug-In 5691-DEL
MultiCAx -- Ad Plug-In 5691-DAL
MultiCAx -- PD Plug-In 5691-PDL
MultiCAx -- STEP Plug-In 5691-DTL
MultiCAx -- IGES Plug-In 5691-DGL

Common add-on products --
Can be ordered with CATIA and/or
ENOVIA VPLM configuration orders:

DMU Space Analysis 1 5693-SPI
DMU Fitting Simulator 2 5693-FIT
DMU Kinematics Simulator 2 5693-KIN
DMU Optimizer 2 5693-DMO
DMU Engineering Analysis Review 2 5693-ANR
DMU Fastening Review 2 5693-FAR
DMU Dimensioning & Tolerancing Review 1 5693-DT1
Photo Studio 2 5693-PHS
Photo Studio Optimizer 2 5693-PSO
Human Builder 2 5693-HBR
Human Measurements Editor 2 5693-HME
Human Posture Analysis 2 5693-HPA
Human Activity Analysis 2 5693-HAA
Real Time Rendering 2 5693-RTR
ENOVIA LifeCycle Applications SPO 5628-LCA

ENOVIA VPLM WLS

Product name | Program number
--- | ---
ENOVIA User Companion for VPM V1.6 | 5691-VMC
ENOVIA User Companion for VPM V1.6 --- for use with ENOVIA VPM V1.6 | 5795-VMC
ENOVIA User Companion for DMU -- Enterprise Option | 5691-DNC
ENOVIA User Companion for LCA -- Enterprise Option | 5691-LCC
ENOVIA User Companion for V5 VPM | 5691-VNC
ENOVIA User Companion for V5 VPM --- Enterprise Option | 5795-VNC

Common products

Can be ordered with CATIA and/or
ENOVIA VPLM configuration orders:

DMU Fitting Simulator 2 5691-FIT
DMU Kinematics Simulator 2 5691-KIN
DMU Optimizer 2 5691-DMO
DMU Engineering Analysis Review 2 5691-ANR
DMU Fastening Review 2 5691-FAR
Photo Studio 2 5691-PHS
Photo Studio Optimizer 2 5691-PSO
Human Builder 2 5691-HBR
Human Measurements Editor 2 5691-HME
Human Posture Analysis 2 5691-HPA
Human Activity Analysis 2 5691-HAA
Real Time Rendering 2 5691-RTR
MultiCAx -- ID Plug-In 5691-IDL
MultiCAx -- UD Plug-In 5691-UDL
MultiCAx -- SolidWorks Plug-In 5691-DWL
MultiCAx -- SE Plug-In 5691-DEL
MultiCAx -- Ad Plug-In 5691-DAL
MultiCAx -- PD Plug-In 5691-PDL
MultiCAx -- STEP Plug-In 5691-DTL
MultiCAx -- IGES Plug-In 5691-DGL

Common add-on products --
Can be ordered with CATIA and/or
ENOVIA VPLM configuration orders:

DMU Space Analysis 1 5693-SPI
DMU Fitting Simulator 2 5693-FIT
DMU Kinematics Simulator 2 5693-KIN
DMU Optimizer 2 5693-DMO
DMU Engineering Analysis Review 2 5693-ANR
DMU Fastening Review 2 5693-FAR
DMU Dimensioning & Tolerancing Review 1 5693-DT1
Photo Studio 2 5693-PHS
Photo Studio Optimizer 2 5693-PSO
Human Builder 2 5693-HBR
Human Measurements Editor 2 5693-HME
Human Posture Analysis 2 5693-HPA
Human Activity Analysis 2 5693-HAA
Real Time Rendering 2 5693-RTR
ENOVIA LifeCycle Applications SPO 5628-LCA

ENOVIA LCA and ENOVIA V5 VPM configurations

ENOVIA -- Casual User 5691-CUR
ENOVIA -- Professional User 5691-MGR
ENOVIA -- System & Data Administrator 5691-NVR
ENOVIA -- Security Administrator 5691-ADR
ENOVIA -- VPM Engineer Cfg 5691-VER
ENOVIA -- VPM Product Design Cfg 5691-DER
ENOVIA -- Vault Administrator Cfg 5691-VAR
ENOVIA -- VPM DMU Review Cfg 5691-VDM
ENOVIA -- LCA Product LifeCycle Review Cfg 5691-LCR
ENOVIA -- LCA Product LifeCycle Management Cfg 5691-LCM
ENOVIA -- LCA Enterprise Process Management Cfg 5691-LCP
ENOVIA -- LCA System & Users Administration Cfg 5691-SUA

ENOVIA LCA and ENOVIA V5 VPM shareable products

ENOVIA -- Engineering Change Management 5691-ECM
ENOVIA -- EBOM Detailing and Configuration 5691-PAS
ENOVIA -- Product Definition 5691-PDC
ENOVIA -- Program Management 5691-PGM
ENOVIA -- Product Interference Management 5691-PIM
ENOVIA -- Product Variant Management 5691-PVM
ENOVIA -- Structures Penetration Management 5691-SPM
ENOVIA -- Action Editor 5691-AED
ENOVIA -- Document Management 5691-DMT
ENOVIA -- LCA Workflow Definition 5691-WDF
ENOVIA -- Supply Chain Exchange 5691-SCX
ENOVIA -- PPR Hub Gateway 5691-PGM
ENOVIA -- PPR Hub STEP Part 21 Adapter 5691-STH
ENOVIA -- PPR Hub SA Adapter 5691-HSD
ENOVIA -- VPM Supply Chain Engineering Exchange 5691-WPS
ENOVIA -- LCA Enterprise Process Management 5691-EMP
ENOVIA -- LCA Enterprise Process Definition 5691-EPO
ENOVIA -- VPM Electrical Cable Route Management 5691-ECV
ENOVIA -- LCA Product Simulation Management 5691-PSL

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UNIX is a registered trademark of the Open Company in the United States and other countries.

Other company, product, and service names may be trademarks or service marks of others.
Additional information

This section describes the new products and enhancements to previously announced products delivered in this release. Refer to the ENOVIA VPLM product matrices section of the Additional information section for details. For full descriptions of new and previously announced ENOVIA products, visit http://www.ibm.com/solutions/plm.

To get to the ENOVIA page, select ENOVIA Products. On the ENOVIA page, select an ENOVIA product set.

Enhanced ENOVIA VPLM products

ENOVIA — 3d com Navigator (PNR): Refer to the Software requirements section for additional support highlights for V5.17.

ENOVIA — Web Viewer (W3N)

• Relationship navigator
  - Save Session
    -- Save relationship navigator expansions and restore them.
    -- Improved Refresh All functionality and ability to perform Auto Refresh actions.
  - Expansion Control — Automatically expand relationships recursively to show all child parts in an assembly with a single click and perform multi-relationship selections.

• Usability
  - Explorer view is usable by all adapters.
  - Icon choices are available to provide appropriate size preferences for the end user.
  - Quick Search Ordering solution is now available.

• View Assemblies in Context — All parts are sent to the viewer with correct positioning. Configured expansions are respected when loaded into the viewer, which improves performance and usability.

ENOVIA — Web Viewer (W3V): In V5.17, the name of the W3V product has changed to ENOVIA — Web Viewer. This combines two former products: ENOVIA — 3d Com Web Viewer (W3V) and ENOVIA — LCA Web Viewer (WVR). The WVR product is being withdrawn.

Note: W3V is now a common product to ENOVIA 3d com and ENOVIA LCA.

PLM Commands — Additional flexibility is added to the Web viewer to provide direct access to PLM commands from the viewer using contextual menus. Before this enhancement, contextual menus provided only basic functionality to the user, such as: Hide, Reframe On/Off, Remove to manipulate and view part structures.

With PLM commands, clients can customize their viewer and add PLM commands for items — such as Display attributes, Highlight in attributes list — to provide key functionality from a mouse click within the viewer environment.

ENOVIA — MultiPDM — CDM/VPM Plug-in (VPL)

• PSN® VPM-NT capabilities: The new PSN capabilities are identical to those provided on UNIX®:
  - A PSN graph is available for designers to easily navigate on the structure by performing zoom, pan, reframe, and expand/collapse, and to directly access commands on selected nodes using contextual menus.
  - To complement the navigation, a toolbar provides depth expansion, configuration handler selector, selected node browsing, and existing PSN selector. The PSN toolbar enables access to static PSN commands such as Select Under, Commit modifications, Highlight config parameters, and Open Clashes and Filtering. It also provides access to general PSN CATlet options: new PSN from same node, Load / Save PSN, Collapse Node / Assembly, Reset, and PSN Settings.
  - Replace Custom part — Users can replace a part with a set of other parts defined by a user-exit. This function is available from the contextual menu on any part (except the root part) in any PSN.
  - Copy paste effectivity — Two new items are added into the PSN graph contextual menu: Copy effectivity and Paste effectivity. These new functions enable users to re-apply an already defined effectivity to other parts.

Product Structure Navigator

ENOVIA — DMU Navigator 1 (DU1)

• Scripting and Journaling supported on the AIX® 64-bit platform to improve user productivity.

• Annotated views enhanced for sections — Displays the annotated view simultaneously in different windows to improve understanding of the issues.

• Productivity: New ability to generate voxelisation of a geometry (vps files) in batch mode (CATDMUtility). The vps files enable improved performance of dynamic clash computations.

• Performance, Capacity, and Scalability (PCS) — Delivers a gain of factor 3 on specific proximity query computation scenarios.

• DLName search is enhanced.

• 3D XML
  - Open/Save the view/light configuration
  - V5 Open/Save for Sub Element Graphic Properties Overload

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.
Support Properties change for 3D annotations through Options Panel

**ENOVIA — DMU Navigator 2 (DMU):** In addition to ENOVIA DMU Navigator 1 (DU1) enhancements, ENOVIA DMU Navigator 2 (DMU) has additional enhancements (Platform 2 (P2) only).

**P2-only enhancements**

- Cumulative snap — This release adds support for inverting by rotation. User can snap a component and then rotate it along two relative axes.
- CATDMUBuilder — 3D XML can now be generated from an assembly stored in ENOVIA or file-based. It enables users to handle large assemblies.

**ENOVIA — DMU Navigator 3 (DU3):** Refer to the ENOVIA — DMU Navigator 1 (DU1) and ENOVIA — DMU Navigator 2 (DMU) sections for descriptions of the enhancements for this release.

**ENOVIA — VPM Navigator (VPN)**

- Increased productivity for product extraction for supply chain exchange: The new ENOVIA / Send to file command enables transfer from ENOVIA VPLM database to a file-based directory with better capability and productivity. This completes the ENOVIA VPLM offering for supplier exchanges and enterprise integration.

  This command supports large product transfer not previously possible and provides smart options to manage latest target directories, overwrite of files and links consistency between all the documents. It is available from the ENOVIA menu, VPM Navigator tree (root node), Query result and Impact Graph.

- Customization enhancements
  - New software openness enables user to customize the display name of ENOVIA V5 documents in CATIA V5 from the existing attribute mapping functionality. This customized display name is shown in all generic CATIA windows: File menu, Document authoring windows, Message popup, and so on. This provides a more comprehensive view for the users when dealing with ENOVIA VPLM documents inside CATIA.
  - Customers can now define their own icons for each type of VPM entity displayed in the VPM Navigator trees. This tree icon customization improves usability. Many types, such as document types (CATParts, Drafting, and so on), can be addressed.
  - The VPM search capability, query object in the database, now supports the search of objects on different and customized environments

- Search and navigation
  - The list of query operators has been drastically increased to provide a much more precise option for users to find information.
  - Some navigation scenarios do not require seeing documents attached to the product structure, such as when the user wants to work on the parts instance (for example, building a working session for design in context). A new Expand All command allows user to expand the product structure tree with or without the document nodes.

- VPM Navigator infrastructure
  - Scripting and journaling support on AIX 64-Bit

**ENOVIA — VPM Relational Design (RLD)**

Ergonomics improvements

- VPM Session open mode (browse only, link only, edit and link) choice is now persistent for improved user comfort.
- Multi-selection is now available for Expand and ExpandAll in the Impact Graph for navigation productivity
- Naming of nodes can now be managed through boxes with multiple line for better layout and enhanced visibility in the Impact Graph. This completes name display customization from ENOVIA VPM Navigator (VPN) product.

**ENOVIA — VPM Configured Product Design (CGP):** V5.17 enhances the versioning process through the VPM Navigator. It empowers methodologies for concurrent design and provides more flexibility to the teams to explore alternate studies. This leads to faster development for more innovative products.

- In addition to the existing synchronization to the last version, the following options are now proposed: the last frozen version, any version, or any selected version. Designers can easily develop their own study, relying on approved version of parts made by peers, when in work versions exist concurrently. They can also choose to check their design with the up-to-date version or an older version to better understand the changes.
- Relational design benefits from this flexibility with the added capability of rerouting a document link to any version of this document. It can be the last one, the last frozen version, any version, or any selected version. Designers can easily develop their own study, relying on approved version of parts made by peers, when in work versions exist concurrently. They can also choose to check their design with the up-to-date version or an older version to better understand the changes.
- Designers have better control when versioning parts with regard to the maturity status rules they have put in place: for instance, part versioning may be authorized only from already frozen parts. Leading to clear part status for their version and their maturity, designers always have the right information relative to the last frozen version.

V5.17 broadens the scope of configuration management of VPM Navigator with enhanced capabilities for the designers to filter and analyze the configured products:

- Designers now have the capability to define configuration filters directly from VPM Navigator. Filters on a combination of date, range, milestones or specifications can be defined, saved, and modified. In addition, modification filters can be applied on top of this configuration filter.
• Users easily find already defined configuration handlers using a search command when they want to filter the product they are working on. This becomes especially productive when dealing with a large number of configuration handlers on highly configured products such as planes or trucks.

• Designers can now retrieve the effectivity of a configurable object in order to understand more about the configuration context in which they are working. This information is directly available from the properties panel of any configurable object.

V5.17 provides more productive and secured methodologies to manage concurrent access and track changes as well as extending the attachment to analysis documents:

• Time and interactions are drastically reduced for the users to manage the lock of product and part instances inside the CATIA session. Product and part instances can be displayed in the Save panel or in the Working Environment Dashboard, so they can be locked directly from here.

• Security is enhanced for customers who want to track all changes made in the product structure by actions. An option now forces the user to provide an Action object before saving the changes performed on a Configured Product.

• Multidiscipline collaboration is reinforced with the capability to attach analysis documents to a part. Access to this information becomes easier, as does life-cycle management, directly visible and linked to the part on which they depend.

ENOVIA — VPM Work Package Exchange (WPE)

• When applying product reconciliation, the lock status is checked on the different objects and the lock is done automatically on those that need to be modified. This greatly enhances batch processes with an integrated management of locks and facilitates user operations in interactive mode during the save operation.

• The 3D preview of the VPDM object, with cache option set on, enables access to either the 3D representation in DMU cache (if it is up to date) or to the cgr (if available) stored in ENOVIA VPLM as an alternative representation.

• A new tab is provided in addition to the List view and the 3D Viewer that compares the attributes defined for a given part, which may have been changed during the exchanges.

• Parts and documents can be incorporated as a new version or revision directly from the reconciliator tool. This enhances productivity by replacing the previous two-step operation in the interactive mode (the use of overwrite rule in the reconciliator and the new version/revision in the save panel). It has even more value in batch mode as the reconciliation rules and versioning management can be handled in a simple way.

• Several options in the extract batch utility enable the user to complete the list of documents to extract using the same information provided by the VPM Navigator impact graph. Those options have a huge added value for extracting all the information linked together by the relational design approach. For instance, it enables the user to retrieve and extract the parts or assembly linked to a drawing or an analysis.

• Usability

• A progress bar is now displayed when performing a global query as well as an interrupt command to stop the query.

• The new document mapping from Virtual Product Development Management (VPDM) graph view completes the mapping of product leaves which was already possible in the CATIA view: a two step operation was necessary before to execute this task.

• Previsualization of drawings is now possible in order to help decision during the comparison.

• The user can memorize criterion parameters during reconciliation session (if re-running the same query twice).

• Global set is available only on the selected sub-tree.

• A report of the reconciliation choices made by the user can now be generated. This report is generated directly by a command available in the reconciliator. The layout of the report could be customized through definition of an xsl document that needs to be declared in reconciliation settings. The report will be displayed in an html viewer that also allows user to print the report.

• The new Document view presents documents to be reconciled as a tree of documents. It presents documents to be reconciled as a tree of documents.

• V5.17 enables reconciliation on catalogs and CATMaterial as publication exposed to complete the information that can be exchanged seamlessly between OEM and suppliers.

• Users can develop their own customized criterion for queries from an XML format they have defined. This adds the existing queries.

• V5.17 provides a new Global Set to automate the mapping by comparing the instance tree in the CATIA view to the VPDM instance tree in the VPDM view. Automatic mapping is important in case the product structure is exposed. Document at the leaf of the product structure (CATPart or CATProduct in Publication exposed) will be mapped.

• CATDrawing documents containing 2D component used in another CATDrawing can now be reconciled in reload mode (detail-ditto external links).

ENOVIA — VPM Electrical Cable Route Management (ECV)

• Export electrical work packages — Export only changed objects and update route status if cable route is impacted: The export work package command has been enhanced so it modifies the cable route status only if the exported data affects the cable route. This new relevant management of cable route status avoids revalidating cable routes that have not been affected.

• Analyze hanger data using light cable way network and the electrical database; analyze cable data using the electrical database.

Embedded in Electrical Cable Routing workbench, the Manage Cables from database command has been enhanced to allow the user to select a cable and analyze it: all the related information, such as cable category, length, diameter, and so on are displayed in a panel that can be saved as a text file. In addition, the user can also select a light network display object,
or key in an instance ID, to display the analysis of the associated hanger data.

- Allow optional cable routing rules — Update cable route status to reflect used cable routing rules.

V5.17 provides flexibility with cable route rules management: Users can now define which routing rules to check or not during routing, from the Manage Cables from Database command through a new option button called Routing Options. Once selected, the user has the option to check and uncheck each individual rule, and to define the level of validation (from no rules violation, report violations, or no validation).

The options can be pre-selected and limited through Tools/Options by an administrator. Then, the cable route status will reflect the routing rules options that have been chosen. Supervisors can change the validation status to be overridden if the status is Fully Routed and the Validation Status is Rule Violated.

- Delete a subset of a route (full or partial) by deleting nodes from the route.

Users can now delete a portion of a cable route from the main panel of Manage Cables from Database. Using the new command, users select the From and To elements they intend to delete.

- Select a subset of cables that are defined in the context. Only these cables are processed and displayed in the Cable Route Management panel.

The query of cables by equipment, schematic, or all cables now only return the cable names and their status in first step. This drastically reduces memory consumption and improves performance of getting the related cable routes from the database. The user can then pick the cables in which he/she is interested in order to get more complete information on them.

- Enhance cable way network to show From/To equipment, From/To entry labels, and connectivity issues.

Users can select a cable in order to display the From and To equipment locations in the light network so they can see where to route to and from. This is especially helpful when doing partial routing as both the equipment locations and the partial route will be displayed at the same time.

- Manage lock/unlock of cable routes

Concurrent engineering has been enhanced by managing lock/unlock of cable routes directly. Users can now check and optionally lock or unlock the cable routes. It avoids several users interacting on the same cable route and having any issue on a concurrent saving of their tasks.

This locking and unlocking management uses the standard ENOVIA VPLM lock/unlock mechanism and can be managed directly from ENOVIA VPM Navigator commands.

- Support ENOVIA VPLM report integration for electrical cable database

In addition to the existing macros that create reports on electrical cable route information, ENOVIA LCA Navigator reporting tools now include out-of-the-box reports and new style sheets for creating reports on this information. Users can customize their output sheets, and these reports can then be saved in different formats such as XML, HTML or CSV for a further application.

- Includes electrical database checking tool

Users can now check and clean any unnecessary data that may have been left behind as a result of other electrical cable database processes. This allows electrical commands to run more efficiently and will conserve space in the database. This new command is now available from the Electrical Cable Database Exporter toolbar. Unnecessary data can correspond to different types such as unused cable references, no longer used workpackages, publications or cable objects.

- ENOVIA — Applications Desktop (ADK): Refer to the Software requirements section for additional support highlights for V5.17.

- ENOVIA — Product Definition (PDC): A new capability to cut, copy, and paste Generic Components (GCO) in Component Editor when defining Generic Components (GCO) greatly enhances user productivity. These new GCOs can be linked to the current product root class (PRC) or copied to another one.

- ENOVIA — EBOM Detailing & Configuration (PAS): V5.17 delivers more powerful and customizable product specification and configuration handlers, and improves usability:

  - Product specifications can now have associated documents in the same way as parts or products. Enhancing knowledge capture and sharing, it allows their visibility, from LCA Navigator or Product Editor, as well as their direct extraction through the send to command.

  - Users can now create customized product specifications and configuration handlers by a direct access to Identity-Card form during their creation. They can also add attributes specific to their process to these two objects, leading to better defined, more efficient searches.

  - Product Specification checking during its creation enables now to displays all the violated rules in a warning panel, enhancing user diagnosis on these errors.

  - V5.17 enables dynamic configuration filters from action/modifications as a computation of stored search criteria. Using dynamic configuration filters, the users have an up-to-date product configuration without changing the criteria.

  - V5.17 provides usability enhancements for product specification and configuration handlers management:

    - Direct access to Sheet Editor from the search result panel is now provided on product specifications and configuration handlers

    - From the sheet editor, the following commands are directly available on these two objects, leading to better productivity:

      - Open and edit the filter criteria
      - Change status
      - Create new version
      - Edit the attributes

V5.17 delivers productivity enhancements and more openness for effectivity definition:

- Effectivity of an instance can now be driven with a NOT operator on a specification: Conditional configuration
becomes very simple on specific cases. For instance, when a specification drives the presence of equipment, the user can now define, in one step, the need of a plastic cover, when this specification is not satisfied, to hide the missing equipment.

- Effectivity definition, based on specifications, is also simplified as empty categories or categories with not authorized specifications are now hidden from the list.

- A new filtering option is provided for product structure expand with configuration filter to hide or show the instances that have an unresolved add operation. This occurs when a configuration expert has not yet assigned effectivities to an operation (add, cut, replace, move). It provides flexibility for other users to filter out these instances that are not yet fully defined.

- A user exit for the specification chooser allows customers to do their own checks and validations against the selected specifications, when other existing applications are used to manage these dedicated tasks. Depending on the result of the check, the user may continue or receive a message dealing with a conflict in the choice.

- Instances computed effectivity can now be added to the file generated by the Export XML function, which supports XML, HTML, and TEXT exports for the Product structure. This enables the customer to share more information with third parties, such as effectivity dates or range.

V5.17 increases usability and productivity for navigation on actions and GCOs as well as replacement of reference on a product.

- Actions and Engineering Change Orders (ECO) are now displayed in the Where used graph, for item or product instances. This enables user to retrieve directly from Product Editor affected actions, reducing the number of steps to find this information for the users.

- In addition, the Where used graph from Product Editor enables user exit to limit the number of instances displayed at one time based on filter applied. It provides more meaningful results to the customer instead of all the instances displayed without filtering capability.

- V5.17 enhances productivity and avoids errors due to multiple interactions by allowing user to replace a reference on a multi-selection of part instances in Product Editor on the selected product.

- After refresh, the GCO tree layout is now kept as it was before for a better user comfort, avoiding manual operations to rebuild the layout.

**ENOVIA — Product Interference Management (PIM):**
Reviewers can multi-select clashes in the results list of the clash manager panel in order to perform a single operation on multiple occurrences.

**ENOVIA — Structure Penetration Management (SPT)**
- Penetration Management has a new and improved workflow environment consisting of ENOVIA — LCA Enterprise Process Management (E-PM) and IBM WebSphere® MQ Workflow.
- Structure Penetration Management fully supports the new Structural System designed with CATIA — Structure Functional Design 2 (SFD) and CATIA — Ship Structure Detail Design 2 (SDD).

**ENOVIA — Engineering Hub (EPI)**
- Cross highlight between ENOVIA LCA and CATIA when selecting parts below a work package — The cross-highlight capability of the Identify in ENOVIA LCA command in CATIA V5 is extended to parts belonging to a work package. The user can now easily identify the work package containing the selected part because it is directly highlighted in the ENOVIA Product Editor interface.

- Capability to disable the automatic naming of part reference or document during the save operation — When this option is active, the user can now manually rename the document or the part number of part reference before saving.

- DMU mode: large assembly optimization for review and applications — A new option, View Product Structure Only, enhances the performance and memory usage by loading only the necessary information for the selected product in order to manage and work on ENOVIA DMU reviews, functional tolerancing and annotations as well as knowledgeware information contained in technological packages.

**ENOVIA — LCA Navigator (LCN)**
- Improved user productivity and ease of use
  - RelNav Ergo — Provides users control to zoom and modify viewing size within the application.
  - RelNav Save Session — Allows users to save RelNav expansions and restore them, capability to refresh all, and Auto Refresh functionality.
  - ENOVIA — LCA Navigator usability — Provides users choices for icon sizing, enables the explorer view to be usable by all adapters, added Quick Search Ordering function, and new nested toolbars and contextual menus.
  - View Assemblies in context in LCA Navigator Web Viewers — provides improved performance by sending *.cgrs to the viewer if this format is available (if *.cgrs are not available, CATIA documents will be tessellated), all parts are being sent to the viewer with the correct positioning, and if a configured expansion is sent to the viewer, this configuration will be respected when loaded into the viewer.

- Web to Win launch — Easy to learn and deploy Web-based solutions allow end-users to open selected products directly in ENOVIA V5 VPM Navigator from their Webtop applications.

- Viewer command selection — Enables information exchange between the viewer component and other components, further integrating the viewer within the LCA Navigator collaborative framework.

- Engineering Hub to Manufacturing Hub change process integration — Improvements to the change management process between ENOVIA VPLM and DELMIA provides a mechanism allowing customers to define the validity checks needed within DELMIA before a change can be approved. This provides improved openness of the change process validation.

**ENOVIA — LCA Document Management (DCM)**
- Full text search — Users can search for documents based on text stored in the file, which provides extended content searching.

- Ability to create and attach documents in fewer clicks — Using a widget, users can create and attach a
document to a PLM object, providing improved usability and limiting the number of steps to complete these tasks.

- Multi-file uploads — Additional functionality is added to let users upload multiple files from a file system and to create documents in ENOVIA VPLM.
- Deletion of sheets — Enhanced function prevents renumbering when a sheet is deleted.
- Improved iteration and format navigation — Provides a consolidated view of all iterations and corresponding formats in Document Properties, as well as contextual commands specific to iterations and formats.

**ENOVIA — LCA Change Management (CGM)**

- Advanced search using effectivity — Using a configurable object associated with an action or ECO, searches can be performed using this relationship. The search can also be further refined using its effectivity values (for example, Range-Range type or Date-Date type values).
- Distribution for related objects from ECOs to actions — Easy and efficient method to distribute the various types of ECO related objects to all the updatable actions associated with the ECO.
- Copy/Paste functions — Improvements made to significantly reduce the number of mouse clicks necessary to paste an ENOVIA VPLM Object as an Action Affected Object when the number of objects to paste grows large.
- Ability to capture the creation of documents under a Part/Product as an Affected object — Improvements to process automation by automatically capturing this operation as an affected object when changes are made under the control of an action and minimizing manual activities for the user.

**ENOVIA — LCA Enterprise Process Management (E-PM)**

- Object navigation and accessibility: Improved user interface and navigation for Enterprise Process Management (E-PM),
  - Allows check-out/force finish of work item behavior
  - Allows a consolidated User Profile UI dialog to easily view and modify user settings
  - States icons in List View
  - Supports sub-process navigation through properties sheet and the Relationship Navigator
  - Improves object navigation for E-PM objects with the elimination of intermediate objects
  - Allows single user interface to attach existing object or create as a new object and attach to Processes and Activities
  - Supports navigation from Work Item to Activity Instances
- Enhanced MQ messaging
  - Enhancements to error handling, providing improved server side traces for the “error queue” and “error logs”
  - Propagation of Application level errors back to E-PM and notification of appropriate users (Admin) to take corrective actions.
  - Support for chaining of commands within a single request message from E-PM
  - Improved definition and modeling of ENOVIA LCA automatic activities in terms of usability and efficiency
- **E-PM Templates: Migration for ENOVIA LCA Workflow process templates for E-PM**
  - Mapping and transforming Entities from XPDL format to FDL format.
  - Provides missing data to conform to Flow Definition Language (FDL) format.
  - Delivers command line utility to run the model translation
- **VPM V4 workflow interoperability**
  - Attach VPM V4 Objects (Part, Document and Model) to E-PM Processes and Activities interactively
  - Trigger the creation of VPM V4 Actions from E-PM activity and wait for the completion of Action before completing the activity
  - Support the creation of Child VPM V4 Actions based on E-PM loop activity
  - Support the navigation of E-PM and the associated VPM V4 objects in Relational Navigator
- **Dynamic process behaviors**
  - Support for ad hoc review and dynamic approval activities
  - Graphical monitoring to create, maintain and view public routing slips as well as ad hoc reviews
  - Capabilities provided to perform multi-instance activities
  - Report enhancements to account for dynamically added activities
- **E-PM Reporting that provides easy report creation on complex relationships and offers more graphical presentation.**
  - Improved content and access to objects and relationships
  - Additional function to define comparable Process/Activity numerical attributes and view them with selected chart components (Point graph, Line graph, Bar graph, Pie graph)
  - Further advantage of the ENOVIA LCA reporting infrastructure capabilities
- **Installation User Interface — Easy to perform setup for MQ Series, MQ Workflow, and the E-PM database.**

**ENOVIA — Document Management (DMT)**

- Deletion of sheets — Enhanced function eliminates need to renumber when a sheet is deleted.
- Access control to design document data — Implementation of CAA user exit prevents unauthorized users from sending vaulted design data from ENOVIA VPLM to CATIA.

**ENOVIA — Engineering Change Management (ECM)**

- Advanced search using effectivity — Using a configurable object associated with an action or ECO, searches can be performed using this relationship. The search can also be further refined using its effectivity values (for example, Range-Range type or Date-Date type values).
- Distribution for related objects from ECOs to actions — Easy and efficient method to distribute the various
types of ECO related objects to all the updatable actions associated with the ECO.

- Copy/Paste functions — Improvements made to significantly reduce the number of mouse clicks necessary to paste an ENOVIA VPLM Object as an Action Affected Object when the number of objects to paste grows large.

- Capture the creation of documents under a part/product as an Affected object — Improvements to process automation by automatically capturing this operation as an affected object when changes are made under the control of an action and minimizing manual activities for the user.

ENOVIA — Product Variant Management (PVM)

- Enables associating documents to product specifications
- Includes Configuration Management usability enhancements

ENOVIA — PPR Hub Step Part 21 Adapter (STH): Migration of multisheet VPM V5 to TOC ENOVIA VPLM V5

ENOVIA — LCA Multisite System Administration (SYA): Activate/deactivate replication requests

ENOVIA — System & Data Administration (SAN)

- In session and decision support reporting — ENOVIA LCA customers leverage the reporting functionality for decision support. Reporting is used in several stages in a product life cycle to track maturity and progress of products that are being defined and developed.

- E-PM installation improvements — Enables automation of most of the post installation deployment tasks related to WebSphere Application Server and MQ Workflow for E-PM product on WebSphere.

- Simulate replication capability — The user can find out exactly what objects will be included in a replication package or an extraction stream.

- Allows replication of Table of Contents (TOC) objects.

- Includes replication package management in LCA Navigator — enhanced user interface.

- Includes configuration replication business objects (RBO) remodeling.

ENOVIA — System & Data Administration (POS)

- Location aware computing — Security functionalities must be deployed inside the PLM server components and the client applications:
  - ENOVIA LCA client side
    - Support of customized field on the login panel (location aware)
    - Country management
  - ENOVIA VPLM server side
    - Country management and data model customization support
    - Security rules kernel improvement — Leverages the country information and supports the export control data

- Delivery of optimized People & Organization (P&O) context metadata to improve the context import PCS when important number (several ten thousands) of Security context objects (RscContext) have to be imported into P&O database

- Audit and Report Log with no SSO deployed (CAA related interfaces)

ENOVIA — System & Data Administration (VSA): Multi openDoc support

Enhanced common products

ENOVIA — DMU Dimensioning & Tolerancing Review 1 (DT1): This release adds support for reusing output from the CATIA — 2D Layout for 3D Design 1 (LO1) product. Users can display, measure, and print 2D layouts.

- Visualize 3D
- Open a 2D window
- Visualize all layout sheets
- Measure geometry
- Print layouts using advanced 2D print options

This key enhancement promotes the 3D master concept. Users can retrieve and reuse functional tolerancing and annotation information in a more convenient display, enabling manufacturing, quality, and engineering personnel to make better decisions earlier.

DMU Space Analysis 1 (SP1)

- Exported sections — Every point of a section is taken into account to create a polyline that will be very close to the when exact section geometry. This enhancement improves the quality of exported sections.

- New minimum distance algorithm — Enhanced compatibility with the equation defined in CATIA — Generative Shape Design leads to more accurate results when computing the minimum distance between parts.

- Section usability — The user can now show the result window of a section with the previous settings retained to improve the usability of the product.

DMU Space Analysis 2 (SPA): This release improves clash computation and analysis.

- Compute and display:
  - The intersection volume during clash computation
  - The inertia bounding box and export it in CGR format

- Visualize all potential collisions

- Display interferences using dimensional representation

- Display selected objects for clash

- Adjust the font size used in the display of clash information

DMU Fitting Simulator 2 (FIT): This release delivers a number of usability and productivity enhancements to move, track, and shuttle operations.

- Display the tree view for the selected objects in a move or shuttle activity. The tree can be scrolled up and down, and when a part is picked, its name is displayed in the preview window.

- Allow the user to edit the analysis during a move or when creating a track. When defining a track, the simulator now includes the interference specifications for all the parts in the same window.
• Generate a track or a move activity on an edge of a part, as when moving a section to the edge of a part for gap analysis.
• Allow the user to move or shuttle groups.
• Display the distance traveled on the trajectory of a track or move activity during simulation.

**DMU Kinematics Simulator 2 (KIN):** Users can now select the different products involved in a mechanism by clicking on the mechanism and then opening the products directly. This enhancement improves the product usability, especially when working with several imported sub-mechanisms.

**DMU Optimizer 2 (DMO):** Enhancement of the decimation algorithm produces better surface quality. This enhancement also decreases the size of the model, making it easier to manage for such purposes as exporting.

**Human Builder 2 (HBR):**
- Improved user interface and manikin manipulation
  - It is now easier to place a manikin onto any surface.
  - Reports can now include status and input parameters.
- Enhanced efficiency in creating more natural postures for the manikin as well as the hands
  - Optimization of posture selection, with enhanced internal inverse kinematics behavior and additional options for a more natural and fluid movement
  - Automatic manikin grasp function for creating a realistic hand posture quickly and easily
- Enhanced snap for the Reach Mode command, enabling more predictable posture of a manikin segment
  - New Vector on Plan coincidence constraints for manikin segments for more natural positioning, allowing, for example, the feet of the manikin to stay flat at a certain height without any other specification in terms of location.
- Ability to maintain manikin gender and percentile in ENOVIA VPLM and DELMIA Process Engineer (DPE) manikin instance databases

**Enhanced WLS products**

**User Companion for DMU (DNS):** A V5.16 to V5.17 update course allows end-users to self-train on all the new capabilities delivered with the DMU Navigator, DMU Analysis, and DMU Optimizer workbenches. This update course is unique in the marketplace by virtue of its extensive coverage of the new release enhancements as well as its synchronization with product availability.

**ENOVIA User Companion for LCA (LCS):**
- A V5.16 to V5.17 update course allows users to self-train on all the new capabilities delivered with ENOVIA LCA. This update course is unique in the marketplace by virtue of its extensive coverage of the new release enhancements as well as its synchronization with product availability.
- The LCA Fundamentals course, included in this product as well as ENOVIA User Companion for V5 VPM (VNS), has been made much more interactive with dynamic detailed steps, roll-over texts, 3DXML images and several simulations. Furthermore, the chapter on configuration is drastically reworked.

The exercises database has been re-engineered with a common scenario for all three courses that are in both VNS and LCS Companion products. Detailed steps have been added.

Self-assessment quiz is added in V5.17.

In the ENOVIA LCA course, the Add Reporting topic is now covered.

**ENOVIA User Companion for V5 VPM (VNS):**
- A V5.16 to V5.17 update course allows users to self-train on all the new capabilities delivered with ENOVIA LCA. This update course is unique in the marketplace by virtue of its extensive coverage of the new release enhancements as well as its synchronization with product availability.
- The LCA Fundamentals course, included in both VNS and LCS, has been made much more interactive with dynamic detailed steps, roll-over texts, 3DXML images and several simulations. Furthermore, the chapter on configuration has been drastically reworked.

The exercises database has been reengineered with a common scenario for all 3 courses that are in both VNS and LCS Companion products. Detailed steps have been added.

Self-assessment quiz is added in V5.17.

In the ENOVIA LCA course, the Add Reporting topic is now covered.

In the Engineering Hub course
- Add to Publications topic is added
- Relational Design chapter is reworked.

New course to match ENOVIA WPE product: ENOVIA Supply Chain Engineering Exchange

**Companion Development Studio (CDS):**
- Enhancements to increase development productivity
  - A new wizard decreases the time needed to create a skillet.
  - A new toolbar provides direct access to preferred functions.
  - Functions introduced in V5.16 are extended in V5.17.
- Continuous extension of product scope
  - New screen templates
  - New data type to support attachments
    - Download/load documents onto applications other than CATIA, such as Microsoft Office and Solidworks
    - Launch ENOVIA SMARTEAM and ENOVIA VPLM applications
- Basis to a Light Studio — Capability to tailor Dassault courseware
- Enhancement of the server version — Same functional level as the client version
- Performance and resources management
Included only products withdrawn

ENOVIA — LCA Web Viewer (WVR) is an included only product that is being withdrawn this release. The WVR function, now part of W3V, is renamed ENOVIA — Web Viewer. W3V is now repositioned as a common product to ENOVIA 3d com.

ENOVIA LCA / ENOVIA V5 VPM configurations

Note: Product licensing matrix is available on product CDs.

- ENOVIA — Casual User Configuration (CUR)
  This configuration targets users whose main interest is to view data stored in ENOVIA VPLM. Some of the activities that the users can perform:
  - Viewing any data (part, document, or engineering change) and navigating any structure or relationship associated with it
  - Applying filters and saved contexts for quick retrieval of product structures
  - Staying updated on the events of interest, such as product releases

  ENOVIA 3d com C3V may be added to this configuration for CAD model visualization using 2D/3D viewers.

- ENOVIA — Professional User Configuration (MGR)
  This configuration targets managers, team leaders, and reviewers whose activities include:
  - Managing, distributing, and reviewing work assignments
  - Taking advantage of document management facilities such as template management
  - Visualizing digital mockup in CATIA and ENOVIA DMU

  Shareable products from ENOVIA LCA and domains can be purchased separately. For instance, EBOM Detailing and Configuration (PAS) may be added for product structures editing.

- ENOVIA — VPM Engineer Configuration (VER)
  This configuration targets engineers and design managers whose activities include:
  - Managing engineering bills of material (EBOMs)
  - Associating CAD models to parts and product structures, taking advantage of full ENOVIA VPLM —CATIA interoperability
  - Performing digital mockup reviews including product interference analysis
  - Exchanging data with suppliers using SMARTBOM briefcase
  - Sending data to DELMIA IPD
  - Managing work assignments related to the above activities

  Shareable products from ENOVIA LCA can be purchased separately. For example:
  - ENOVIA — Product Variant Management (PVM) for product lines and options planning

- ENOVIA — Program Management (PGT) for managing programs, milestones and object life cycle definition

- ENOVIA — Security Administrator Configuration (ADR)
  This configuration targets corporate or departmental administrators whose main activities consist of:
  - Setting up databases and P&O (People & Organization) profiles
  - Setting up access privileges and default environments for departments and end-users

- ENOVIA — System and Data Administrator Configuration (RVR)
  This configuration targets chief system and data administrators who are in charge of ENOVIA VPLM implementation. In addition to the products dedicated for system setup, most products from ENOVIA V5 VPM and ENOVIA LCA are included for end-user support and customization purposes.

- ENOVIA — VPM Product Design Configuration (DER)
  VPM design engineers design parts, assemblies, and products. These users normally design directly in CATIA V5 and save the design work in ENOVIA VPLM (Engineering Hub) afterwards. These users include design managers with additional responsibilities such as managing work assignments (actions) related to the design activities, performing clash analysis and exchanging data with suppliers.

  This is basically the same group of users targeted by the VPM Engineer configuration. The difference is that all applications provided within this configuration are available through the CATIA V5 user interface. Designers can access both design and life cycle management functions from within CATIA V5 to facilitate easy adoption of ENOVIA V5 VPM functions among CATIA users.

  This configuration targets design engineers and design managers whose activities include:
  - Creating and managing EBOMs structure
  - Designing CAD models and associating them to parts and products
  - Performing advanced part design
  - Performing relational design and changing impact analysis
  - Performing digital mockup reviews including product interference analysis
  - Sending data to DELMIA IPD
  - Managing work assignments (actions) related to the above activities

- ENOVIA — Vault Administrator Configuration (VAR)
  This configuration targets systems administrator whose main activities include:
  - Creating and managing the vaults
  - Performing data backup and restore
  - Managing remote and local vaults
  - Storing ENOVIA VPLM ENOVIAVPM data by a system administrator using V5 architecture/vaulting system. This product can be purchased as a stand-alone on top of ENOVIA VPLM ENOVIAVPM configuration.
• **ENOVIA — VPM DMU Review Configuration (VDM)**

This configuration targets users who participate in product design reviews, but do not require the full product design capabilities provided by the ENOVIA — VPM Product Design Configuration.

• **ENOVIA — LCA Product LifeCycle Review Configuration (LCR)**

This entry configuration is used for the Web-based, light client ENOVIA LCA. It targets enterprise users whose main activities include:
- Searching and navigating on product and project information stored in an ENOVIA VPLM database
- Performing visualization and annotation on 2D/3D documents using 2D/3D viewers
- Collaborating with other enterprise users (ENOVIA — Instant Collaboration can be added on top of this configuration)
- Performing limited authoring function such as transferring ownership and changing life cycle status (promote, demote)

• **ENOVIA — LCA Product LifeCycle Management Configuration (LCM)**

This configuration offers project and change management capabilities. All products included in this configuration operate within the Web-based, light-client environment of ENOVIA LCA.

This configuration targets managers and supervisors whose main activities include:
- Search and navigate on product and project information stored in an ENOVIA VPLM database
- Perform visualization and annotation on 2D/3D documents using 2D/3D viewers
- Manage changes to product data and documents
- Use workflow to manage changes and automate corporate processes
- Use Microsoft Project to manage project in ENOVIA LCA
- Collaborate with other enterprise users (ENOVIA — Instant Collaboration can be added on top of this configuration)

• **ENOVIA — LCA Enterprise Process Management Configuration (LCP)**

This configuration targets people who are involved in enterprise process administration, management and participation.

There are two types of workflow users who use this configuration:
- Process administrators
- Process users (initiators and participants)

• **ENOVIA — LCA System & Users Administration Configuration (SUA)**

This configuration targets corporate or departmental administrators whose main activities include:
- Performing ENOVIA VPLM system installation
- Setting up database
- Setting up people and organization profiles
There are four matrices for the four ENOVIA VPLM product sets: ENOVIA DMU, ENOVIA 3d com, ENOVIA LCA, and ENOVIA V5 VPM.

**ENOVIA DMU product matrix**

<table>
<thead>
<tr>
<th>Configurations</th>
<th>DV1</th>
<th>DM1</th>
<th>DM2</th>
<th>DPS</th>
<th>DH2</th>
<th>DM3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENOVIA DMU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DU1 ENOVIA -- DMU Navigator 1</td>
<td>I</td>
<td>I</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>SPI DMU Space Analysis 1</td>
<td>A</td>
<td>A</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>PRT ENOVIA -- DMU Digital Plant</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>DT1 DMU Dimensioning &amp; Tolerancing Review 1</td>
<td>A</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>RT1 Real Time Rendering 1</td>
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**ENOVIA MultiCaX Products**

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<td>I</td>
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<td>I</td>
<td>I</td>
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<td>DAL MultiCaX -- AD Plug-In</td>
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### ENOVIA 3d com product matrix

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**ENOVIA 3d com Classic Products**

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<td>S3P ENOVIA -- 3d com Space Analysis</td>
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**Plug-In**

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<td>OP Plug-In</td>
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<td>VPL ENOVIA -- MultiPDM -- CDM/VPM</td>
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<td>Plug-In</td>
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**Configurations**

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<th>W3G</th>
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**ENOVIA 3d com Web Navigator Products**

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<td>W3V ENOVIA -- Web Viewer</td>
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**Configurations**

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**ENOVIA MultiCAx Products**

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<td>DDL ENOVIA -- MultiCAx -- DELMIA</td>
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</table>

**Plug-In**

(1) N3G configuration allows user to query, navigate, and access product information stored in ENOVIA VPLM ENOVIA VPM and/or ENOVIA V5 VPM.

### ENOVIA LCA product matrix

<table>
<thead>
<tr>
<th>Configurations</th>
<th>CUR</th>
<th>MGR</th>
<th>RVR</th>
<th>ADR</th>
<th>VAR</th>
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<th>LCM</th>
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**ENOVIA LCA Navigator Products**

<table>
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<td>W3V ENOVIA -- Web Viewer</td>
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<td>N</td>
<td>I</td>
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<tr>
<td>DCM ENOVIA -- LCA Document Management</td>
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<td>N</td>
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<tr>
<td>CDM ENOVIA -- LCA Change Management</td>
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<tr>
<td>PJM ENOVIA -- LCA Project Management</td>
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**Configurations**

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<th>VAR</th>
<th>LCR</th>
<th>LCM</th>
<th>LCP</th>
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</table>
ENOVIA LCA Desktop Editor Products

**Desktop**
- ADK ENOVIA -- Applications
  - I I I I N N N N
- AED ENOVIA -- Action Editor
  - S I I S N N N N
- PDC ENOVIA -- Product Definition
  - S S I S N N N N
- DMT ENOVIA -- Document
  - S I I S N N N N

**Management (*)**
- PGT ENOVIA -- Program
  - S S I S N N N N
- ECM ENOVIA -- Engineering Change
  - S I I S N N N N
- SCE ENOVIA -- Supply Chain
  - S S I S N N N N
- PVM ENOVIA -- Product Variant
  - S S I S N N N N

**Enterprise Architecture**
- EPI ENOVIA -- Engineering Hub
  - I I I I N N N N
- T3A ENOVIA -- Multi-Tier
  - I I I I N N N N

* These products could be used on top of VER configuration, but it is not recommended.

**Configurations**
CUR MGR RVR ADR VAR LCR LCM LCP SUA

**ENOVIA Enterprise Gateway Products**

**Gateway (*)**
- PGW ENOVIA -- PPR Hub
  - S S S S N N N N
- STH ENOVIA -- PPR Hub Step
  - S S S S N N N N
- SAH ENOVIA -- PPR Hub SA
  - S S S S N N N N

* These products could be used on top of VER configuration, but it is not recommended.

**Configurations**
CUR MGR RVR ADR VAR LCR LCM LCP SUA

**ENOVIA Enterprise Administration Products**

**System Administration**
- SYA ENOVIA -- LCA Multisite
  - N N I N N N N I
- POC ENOVIA -- LCA People, Organization & Security
  - N N I N N N N I
- SAN ENOVIA -- System & Data Administration
  - N N I I N N N N
- POS ENOVIA -- People, Organization & Security
  - N N I I N N N N
- VSA ENOVIA -- Vault Server Administration
  - N N N I N N N N

* These products could be used on top of VER configuration, but it is not recommended.
### ENOVIA V5 VPM product matrix

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<thead>
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**ENOVIA VPM Navigator Products**

**ENOVIA VPM Product Editor Products**

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</tr>
</tbody>
</table>

* These products could be used on top of CUR, MGR, ADR, and RVR configurations, but it is not recommended.
ENOVIA VPLM APIs

The ENOVIA VPLM — CAA API products are delivered with CAA RADE (5691-CDC). This release offers one new API, VPN Navigator.

For information about the CAA RADE products, visit http://www.ibm.com/solutions/plm

ENOVIA LCA / ENOVIA V5 VPM customization

Customize ENOVIA LCA / ENOVIA V5 VPM using the CAA RADE V5 tools (for example, 5691-CDC, 5691-PAD), which can be ordered separately.

Reorganize the user interface without CAA RADE by using masks. These can be manipulated either by the system administrator or the end user. The user can:

- Remove attributes or move them within user panels
- Insert user-defined attributes into panels
- Reorganize or create tabs
- Rename tabs and attributes
- Relate masks to document types
- Support multiple environments where objects may have different attributes

Without CAA RADE V5, the user can:

- Customize life cycle definitions for different object types
- Define object maturity values
- Create filters to selectively present objects to users
- Set default (for example, a default repository path) or acceptable values for attributes

User exits can be developed for a limited set of functions including object promotion and version and revision control.

Using CAA RADE V5, the user can:

- Create new objects and object attributes
- Use ENOVIA LCA APIs to develop code that adds, extends, or replaces object behavior
- Define additional life-cycle operators
- Extend the inter/intra-enterprise import/export platform
- Implement legacy federation through ENOVIA 3d com/ENOVIA DM.

ENOVIA VPLM Data Customization

Using CAA-RADE Data Model Customizer (part of the CAA RADE V5 development tool that can be ordered separately), the users can add their own data on the following modelers:

- ENOVIA LCA Product Structure
- ENOVIA Document
- ENOVIA ECO and ECR

Additional details

For descriptions of other ENOVIA VPLM products, visit http://www.ibm.com/solutions/plm/guide

ENOVIA VPLM WLS V5

Additional details on previously announced functions:

The WLS Companion Server facilitates deployment by eliminating the need to install the license function and complete user companion Java™ client on individual student machines. Instead, the server runs these functions using a J2EE application server software, such as IBM WebSphere or Apache Tomcat.

The standard WLS user companion installation, whether in a file standalone mode or HTTP page server mode, requires a full Java client and WLS license to be installed on each student client machine. The Companion Server consolidates these functions on a single machine to streamline the licensing process and to improve user companion response time.

Packaging model

- ENOVIA User Companion for VPM (5691-VMC, 5795-VMC), User Companion for DMU (5691-DNC, 5795-DNC), and ENOVIA User Companion for LCA (5691-LCC, 5795-LCC) are available as configurations.

Note: The modification level for ENOVIA VPLM ENOVIAVPM WLS is 1.6.0.

- User Companion Desktop is included with every configuration.

Packaging and products

The user can order ENOVIA VPLM WLS configurations two ways:

- As shareable configurations, order User Companion for DMU Configuration (5691-DNC), for example. Shareable configurations are suited for users who need a limited number of licenses.

  These configurations are delivered with their own license key, allowing the user to obtain the key at the beginning of the session, or to leave it for another user.

- As enterprise configurations, order User Companion for DMU Configuration — Enterprise Option (5795-DNC), for example.

  This licensing option offers a reduced Primary License Charge (PLC) and requires the user to purchase licenses in a quantity equal to the quantity of each licensed CATIA configuration or product as described by the following terms.

The ENOVIA VPLM WLS configuration 5795-DNC is licensed to users on a one-to-one relationship between the 5795-DNC configuration and each licensed 5693-DN1 or -DMN add-on or 5691-DMN shareable product and also each licensed configuration (and any future configuration) that includes the DMU Navigator 1 or DMU Navigator 2 product.

All subsequent orders for the applicable licensed configurations must be accompanied by an equivalent order for the supporting ENOVIA User Companion. The price of an enterprise seat is greatly reduced compared to the price of a shareable order.

There is a 10-seat minimum requirement for the ENOVIA User Companion for VPM Configuration — Enterprise Option (5795-VMC).

-15- AP06-0196
There is no minimum seat requirement for the User Companion for DMU Configuration — Enterprise Option (5795-DNC).

The following rules apply:

- When the enterprise option is deployed, the shareable option is no longer necessary.
- A shareable product (5691) can be added only on top of a shareable configuration (5691).
- An enterprise product (5795) can be added only on top of an enterprise configuration product (5795).
- The user can have a 5691 type entry configuration and a 5795 type entry configuration (such as 5691-MDC plus 5691-HDS and 5795-DNC).

---

**Technical information**

**Hardware requirements**

**ENOVIA DMU — ENOVIA VPLM WLS requirements**: The following requirements are common to all operating systems supported by ENOVIA DMU products and ENOVIA VPLM WLS. System unit and graphics display requirements are platform-specific.

**Note**: ENOVIA User Companion for VPM WLS is designed to run concurrently with ENOVIAVPM V1.6. For hardware prerequisites, refer to Software Announcement AP06-0199, dated September 5, 2006.

**ENOVIA DMU required components and features**

- **Disk drive**: An internal or external disk drive is required (minimum recommended size 2 GB for ENOVIA VPLM, 4 GB for ENOVIA VPLM WLS) to store program executables (installation of all ENOVIA DMU products requires about 700 MB on Windows™, 900 MB on AIX or IRIX, 1.0 GB on HP-UX, 800 MB on Solaris), program data, usage environment, and paging space.
- **Memory**: 256 MB of RAM is the minimum recommended amount of memory for all applications. 512 MB of RAM is recommended for ENOVIA — DMU Navigator applications on large assemblies. Requirements may be greater when a large amount of data is used.
- **Internal/external drives**: CD-ROM drive is required for program installation and access to the online documentation, which can be downloaded optionally to disk.
- **Graphics display**: A graphics color display, compatible with selected platform-specific graphics adapter. The minimum recommended size for usability reasons is 17 inches; 1024 x 768 and 1280 x 1024 for UNIX workstations. When selecting a graphics adapter, hardware texturing capability is strongly recommended when using ENOVIA — DMU Products that use texture mapping, in which case the amount of RAM has to be adequate for the number and complexity of textures to be used.
- **Keyboard**: A specific keyboard compatible with selected installation locale may be required for national language support.
- **Pointing device**: Three-button mouse; on Windows workstations, a two-button mouse can be used (the third button is emulated with a keyboard sequence). The three button mouse is recommended for usability reasons. IntelliMouse (two buttons plus wheel) is an alternative to the three-button mouse on Windows workstations, the wheel acting as the middle button and allowing additional manipulations such as panning and scrolling.
- **Optional components and features**: A SpaceBall or a SpaceMouse can be used in addition to the standard mouse to perform graphic manipulations (zoom, pan, rotate). The required drivers are delivered with these devices. DMU Fitting Simulator 2 (FIT) supports the Spaceball. The SpaceBall and the SpaceMouse are supported on both P1 and P2. While in P1, they enable graphic manipulations (in examine or fly modes), in P2 they also make it possible to move objects (part trajectories in ENOVIA DMU fitting, for example).

The robustness of the overall solution is dependent on the robustness of the operating system and the hardware environment used. For a list of Windows NT™ and UNIX hardware configurations certified by Dassault Systemes for running ENOVIA DMU products, visit http://www.ibm.com/solutions/plm

Although ENOVIA DMU products and WLS can run on other configurations or other graphics adapters, incidents specific to these configurations or adapters are not accepted for support.

**ENOVIA DMU platform-specific hardware requirements**

**Windows 2000/Windows XP**

**Note**: ENOVIA VPLM V5.17 is the last release to support Microsoft Windows 2000 Professional Edition. Customers are encouraged to migrate to Microsoft Windows XP Professional Edition.

- **System unit**: Intel® Pentium® III- or Pentium 4-based workstations running Microsoft Windows 2000 Professional or Windows XP Professional.
- **Graphics adapter with 3D OpenGL accelerator is required. Note that graphics performance (panning, zooming, rotating model) depends on the selected adapter. Recommended minimum:**
  - 24-bit, true color, double-buffered visual.
  - 24-bit Z-buffer.
  -Stencil buffer.
  - Minimum supported resolution 1024 x 768; 1280 x 1024 is recommended for usability.
- **Network adapter**: An active LAN adapter (Ethernet or token ring, installed and configured) is required for licensing purposes.

**Supported configurations of Windows 2000 and Windows XP**

For a current list of hardware configurations, certified by Dassault Systemes for running ENOVIA DMU products, visit http://www.ibm.com/solutions/plm

Check the earlier Web site for changes.

**Windows x86-64 64-bit environment**

- **Disk drive**: 2.5 GB
- **Memory**: 4 GB is the minimum recommended amount of memory.
• System unit: Intel EM64T, AMD Opteron 64-bit based workstations running Windows XP Professional x64 Edition

• Graphics adapter: A graphics adapter with a 3D OpenGL accelerator is required.

  **Note:** Graphics performance on local transformations (panning, zooming, rotating model) will depend on the selected graphics adapter. The graphics adapter should have the following capabilities:
  - 24-bit, true color, double-buffered visual.
  - 24-bit Z-buffer.
  - Stencil buffer.
  - Minimum supported resolution 1024 x 768; 1280 x 1024 is recommended for usability reasons.

• Network adapter: An active LAN adapter (Ethernet or token ring, installed and configured) is required for license key purposes.

• Supported configurations on Windows XP Professional x64 Edition: for an updated list of hardware configurations, certified at Dassault Systemes for running ENOVIA 3d com V5 products, visit http://www.ibm.com/solutions/plm

IBM AIX

• System unit
  - Any RS/6000®, based on the PowerPC 604™ (166 MHz minimum clock speed), POWER4™, processor families, supported on AIX V5.2 or AIX V5.3.
  - Any POWER5™, PowerPC® 970-based systems, supported on AIX V5.3

  **Notes**
  - AIX V5.2 ML07 is the minimum Buildtime and Runtime level supported.
  - Additional support for AIX Run time is AIX V5.3 ML03 (on 32-bit and 64-bit) — on Power 4 and Power 5 only.
  - Standard support for AIX V5.1 ended on April 1, 2006, and end of support (EOS) for AIX V5.2 is September 1, 2007. To ensure a consistent level of maintenance and service for CATIA and ENOVIA VPLM, customers are encouraged to migrate to AIX V5.3.

• Graphics adapter

  One of the following graphics adapters:
  - GXT500P
  - GXT550P
  - GXT800P
  - GXT800M
  - GXT2000P
  - GXT3000P
  - GXT4000P
  - GXT4500P
  - GXT6000P
  - GXT6500P

  **Note:** Support of the IBM eServer® P5 and IBM System p5™ Server requires AIX V5.3.

HP-UX

• System unit
  - Any B-Class, C-Class, or J-Class workstation based on a PA8000 processor, supported on HP-UX 11.11 (HP-UX 11i), provided that requirements are met.

  **Note:** Additional support for HP Run time is HP 11i Dec 2004 (on 32-bit only) — required level for Oracle 10gR2 support.

• Graphics adapter

  One of the following graphics adapters:
  - Visualize-FXE
  - Visualize-FX2
  - Visualize-FX4
  - Visualize-FX5
  - Visualize-FX6
  - Visualize-FX10
  - Fire GL-UX
  - Fire GL T2-128
  - Fire GL X1
  - Fire GL X3

SGI IRIX

  **Note:** ENOVIA VPLM V5.17 is the last release to support SGI IRIX. Any future release will require customers who are currently running ENOVIA VPLM on SGI IRIX to migrate to another operating system.

• System unit: Any O2, Indigo2, Octane, Octane2, Onyx2, Fuel, Onyx3000, or Tezro workstations based on R5000, R10000, R12000, R14000, or R16000 processors, supported on IRIX 6.5, provided that requirements are met.

• Graphics adapter

  One of the following graphics adapters:
  - Integrated graphics adapters on O2 workstations
  - Solid Impact or SI/SE
  - Super Solid Impact or SSI/SSE
  - High Impact
  - Maximum Impact or MXI/MXE
  - VPro V6
  - VPro V8
  - VPro V10
  - VPro V12
  - InfiniteReality
  - InfiniteReality 3
  - InfinitePerformance

Sun Solaris

• System unit: Any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, Ultra80, Sun Blade 100, Sun Blade 150, Sun Blade 1000, Sun Blade 1500, Sun Blade 1500+ (1.5 GHz), Sun Blade 2000, or Sun Blade 2500 workstation based on UltraSPARC processor, supported on Solaris 8 and Solaris 10 (SPARC) provided that requirements are met.

• Graphics adapter

  One of the following graphics adapters:
  - Creator3D
  - Creator3D Series III
  - Elite 3D Model M3/M6 (U10-440 MHz only, for U10 workstations)
  - Expert 3D Lite
  - Expert 3D
  - XVR-500
  - XVR-1000
  - XVR-1200
  - XVR-600 (Support of XVR-600 requires Solaris 8 H/W 5/03 with OpenGL 1.3)
Common requirements

The following requirements are common to all operating systems supported by ENOVIA 3d com. System unit and graphics requirements are platform-specific and include:

- Disk drive: 100 MB of disk space is required for data dynamically downloaded from the ENOVIA 3d com product server.
- Memory: 128 MB of RAM is the minimum recommended amount of real memory; 256 MB of RAM is recommended on ENOVIA 3d com clients.
- Graphics display: A graphics color display, compatible with the selected platform-specific graphics adapter. The minimum recommended size for usability reasons is 17 inches. The minimum resolution required for Windows workstations is 1024 x 768, and 1280 x 1024 on UNIX workstations.
- LAN adapter: a network adapter is required to connect the server and clients to the LAN or WAN.
- Keyboard: A specific keyboard compatible with selected installation locale may be required for national language support.
- Pointing device: Two-button or three-button mouse.

Platform-specific requirements

Windows 2000/ Windows XP


- System unit: Intel Pentium III- or Pentium 4-based workstations running Microsoft Windows 2000 Professional Edition SP 4 (at minimum level), or Windows XP Professional Edition SP1 or SP2.
- Graphics adapter: A 3D graphics adapter is required.

Note: Memory consumption is about 50 MB after all ENOVIA 3d com applets, the Java Virtual Machine, and the browser itself is loaded.

IBM AIX

- System unit
  - Any RS/6000, based on Power4 processor family supported on AIX V5.2 or AIX V5.3
  - System units based on Power5 or PowerPC 970 processor families, supported on AIX V5.3.

Note: Standard support for AIX V5.1 ended on April 1, 2006, and end of support (EOS) for AIX V5.2 is September 1, 2007. To ensure a consistent level of maintenance and service for CATIA and ENOVIA VPLM, customers are encouraged to migrate to AIX V5.3.

- Graphics adapter

One of the following graphics adapters:
  - GXT500P
  - GXT550P
  - GXT800P
  - GXT800M
  - GXT2000P
  - GXT3000P
  - GXT4000P

HP-UX

- Any B-Class, C-Class or J-Class workstation based on a PA8000 processor family, supported on HP-UX 11.11 (HP-UX 11i), provided that requirements are met.

- One of the following graphics adapters:
  - Visualize-FXE
  - Visualize-FX2
  - Visualize-FX4
  - Visualize-FX5
  - Visualize-FX6
  - Visualize-FX10
  - Fire GL-UX
  - Fire GL X1
  - Fire GL X3
  - Fire GL-T2

SGI IRIX

Note: ENOVIA VPLM V5.17 is the last release to support SGI IRIX. Any future release will require customers who are currently running ENOVIA VPLM on SGI IRIX to migrate to another operating system.

- System unit: Any O2, Indigo2, Octane, Octane2, Onyx2, Tezro, Fuel, or Onyx3000 workstations based on R5000, R10000, R12000, R14000, or R16000 processors, supported on IRIX 6.5, provided that requirements are met.

- Graphics adapter

One of the following graphics adapters:
  - Integrated graphics adapters on O2 workstations
  - Solid Impact or SI/SE
  - Super Solid Impact or SSI/SSE
  - High Impact
  - Maximum Impact or MXI/MXE
  - VPro V6
  - VPro V8
  - VPro V10
  - VPro V12
  - Infinite Reality
  - Infinite Reality 3
  - Infinite Performance

Sun Solaris

- System unit: Any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, Ultra80, Sun Blade 100, Sun Blade 150, Sun Blade 1000, Sun Blade 1500, Sun Blade 1500+ (1.5 GHz), Sun Blade 2000, or Sun Blade 2500 workstation based on the UltraSPARC processor, supported on Solaris 8 and Solaris 10 (SPARC) provided that requirements are met.

- Graphics adapter

One of the following graphics adapters:
  - Creator3D
  - Creator3D Series III
  - Elite 3D (U10-440 MHz for Ultra 10 workstations)
  - Expert 3D Lite
  - Expert 3D
  - XVR-500
  - XVR-1000
  - XVR-1200
  - XVR-600 (Support of XVR-600 requires Solaris 8 H/W 5/03 with OpenGL 1.3)
ENOVIA 3d com server hardware requirements

Common requirements (classic ENOVIA 3d com)

The following requirements are common to all operating systems supported by ENOVIA 3d com products. System unit and graphic requirements are platform-specific and are detailed in the sections that follow:

- Disk drive: An internal or external disk drive is required to store program executables (installation of all ENOVIA 3d com products requires about 800 MB on Windows or Solaris, 1.1 GB on AIX, 1.3 GB on HP-UX, 1.0 GB on IRIX), program data, usage environment, and paging space. Requirements may be greater when large amounts of data are used.

- Memory: 256 MB of RAM is the minimum recommended amount of memory for all applications. Requirements may be greater when large amounts of data are used.

- Internal/external drives: A CD-ROM drive is required for program and online documentation installation.

- Display: A graphic color display, compatible with the selected platform-specific graphics adapter. The minimum recommended size is 17 inches. The minimum resolution required for Windows workstations is 1024 x 768, and 1280 x 1024 on UNIX workstations.

- LAN adapter: A network adapter is required to connect the server and clients to the LAN or WAN.

- Keyboard: A specific keyboard compatible with selected installation locale may be required for national language support.

- Pointing device: Three-button mouse.

General rules for memory requirements (classic ENOVIA 3d com)

The memory requirement depends on the number of simultaneous ENOVIA 3d com sessions; the users need to dimension the server system accordingly.

The server dimensioning needs to take into account the memory used by the CAD/CAM process on the server.

For CATIA V5 (classic ENOVIA 3d com)

- ENOVIA 3d com consumes 50 MB for the first session plus 10 MB for each additional session for an average 1 MB model.

- The RAM requirement formula is the following: 50 MB + n*10 MB + n*m MB, where n is the number of maximum concurrent sessions and m the average size of the CATIA models.

Note: If several models are selected in one session, only one model remains loaded at the same time, optimizing the memory consumption. As an example, for 10 concurrent users manipulating 10 MB average-size models, the minimum RAM requirement is 256 MB.

For better response time, a graphics card can be installed on the server and shared in a sequential mode between the simultaneous sessions to improve 3D rendering. Customers must dimension the graphics card accordingly.

Platform-specific requirements

Windows 2000/Windows XP (classic ENOVIA 3d com)


- Graphics adapter: The same as for CATIA V5. For a list of supported graphics adapters, visit http://www.ibm.com/solutions/plm

UNIX (AIX, HP-UX, IRIX, or Solaris) (classic ENOVIA 3d com)

System unit and graphics adapter: Refer to the ENOVIA 3d com client hardware requirements section.

Notes

- In addition to graphics adapters supported on an AIX ENOVIA 3d com client, Virtual Frame Buffer technology offered through AIX operating system is also supported on an AIX ENOVIA 3d com server.

- In addition to the previous Hardware requirements, on server side, IBM eServer P5 and IBM System P5 Server are supported with AIX V5.3.

Common requirements — ENOVIA 3d com Web Navigator

For a list of hardware requirements for the WebSphere Application Server on supported operating systems (AIX and Windows 2003 Server), visit http://www.ibm.com/software/webservers/appserv/was/library

ENOVIA LCA and ENOVIA V5 VPM client hardware requirements

Common requirements

The following requirements are common to all operating systems supported by ENOVIA LCA and ENOVIA V5 VPM. System unit and graphic requirements are platform-specific.

- Disk drive: 250 MB of disk space

- Memory: Client workstation RAM: Minimum 256 MB recommended

- Internal/external drives: CD-ROM drive for program and online documentation installation

- Display: A graphic color display, compatible with the selected platform-specific graphics adapter. The minimum recommended size is 17 inches. The minimum resolution required for Windows workstations is 1024 x 768, and 1280 x 1024 on UNIX workstations.

- Graphics adapter: An OpenGL graphics adapter, compatible with the windowing manager of the selected operating system (CDE on AIX, HP-UX, or Solaris; Irix Interactive Desktop on SGI).

- LAN adapter: A network adapter to connect the server and clients to the LAN or WAN.
• **Keyboard:** Keyboard compatible with selected installation locale may be required for national language support.

• **Pointing device:** Two- or three-button mouse.

**Platform-specific requirements**

**Windows 2000/Windows XP**

**Note:** ENOVIA VPLM V5.17 is the last release to support Microsoft Windows 2000 Professional Edition. Customers are encouraged to migrate to Microsoft Windows XP Professional Edition.

**System unit:** Intel Pentium III- or Pentium 4-based workstations running Microsoft Windows 2000 Professional SP 4 (at minimum level) or Windows XP SP 1 or SP 2 Professional.

**IBM AIX**

**System unit**

- Any RS/6000, based on Power4 processor family supported on AIX V5.2 or AIX V5.3
- System units based on Power5 or PowerPC 970 processor families, supported on AIX V5.3.

**HP-UX**

**System unit:** Any B-Class, C-Class or J-Class workstation based on PA8000 Processor family supported on HP-UX 11.11 (HP-UX 11i).

**SGI IRIX**

**Note:** ENOVIA VPLM V5.17 is the last release to support SGI IRIX. Any future release will require customers who are currently running ENOVIA VPLM on SGI IRIX to migrate to another operating system.

**System unit:** Any O2, Indigo2, Octane, Octane2, Fuel, Onyx2, Onyx3000, or Tezro workstations based on R5000, R10000, R12000, R14000, or R16000 processors supported on IRIX 6.5

**Sun Solaris**

**System unit:** Any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, Ultra80, Sun Blade 100, Sun Blade 150, Sun Blade 1000, Sun Blade 1500, Sun Blade 1500+ (1.5 GHz), Sun Blade 2000, or Sun Blade 2500 workstation based on the UltraSPARC processor supported on Solaris 8 and Solaris 10 (SPARC).

ENOVIA LCA and ENOVIA V5 VPM server hardware requirements

**Common requirements**

The following requirements are common to all operating systems supported by ENOVIA LCA. System unit requirements are platform-specific.

• **Disk drive:** Internal or external disk drive to store program executables, program data, usage environment, and paging space. Installation of all ENOVIA LCA products requires approximately 1.0 GB on AIX or Solaris, and 1.3 GB on HP-UX. Requirements may be larger when large amounts of data are used.

• **Memory:** ENOVIA LCA requires at least 256 MB of real memory for the first session, including the operating system, but could use up to 2 GB (or more in some cases) depending on system settings, database parameters, and other factors. If ENOVIA LCA server is installed on the same server as the database, be sure to add the database memory requirement to that needed for ENOVIA LCA.

Additional memory is required for each additional Application Server session, and 75 MB should be used as a typical-use starting point (with a minimum of 25MB per user session for those only logged-on). More or less additional-session memory may be required depending on user-specific factors such as the amount of data loaded, the number of different application areas open concurrently, local customizations, and so on. Additional sizing rules will be provided after further capacity planning evaluations.

• **Internal/external drives:** CD-ROM drive for program and online documentation installation

• **Display:** A graphic color display compatible with the selected platform-specific graphics adapter. The minimum recommended size is 17 inches. The minimum resolution required is 1024 x 768 on Windows workstations and 1280 x 1024 on UNIX workstations.

• **Graphics adapter:** An OpenGL graphics adapter, compatible with windowing manager of the selected operating system (CDE on AIX, HP-UX, or Solaris, Irix Interactive Desktop on SGI).

• **LAN adapter:** Network adapter to connect the server and clients to the LAN or WAN.

• **Keyboard:** Keyboard compatible with selected installation locale may be required for national language support.

• **Pointing device:** Three-button mouse

**Platform-specific requirements**

**Windows 2003**

**System unit:** Intel Pentium III- or Pentium 4-based workstations or server running Microsoft Windows Server 2003 Standard Edition and Windows Server 2003 Enterprise Edition are supported on ENOVIA LCA Server side.

**IBM AIX**

**System unit**

- Any RS/6000, based on Power4 processor family supported on AIX V5.2 or AIX V5.3
- System units based on Power5 or PowerPC 970 processor families, supported on AIX V5.3.

In addition to the above hardware requirements, IBM eServer P5 and IBM System P5 Server are supported with AIX V5.3.

**HP-UX**

**System unit:** Any B-Class, C-Class, or J-Class supported on HP-UX 11.11 (HP-UX 11i).

**Sun Solaris**

**System unit:** Any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, Ultra80, Sun Blade 100, Sun Blade 150, Sun Blade 1000, Sun Blade 1500, Sun Blade 1500+ (1.5 GHz), Sun Blade 2000, or Sun Blade 2500 workstation based on the UltraSPARC processor supported on Solaris 8 and Solaris 10 (SPARC).

**Note:** ENOVIA VPLM application server and Web-client (ENOVIA LCA Navigator) deployment on WebSphere Application Server are supported on Solaris (WebSphere Application Server V6.0.2 on Solaris 32).
Software requirements

Summary of changes for V5.17

- V5.17 is the last release to support:
  - Microsoft Windows 2000 Professional Edition
  - IBM AIX V5.2
  - Sun Solaris 8
  - Oracle 9.2
  - SGI IRIX

- 32-bit requires:
  - Orbix 3.3 for all platforms
  - Motif 2.1 for AIX

- Additional run-time support for IBM AIX running on Power4 or Power5 processors for both 32-bit and 64-bit is AIX V5.3 ML03.

- Additional run-time support for HP-UX is HP-UX 11i (December, 2004).

- Additional run-time support for Sun Solaris is Sun Solaris 10.03/05 (SPARC) with Motif 2.1.

- The required level for document browsers in a UNIX environment is Mozilla 1.7 for AIX, HP-UX, and Solaris and Mozilla 1.4 for IRIX.

- The required level for document browsers in a Microsoft Windows environment is Microsoft Internet Explorer 6.0 or Mozilla 1.7.

- The required level for JRE is 1.5.0, except for SGI IRIX, which requires 1.4.1.

- The required level for WMQ is 6.0.

Requirements for interoperability with CATIA products

- CATIA V5 and ENOVIA VPLM must be at the same release, service pack, and hot fix level for proper interoperability.

- CATIA V5 and ENOVIA VPLM ENOVIAVPM interoperability is supported between various CATIA V5 release and ENOVIA VPLM ENOVIAVPM PTF levels. Refer to the most recent ENOVIA VPLM ENOVIAVPM PTF program directory for the current prerequisite and recommended interoperability PTFs.

Specific software requirements for ENOVIA WLS V5:
Access to the companion desktop — Companion desktop access is accomplished using the same browser requirements as ENOVIA VPLM (refer to the Access to product information (ENOVIA DMU / ENOVIA 3d com) and Access to product information (ENOVIA LCA) sections). The Java plug-in (JRE at a minimum level of 1.5) is required to visualize the different types of simulations (Show Me, Discover It, Try It, and the Quiz) and to allow for automatic model loading from ENOVIA VPLM.

The supported level of JRE 1.5 can be downloaded from

WLS license management — Licenses can be managed either using standard ENOVIA VPLM licensing or by using the J2EE Companion Server. For standard licensing, refer to the license management environment prerequisite sections for ENOVIA 3d com, ENOVIA DMU, and ENOVIA LCA (includes ENOVIA V5 VPM). Requirements for the J2EE Companion Server are:

- Application server setup — The application server used must support Servlet 2.4 and JSP 2.4 and must be able to handle the Companion Server WAR or EAR files. These files are copied during installation if the application server option was selected during the installation procedure. The server setup operation depends on the application server used and must be done by the system administrator.

- Companion application setup for license serving — The application server machine must be able to access WLS licenses, and licenses must be available to this server machine. For the Enterprise Option, the total number of licenses must be equal to the maximum number of students that will be connected at the same time to the application server.

Operating System support exceptions: There are four MultiCAx products that are only supported on Windows 2000 and Windows XP:

- MultiCAx — SOLIDWORKS Plug-in
- MultiCAx — SE Plug-in (Solid Edge)
- MultiCAx — AD Plug-in (ACIS — DXF3D — Inventor)
- MultiCAx — UD Plug-in (Unigraphix Direct Interface)

ENOVIA DMU and ENOVIA VPLM WLS common software requirements: ENOVIA VPLM WLS has the same software requirements as ENOVIA DMU unless otherwise noted.

Note: ENOVIA User Companion for VPM WLS is designed to run concurrently with ENOVIAVPM V1.6. For software prerequisites, refer to Software Announcement AP06-0199, dated September 5, 2006.

Refer to the program directory or contact the IBM Support Center for appropriate corrective service to apply to the following software.

ENOVIA DMU platform-specific software requirements

Windows 2000/Windows XP


- Microsoft Windows 2000 Professional with SP4 (at minimum level) or Windows XP Professional Edition SP1 and SP2 with the following components:
  - Microsoft Windows 2000 and Windows XP deliver an implementation of OpenGL libraries. These libraries can be updated depending on selected graphics adapter, when the user installs the graphics adapter and associated drivers. For a list of driver levels based on certified configurations, visit
  - A localized version of the operating system may be required when selected installation locale differs from Latin1.

ENOVIA DMU V5 64-bit on Windows XP Professional x64 edition

- Minimum level required: Windows XP Professional x64 Edition
- Microsoft implementation of OpenGL libraries, as delivered with Windows. For recommendations related to driver levels based on tested graphic adapters, visit
  http://www.3ds.com/implementation/technology/windows/certified-workstations-list/
ENOVIA DMU V5 32-bit on Windows XP Professional x64 edition

- Minimum level required: Windows XP Professional x64 Edition
- Microsoft implementation of OpenGL libraries, as delivered with Windows. For recommendations related to driver levels based on tested graphic adapters, visit [http://www.3ds.com/implementation/technology/windows/Certified-workstations-list/](http://www.3ds.com/implementation/technology/windows/Certified-workstations-list/)
- The following set of patches are required when running 32-bit applications on x64 environment:
  - KB903648: When using macro and VBScript features, V5 may crash when accessing more than 2GB of address space. A Microsoft patch is available to correct this problem. To see Microsoft Article: KB903648, visit [http://support.microsoft.com/default.aspx?scid=kb;en-us;903648](http://support.microsoft.com/default.aspx?scid=kb;en-us;903648)
  - KB911021: Required for applications allowing more than 2GB of address space. Contact your Microsoft support representative for any questions regarding this patch.

AIX

Note: Standard support for AIX V5.1 ended on April 1, 2006, and end of support (EOS) for AIX V5.2 is September 1, 2007. To ensure a consistent level of maintenance and service for CATIA and ENOVIA VPLM, customers are encouraged to migrate to AIX V5.3.

- AIX V5.2 ML07, with the following components:
  - XL C/C++ Enterprise Edition Run-time Environment at a minimum level of V7.0.0 with the IBM C++ Run-time Environment Component for AIX
  - XL Fortran Enterprise Edition for AIX Run-time at a minimum level of V9.1.0
  - OpenGL and GL3.2 Run Time Environment (delivered with the operating system)
  - Common Desktop Environment (CDE; delivered with the operating system).
  - For AIX 32-bit and 64-bit- Motif 2.1
  - Java Run Time Environment (JRE) 1.5

Or

- AIX V5.3 ML03 with the following components:
  - XL C/C++ Enterprise Edition Run-time Environment at a minimum level of V7.0.0 with the IBM C++ Run-time Environment Component for AIX
  - XL Fortran Enterprise Edition for AIX Run-time at a minimum level of V9.1.0
  - Motif 2.1
  - Java Run Time Environment (JRE) 1.5

Note: Additional Support for AIX Run time is AIX V5.3 ML03 (on 32-bit and 64-bit) — on Power 4 and Power 5 only.

HP-UX

- HP-UX Version HP-UX 11iv1 (December, 2003) with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.50)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Or

- HP-UX Version HP-UX 11iv1 (June, 2004) with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.50)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Support of WAS 6.0.2 or Oracle 10.2.0.2 (10gR2) requires HP 11iv1 to respect previous recommendations for HP 11i December 2004.

SGI IRIX

Note: ENOVIA VPLM V5.17 is the last release to support SGI IRIX. Any future release will require customers who are currently running ENOVIA VPLM on SGI IRIX to migrate to another operating system.

The minimum indicated levels of IRIX 6.5.15m, including:

- C, C++, and Fortran77 standard execution environment (delivered with the operating system)
- OpenGL (delivered with IRIX execution environment)
- IRIX Interactive Desktop (delivered with the operating system)
- WorldView when selected installation locale differs from ISO-1

Sun Solaris

The minimum indicated levels of Sun Solaris 8 and Solaris 10 H/W 05/03

- C and C++ runtime environment (delivered with the operating system).
- OpenGL runtime environment (delivered with the operating system).
- Fortran runtime environment is delivered with ENOVIA — DMU Navigator.
- CDE (delivered with the operating system).
- A localized version may be required when the selected installation locale differs from ISO-1.
- Motif 2.1
Notes

- Additional Support for SOLARIS Run time on SPARC system is Solaris 10.03/05 (on 32-bit only).
- V5.17 is the last release to support Solaris 8. Customers currently running V5 on Solaris 8 are encouraged to migrate to Solaris 10.
- Support of the XVR 600 graphic adapter requires OpenGL runtime environment at level 1.3.

Specific software requirements for ENOVIA VPLM WLS

An HTML browser is required:

- UNIX environment: Mozilla is required at level 1.7 on all UNIX except SGI, which requires Mozilla 1.4.
- Windows environment: Microsoft Internet Explorer 6.0 (Microsoft VM version number 3158) is a minimum requirement.

Browser plug-ins: Some WLS products may provide learning resources using the Portable Document Format (PDF). To view these documents, Adobe Acrobat Reader V3, or later, must be installed as a plug-in on the browser. To download, visit http://www.adobe.com/

Although access to WLS might work on other HTML browsers, incidents specific to browsers other than the products mentioned above are not eligible for support.

Access to product information (ENOVIA DMU / ENOVIA 3d com): Product information and User GALAXY (online product marketing information) are delivered in HTML format. An HTML browser is required to access this documentation. Online documentation may be installed and used only in an officially supported operating environment.

- In a UNIX environment (AIX, HP-UX, IRIX, Solaris)
  - Mozilla 1.7 with Java plug-in installed, except for IRIX
  - IRIX: Mozilla 1.4 with Java plug-in installed
- In a Windows environment, either
  - Microsoft Internet Explorer 6.0
  - Mozilla 1.7 with Java plug-in installed

Although access to the online documentation might work on other HTML browsers, incidents specific to browsers other than products mentioned above are not eligible for support.

In addition to a Java-enabled Web browser, a Java plug-in at level 1.5 (or 5.0) is required, except for IRIX, which requires Java 1.4.1.

Note: Improvements in HTML searching and printing capabilities eliminate the need to duplicate product information in the Portable Document Format (PDF) format. PDF CDs are therefore no longer included in the ENOVIA VPLM softcopy collection kit.

ENOVIA DMU prerequisites for the license management environment

- Windows workstations must have an active LAN card (Ethernet or token ring) and TCP/IP installed and properly configured, but there is no need to have the workstations connected to the network.
- No additional software is required when accessing license keys.

- IBM License Use Management (LUM) is required to serve concurrent license keys across a network. A LUM configuration file (i4ls.ini) is required on ENOVIA — DMU clients to access concurrent license keys from these servers.
- ENOVIA VPLM add-on (AOP) and shareable products may require license keys for prerequisite products that are not already included in a standard configuration. Prerequisites for shareable products can be satisfied by a standard configuration, by an AOP within a custom configuration, or by a shareable product. However, because all add-on products are defined within one custom license key, any AOP prerequisites must be satisfied by either a standard configuration or by other AOPs purchased and defined within the same custom configuration.
- There is no limit to the number of ENOVIA DMU processes launched for a given license key (configuration or product). For instance, a user can launch the following simultaneous processes:
  - A V5 interactive session
  - A V5 process executed through an OLE container application
  - Replay of macros recorded from captured sequences of V5 user interactions

- LUM level
  - V4.6.8 with Patch 4.6.8.3 is the certified, recommended level.
  - V4.6.5 is the minimum level for UNIX; Windows 2000 Professional, Server, Advanced Server; or Windows XP license key servers.
  - V4.6.7 is the minimum level for Windows Server 2003 license key servers.
  - V4.6.5 is the minimum level when the High Availability Licensing (HAL) mechanism offered by LUM is used.
  - V4.6.7, or later, is required when the Concurrent Offline Licensing mechanism offered by LUM is used.
  - V4.6.8 supports LUM service across a firewall and other new features.

LUM 4.6.8 with Patch 4.6.8.3 is shipped with ENOVIA VPLM. Various release levels of LUM may be downloaded, at no charge, from http://www.ibm.com/software/lum

ENOVIA DMU macro replay capabilities: ENOVIA DMU products have built-in macro record and replay: For UNIX, the interpreter is VisualBasic (VB) Script 3.0 from Mainsoft. It is included in ENOVIA DMU products as shared libraries.

For Windows, the interpreter is either:

- VB Script 5.0, or later, delivered with Microsoft Internet Explorer. VB Script libraries at level 5.0.0.3715 are delivered with Internet Explorer 5.0, or later, with later versions of Internet Explorer. Use of VB Script is recommended for developing Windows/UNIX compatible macros.
- Microsoft VisualBasic for Applications (VBA) 6.0, or later. VBA is delivered and installed by default with ENOVIA DMU.
ENOVIA DMU printer and plotter support in a UNIX environment: ENOVIA DMU products provide support for main plotter/printer languages:

- CGM-ISO, ATA, CALS
- Hewlett Packard HP-GL/2-RTL and HP-GL or IBM-GL subsets
- OCE Graphics GPR50: VDF Plotting routines
- PostScript

ENOVIA DMU printer and plotter support in a Windows environment: Support of printers and plotters on Windows is performed through the availability, for the targeted printers/plotters, of the corresponding vendors’ drivers, compatible with the targeted version of the operating system. Contact the appropriate printer/plotter vendor for support.

Batch monitoring using WebSphere MQ (formally known as MQSeries®): Using WebSphere MQ communication tools, some batch operations can now be launched remotely. When implemented at the batch level, this optional feature requires:

- WebSphere MQ V6.0; for information about availability, visit http://www.ibm.com/software/integration/wmq
- WebSphere MQ client is required on systems where the transaction is initiated. WebSphere MQ server is required on systems where remote batches are executed.

ENOVIA DMU software installation

- On Windows, installing and uninstalling rely on Windows-compliant tools such as InstallShield, enabling anyone familiar with Windows procedures and concepts to install the software.
- The concepts, procedures, and look and feel of installation procedures for Windows are carried over to the UNIX environment to give a common ENOVIA — DMU Products interface for all supported operating systems.
- Installation procedures feature
  - Easy and fast installation: Any user can install and execute the product with a limited number of interactions.
  - Reduced user environment: When installed, a product requires customization.
  - Customizable installation: The user can select downloaded products.

ENOVIA 3d com client software requirements

Common client software requirements

Java-enabled Web browser on the client machines

- Windows — Microsoft Internet Explorer 6.0 or Mozilla 1.7 on Windows with Java plug-in Version 5.0 update 5 available under the JDK/JRE 5.0 section at http://java.sun.com/products/archive/index.html
- IBM AIX — For Mozilla 1.7, the recommended plug-in on AIX is Java 1.5.
- IRIX — When using Mozilla 1.4 browser, a Java plug-in is necessary. The recommended plug-in on SGI, at minimum level 1.4.1, is available at http://www.sgi.com/products/evaluation/6.5_java_plugin_1.4.1/
- HP-UX — When using Mozilla 1.7 browser, a Java plug-in is necessary. The recommended plug-in on HP-UX, at minimum level 5.0, is available at http://www.hp.com/products1/unix/java/java2/jpi/downloads/index.html
- Solaris — When using Mozilla 1.7 browser, a Java plug-in is necessary for access to the Documentation search applet. The recommended plug-in on Solaris is Version 5.0 update 5 available under the JDK/JRE 5.0 section at http://java.sun.com/products/archive/index.html

On Sun Solaris, IBM AIX, HP-UX and Windows, for classic ENOVIA 3d com, the Java Runtime Environment at level 1.5 (or 5.0) is required for ENOVIA 3d com Classic. It can be downloaded from

- SUN Solaris
- IBM AIX
- HP-UX
  http://www.hp.com/go/java/
- Windows

On SGI IRIX, the Java Runtime Environment at level 1.4.1.06 is required for ENOVIA 3d com Classic, available with the operating system or downloadable from http://www.sgi.com/products/evaluation/

On-the-fly conversion to VRML does not require any additional software.

- If no plug-in is available to display the converted data, the browser will propose to store the data with the extension .wrl on the client.
- If a VRML plug-in is available it is automatically invoked for viewing and manipulation.

For interoperability between a CATIA V5 session and a VPM database, using a ENOVIA 3d com Classic, available with the operating system or downloadable from http://www.sgi.com/products/evaluation/

Platform-specific software requirements

UNIX

Operating system requirements stated in the Specific server software requirements section apply equally for ENOVIA 3d com product clients on UNIX machines.

Windows 2000/Windows XP


Windows 2000 Professional Edition with Service Pack 4 or higher or Windows XP SP1 or SP2, or Professional Edition, with the following components:
• Windows 2000 or Windows XP delivers an implementation of OpenGL libraries. These libraries may be updated depending on the selected graphics adapter when the user installs the graphics adapter and associated drivers.

• A localized version of the operating system may be required when the selected installation locale differs from Latin1.

Windows XP Professional x64 edition for V5 32-bit

• Minimum level required: Windows XP Professional x64 Edition

• Microsoft implementation of OpenGL libraries, as delivered with Windows. For recommendations related to driver levels based on tested graphic adapters, visit http://www.3ds.com/implementation/technology WINDOWS/technology/windows/

• The following set of patches are required when running 32-bit applications on x64 environment:
  - KB903648: When using macro and VBScript features, V5 may crash when accessing more than 2GB of address space. A Microsoft patch is available to correct this problem. To see Microsoft Article: KB903648, visit http://support.microsoft.com/default.aspx?scid=kb;en-us;903648
  - KB911021: required for applications allowing more than 2GB of address space. Contact your Microsoft support representative.

ENOVIA 3d com server software requirements: Information in this section describes requirements specific to each supported operating system on ENOVIA 3d com servers.

Windows 2003


• Microsoft Windows 2003 delivers an implementation of OpenGL libraries. These libraries may be updated depending on the selected graphics adapter when the user installs the graphics adapter and associated drivers.

• DirectX at minimum level 8.1 is required for correct operation of ENOVIA 3d com Server in a multi-user environment. It is available from http://www.microsoft.com/downloads/

• A localized version of the operating system may be required when the selected installation locale differs from Latin1.

Note: V5.17 is the final release to support Windows 2000 Professional Edition. Customers currently running V5 on Windows 2000 are encouraged to migrate to Windows XP.

AIX

Note: Standard support for AIX V5.1 ended on April 1, 2006, and end of support (EOS) for AIX V5.2 is September 1, 2007. To ensure a consistent level of maintenance and service for CATIA and ENOVIA VPLM, customers are encouraged to migrate to AIX V5.3.

• AIX V5.2 ML07, with the following components:

• AIX V5.3 ML03, with the following components:
  - XL C/C++ Enterprise Edition Run-time Environment at a minimum level of V7.0.0 with the IBM C++ Run-time Environment Component for AIX
  - XL Fortran Enterprise Edition for AIX Run-time at a minimum level of V9.1.0
  - OpenGL and GL3.2 Run Time Environment (delivered with the operating system)
  - Common Desktop Environment (CDE; delivered with the operating system).
  - For AIX 32-bit and 64-bit Motif 2.1
  - Java Run Time Environment (JRE) 1.5.

Or

• AIX V5.3 ML03, with the following components:
  - XL C/C++ Enterprise Edition Run-time Environment at a minimum level of V7.0.0 with the IBM C++ Run-time Environment Component for AIX
  - XL Fortran Enterprise Edition for AIX Run-time at a minimum level of V9.1.0
  - Motif 2.1
  - Java Run Time Environment (JRE) 1.5.

Note: ENOVIA VPLM V5.17 is the last release to support AIX V5.2. Customers currently running V5 on AIX V5.2 are encouraged to migrate to AIX V5.3.

AIX V5.2 ML07 is the minimum build-time and run-time level supported.

HP-UX

• HP-UX Version HP-UX 11iv1 (December, 2003) with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.50)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Or

• HP-UX Version HP-UX 11iv1 (June, 2004) with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.50)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Or

• HP-UX Version HP-UX 11iv1 (December, 2004) with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.62)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)
Support of WebSphere Application Server V6.0.2 or Oracle 10.2.0.2 (10gR2) requires HP 11i v1 to respect previous recommendations for HP 11i December 2004.

**SGI IRIX**

**Note:** ENOVIA VPLM V5.17 is the last release to support SGI IRIX. Any future release will require customers who are currently running ENOVIA VPLM on SGI IRIX to migrate to another operating system.

IRIX 6.5.15m, including:
- C, C++, and Fortran77 standard execution environment (delivered with the operating system)
- OpenGL (delivered with the IRIX execution environment)
- IRIX Interactive Desktop (delivered with the operating system)
- WorldView required when the selected installation locale differs from ISO-1

**Sun Solaris**

Sun Solaris 8 HW 05/03 or Solaris 10 SPARC HW 03/05, including:
- C and C++ runtime environment (delivered with the operating system)
- OpenGL runtime environment (delivered with the operating system)
- Fortran runtime environment (delivered with the operating system)
- A localized version of the operating system may be required when the selected installation locale differs from ISO-1

**Notes**
- V5.17 is the last release to support Solaris 8. Customers currently running V5 on Solaris 8 are encouraged to migrate to Solaris 10.
- WAS 6.0.2 is currently supported on SOLARIS 32.
- Current support for SOLARIS run-time on SPARC system is Solaris 10.03/05 (on 32-bit only).

**Additional ENOVIA 3d com server software requirements**

The following components are required or optional on ENOVIA 3d com servers for all supported operating systems:

**HTTP server**
- ENOVIA 3d com Classic requires an HTTP server (not delivered with the ENOVIA 3d com products) on the server machine. The user will need to configure it after the ENOVIA 3d com installation.
- ENOVIA 3d com Classic supports the following HTTP servers:
  - Apache Server
  - IBM HTTP Server
  - Microsoft Internet Information Services
  - Incidents specific to other servers will not be eligible for support

**ORBIX**
ORBIX (supplied with ENOVIA 3d com Navigator) enables IIOP-based, CORBA-compliant communications on the server side.

**Java virtual machine**

On Sun Solaris, IBM AIX, HP-UX and Windows, for classic ENOVIA 3d com, the Java Runtime Environment at level 1.5 (or 5.0) is required on the server side for the Workbook server. It can be downloaded from
- SUN Solaris
- IBM AIX
- HP-UX
- Windows

On SGI IRIX, the Java Runtime Environment at level 1.4.1_06 is required for the Workbook server, available with the operating system or downloadable from [http://www.sgi.com/products/evaluation/](http://www.sgi.com/products/evaluation/)

Workbook can be managed through a WebSphere Application Server.

**WebSphere Application Server (ENOVI A 3d com Web Navigator)**

Management of settings, workbooks, and single sign on can optionally be hosted on a Web application server running on AIX, HP-UX, Solaris, or Windows 2003.

Implementing ENOVIA 3d com Web Viewer and ENOVIA LCA Navigator also requires WebSphere Application Server (refer to ENOVIA 3d com Program Directories for detailed information on ENOVIA 3d com Web Navigator implementation).

ENOVI A 3d com Server and the Web application server can run on different machines and are installed separately. This Web application server requires:
- WebSphere Application Server Express, Base, or Network Deployment V6.0.2 is the recommended level. For more information, visit [http://www-306.ibm.com/software/webservers/appserv/was/features/](http://www-306.ibm.com/software/webservers/appserv/was/features/)
- An HTTP server supported by the selected IBM WebSphere Application Server version.
  - Apache Server
  - IBM HTTP Server
  - Microsoft Internet Information Services
  - Incidents specific to other servers will not be eligible for support
- If the ENOVIA 3d com Web application server manages Single Sign On, an LDAP directory server supported by the selected WebSphere Application Server level is required.

**WebSphere Portal (ENOVI A 3d com Web Navigator and ENOVIA — LCA Navigator)**

On AIX and Windows, WebSphere Portal Server V5.1.0.2 on WebSphere Application Server V6.0.2 can be used with the new File Explorer and the ENOVIA 3d com Web Navigator and ENOVIA — LCA Navigator portlets. For more information about WebSphere Portal, visit...
To use the Sametime® collaboration capabilities, Lotus® Instant Messaging and Web Conferencing 6.51 is required.

**ENOVIA 3d com prerequisites for the license management environment**

- “Nodelock” license keys are not allowed with ENOVIA 3d com. LUM is required to serve concurrent license keys across a network. A LUM configuration file (i4ls.ini) is required on clients to access concurrent license keys from these servers.

**Note:** Concurrent offline licensing is not supported.

- **LUM level**
  - V4.6.8 with Patch 4.6.8.3 is the certified, recommended level.
  - V4.6.5 is the minimum level for UNIX; Windows 2000 Professional, Server, Advanced Server; or Windows XP license key servers.
  - V4.6.7 is the minimum level for Windows Server 2003 license key servers.
  - V4.6.5 is the minimum level when the High Availability Licensing (HAL) mechanism offered by LUM is used.
  - V4.6.8 supports LUM service across a firewall and other new features.

LUM 4.6.8 with Patch 4.6.8.3 is shipped with ENOVIA VPLM. Various release levels of LUM may be downloaded, at no charge, from [http://www.ibm.com/software/lum](http://www.ibm.com/software/lum)

**Optional ENOVIA 3d com server requirements**

**For CATIA V5**

- CATIA V5 server code is included on the ENOVIA 3d com CD-ROM and installed by default. To use ENOVIA 3d com in conjunction with CATIA V5, the user must install ENOVIA 3d com with the ENOVIA 3d com Navigator or with ENOVIA 3d com CAD Viewing configuration.

- The ENOVIA 3d com Navigator and CAD Viewing configurations include a V5 server that supports reading and visualizing of CATIA 3D data created at any level up to and including CATIA V5.12 and CATIA V4.2.4.1.

**Notes**

- MultiCAx plug-ins (ProEngineer, Unigraphics, and I-deas) must be installed on the server side when multi-CAD support is required.

- ENOVIAVPM (for installation using ENOVIA —MultiPDM CDM/VPM Plug-in) requires ENOVIAVPM V1.6.

**Requirements for using instant collaboration capabilities with ENOVIA 3d com**

- Sametime Server: 6.5.1
- Server OS: see Sametime release Note
- Client OS: Windows, AIX V5.2, Solaris 8

Using ENOVIAVPM V1.6 with ENOVIA VPLM V5.17 or CATIA V5.17 products: ENOVIAVPM V1.6 customers who plan to interoperate with the V5.17 family of ENOVIA VPLM or CATIA products must install an ENOVIAVPM program temporary fix (PTF) to obtain the required interoperability level. (V5.17 service pack may also be required.) The required PTF could vary depending on whether the base level of the V5.17 product is being used, or a subsequent service pack level. Check the V5.17 documentation for interoperability information, or contact IBM Support for specific details, or visit [https://www.ibm.com/software/applications/plm/support/support.wss](https://www.ibm.com/software/applications/plm/support/support.wss)

Select Fixes, tools on the left side.

**ENOVIA — LCA Enterprise Process Definition (E-PD) support:** This product is supported on Windows XP and Windows 2000 only.

**ENOVIA LCA and ENOVIA V5 VPM client software requirements**

**Common client software requirements**

For ENOVIA LCA Desktop Editor products and ENOVIA V5 VPM: Java Runtime environment, version 1.5 is required (see Program Directories for further details)

For Web-client ENOVIA LCA (ENOVIA LCA Navigator)

The following Java-enabled Web-browsers on the client machines are supported:

- **Windows**
  - Microsoft Internet Explorer 6.0 or Mozilla 1.7 on Windows with Java plug-in Version 5.0 update 5 available under the JDK/JRE 5.0 section at [http://java.sun.com/products/archive/index.html](http://java.sun.com/products/archive/index.html)

- **IBM AIX**
  - For Mozilla 1.7, the recommended plug-in on AIX is Java 1.5.

- **IRIX**
  - When using Mozilla 1.4 browser, a Java plug-in is necessary. The recommended plug-in on SGI, at minimum level 1.4.1, is available at [http://www.sgi.com/products/evaluation/6.5_java_plugin_1.4.1/](http://www.sgi.com/products/evaluation/6.5_java_plugin_1.4.1/)

- **HP-UX**

- **Solaris**
  - When using Mozilla 1.7 browser, a Java plug-in is necessary for access to the Documentation search applet. The recommended plug-in on Solaris is Version 5.0 Update 5 available under the JDK/JRE 5.0 section at [http://java.sun.com/products/archive/index.html](http://java.sun.com/products/archive/index.html)

**Platform-specific client software requirements**

**UNIX**

Operating system requirements for clients on UNIX machines are the same as those stated in the ENOVIA LCA server software requirements section.
Windows 2000/Windows XP

**Note:** ENOVIA VPLM V5.17 is the last release to support Microsoft Windows 2000 Professional Edition. Customers are encouraged to migrate to Microsoft Windows XP Professional Edition.

- Microsoft Windows 2000 Professional with Service Pack 4 or higher, or Windows XP Professional SP1 or SP2 with the following components:
  - Microsoft Windows 2000 and Windows XP deliver an implementation of OpenGL libraries. The user can update these libraries depending on the graphics adapter selected when the user installed the adapter and associated drivers.
  - A localized version of the operating system may be required when the selected installation locale differs from Latin1.

**Windows XP Professional x64 edition for V5 32-bit**

- Minimum level required: Windows XP Professional x64 Edition
- Microsoft implementation of OpenGL libraries, as delivered with Windows. For recommendations related to driver levels based on tested graphic adapters, visit [http://www.3ds.com/implementation/technology/windows/certified-workstations-list/](http://www.3ds.com/implementation/technology/windows/certified-workstations-list/)
- The following set of patches are required when running 32-bit applications on x64 environment:
  - KB903648: When using macro and VBScript features, V5 may crash when accessing more than 2GB of address space. A Microsoft patch is available to correct this problem. To see Microsoft Article: KB903648, visit [http://support.microsoft.com/default.aspx?scid=kb;en-us;903648](http://support.microsoft.com/default.aspx?scid=kb;en-us;903648)
  - KB911021: Required for applications allowing more than 2GB of address space. Contact your Microsoft support representative.

**ENOVIA LCA server software requirements**

**Common server software requirements**

Java Runtime Environment V1.5.0 (5.0) is required.

- SUN Solaris
- IBM AIX
- HP-UX
- Windows

**Database Management System (DBMS) requirements**

ENOVIA VPLM data persistency is independent of a specific implementation. It supports:

- ENOVIA LCA requirement on DB2
  - When running on Windows, IBM AIX, HP-UX 11i, or Sun Solaris, IBM DB2 UDB Client Version DB2 V8.2.2.

- ENOVIA LCA requirement on Oracle
  - ORACLE 9.2.0.3 or 10.2.0.2 client-connection modules are required when running on Windows, AIX, HP-UX and SUN.

Contact the local IBM or Oracle representative for planning and support information about DB2 or Oracle.

**Notes**

- DB2 UDB Enterprise Edition V8.2.2 is shipped with ENOVIA LCA V5.17.
- Further DB2 or Oracle fixpack requirements, if any, will be documented in program directories.
- Contact the local IBM or Oracle representative for planning and support information about DB2 or Oracle.

**ENOVIA LCA Navigator V5 32-bit on Windows XP Professional x64 edition**

- Minimum level required: Windows XP Professional x64 Edition
- Microsoft implementation of OpenGL libraries, as delivered with Windows. For recommendations related to driver levels based on tested graphic adapters, visit [http://www.3ds.com/implementation/technology/windows/certified-workstations-list/](http://www.3ds.com/implementation/technology/windows/certified-workstations-list/)
- The following set of patches are required when running 32-bit applications on x64 environment:
  - KB903648: When using macro and VBScript features, V5 may crash when accessing more than 2GB of address space. A Microsoft patch is available to correct this problem. To see Microsoft Article: KB903648, visit [http://support.microsoft.com/default.aspx?scid=kb;en-us;903648](http://support.microsoft.com/default.aspx?scid=kb;en-us;903648)
  - KB911021: Required for applications allowing more than 2GB of address space. Contact your Microsoft support representative.

**Platform-specific server software requirements**

Information in this section describes requirements specific to each supported operating system on ENOVIA LCA servers.

**Microsoft Windows**

- Microsoft Windows delivers an implementation of OpenGL libraries. These libraries may be updated depending on the selected graphics adapter when installing the graphics adapter and associated drivers.
  - Also available with Windows XP Service Pack 1
- A localized version of the operating system may be required when the selected local installation differs from Latin1.

**AIX**

**Note:** Standard support for AIX V5.1 ended on April 1, 2006, and end of support (EOS) for AIX V5.2 is September 1, 2007. To ensure a consistent level of maintenance and service for CATIA and ENOVIA VPLM, customers are encouraged to migrate to AIX V5.3.

- AIX V5.2 ML07, with the following components:
  - XL C/C++ Enterprise Edition Run-time Environment at a minimum level of V7.0.0 with the IBM C++ Run-time Environment Component for AIX
  - XL Fortran Enterprise Edition for AIX Run-time at a minimum level of V9.1.0
  - OpenGL and GL3.2 Run Time Environment (delivered with the operating system)
Common Desktop Environment (CDE; delivered with the operating system).
- For AIX 32-bit and 64-bit: Motif 2.1
- Java Run Time Environment (JRE) 1.5.

Or
- AIX V5.3 ML03, with the following components:
  - XL C/C++ Enterprise Edition Run-time Environment at a minimum level of V7.0.0 with the IBM C++ Run-time Environment Component for AIX
  - XL Fortran Enterprise Edition for AIX Run-time at a minimum level of V9.1.0
  - Motif 2.1
  - Java Run Time Environment (JRE) 1.5.

**Note:** ENOVIA VPLM V5.17 (ENOVIA LCA) is the last release to support AIX V5.2. Customers are encouraged to migrate to AIX V5.3.

**HP-UX**
- HP-UX Version HP-UX 11i v1 (December, 2003), with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.50)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Or
- HP-UX Version HP-UX 11i v1 (June, 2004), with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.50)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Or
- HP-UX Version HP-UX 11i v1 (December, 2004) with the following components at the minimum levels indicated:
  - ANSI C++ Runtime Environment (aC++, at a minimum level of 3.62)
  - HP Fortran 90 Runtime Environment (delivered with the operating system)
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE (delivered with the operating system)

Support of WAS 6.0.2 or Oracle 10.2.0.2 (10gR2) requires HP 11i v1 to respect previous recommendations for HP 11i December 2004.

**Sun Solaris**
- Sun Solaris 8 H/W 05/03 or Solaris 10 SPARC HW 03/05, including:
  - C and C++ runtime environment — Delivered with the operating system
  - OpenGL runtime environment — Delivered with the operating system
  - CDE — Delivered with the operating system

Support of the XVR 600 graphic adapter requires OpenGL runtime environment at level 1.3.

**WebSphere Application Server**
- Implementing ENOVIA LCA Navigator requires WebSphere Application Server (refer to ENOVIA LCA Program Directories for detailed information on ENOVIA LCA Navigator implementation).

**Note:** ENOVIA LCA Navigator products installed on the WebSphere Application Server are supported on AIX, HP-UX, and Windows 2003 server.

- ENOVIA LCA application server and the Web Application Server may run on different machines and are installed separately. This Web Application Server requires:
  - WebSphere Application Server Express, Base or Network Deployment V6.0.2 is the recommended level.
  - An HTTP server, supported by the selected WebSphere Application Server version. The following servers are supported:
    - Apache Server
    - IBM HTTP Server
    - Microsoft Internet Information Services
    - Incidents specific to other servers will not be eligible for support

**LDAP:** In the case that ENOVIA LCA Navigator Web Application Server manages Single Sign On, an LDAP directory server supported by the selected WebSphere Application Server version is required in addition to the above middleware requirements.

**ORBIX:** The ORBIX 3.0.1 product (supplied with ENOVIA LCA Navigator) is used and enables IIOP-based, CORBA-compliant communications on the server side.

**Lotus Sametime:** For customers deploying ENOVIA — VPM Navigator Instant Collaboration and ENOVIA 3d com Instant Collaboration, Lotus Sametime Server V6.5.1 is required in addition to the above middleware requirements.

**MQ:** For customers deploying ENOVIA — Enterprise Process Management (E-PM) and ENOVIA — Enterprise Process Definition (E-PD), the following MQ applications are required in addition to the above middleware requirements:
- Message-oriented middleware:
  - IBM WebSphere MQ V6.0
- Workflow engine: WebSphere MQ Workflow V3.6
Additional ENOVIA LCA requirements

Access to product information (ENOVIA LCA)

Product documentation is delivered in HTML format. An HTML browser is required to access this documentation. Product documentation may be installed and used only in an officially supported operating environment.

- On Windows, Microsoft Internet Explorer 6.0 or higher with Java plug-ins at level 1.5
- On UNIX, except SGI IRIX or Windows, Mozilla 1.7 with Java plug-ins at level 1.5 (the Java level is available in the program directories)
- On SGI IRIX, Mozilla 1.4 and Java plug-in at level 1.4.1 (the Java level is available in the program directories)

Although access to product documentation might work on other HTML browsers, incidents specific to other browsers are not eligible for support.

In addition to a Java-enabled Web browser, a Java plug-in at level 1.4 is required on the client side.

Note: Improvements in HTML searching and printing capabilities eliminate the need to duplicate product information in the Portable Document Format (PDF) format. PDF CDs are therefore no longer included in the information in the Portable Document Format (PDF)

Prerequisites for the ENOVIA LCA license management environment

- Nodelock license keys are not allowed with ENOVIA LCA. IBM License Use Management (LUM) is required to serve concurrent license keys across a network. A LUM configuration file (i4ls.ini) is required on clients to access concurrent license keys from license servers.

Note: Concurrent offline licensing is not supported.

- LUM level
  - V4.6.8 with Patch 4.6.8.3 is the certified, recommended level.
  - V4.6.5 is the minimum level for UNIX; Windows 2000 Professional, Server, Advanced Server; or Windows XP license key servers.
  - V4.6.7 is the minimum level for Windows Server&rrbl.2003 license key servers.
  - V4.6.5 is the minimum level when the High Availability Licensing (HAL) mechanism offered by LUM is used.
  - V4.6.8 supports LUM service across a firewall and other new features.

LUM 4.6.8 with Patch 4.6.8.3 is shipped with ENOVIA VPLM. Various release levels of LUM may be downloaded, at no charge, from

http://www.ibm.com/software/lum

Documentation

Complete online documentation is available on CD. Totally Web-oriented using standard HTML and graphics formats, it is readily accessible using a standard Web browser. Navigation help includes the ability to do full text search.

Documentation is also available in PDF. Printing and browsing requires Adobe Acrobat Reader V5.0, or later. To download, visit

http://www.adobe.com/

License Management Model

ENOVIA LCA delivers identical license management mechanisms in UNIX and Windows environments, based on LUM and on the UNIX license management server, shareable across UNIX and Window clients. The following license management principles apply:

- A license key is required to use an ENOVIA LCA configuration or product.
- License keys are acquired and released for the total configuration. The products within a standard or custom configuration cannot be broken up or shared outside of it.
- In all cases, license keys are acquired at the beginning of the process (login) and released at its termination (logout).

ENOVIA LCA products and configurations are licensed on a concurrent usage basis.

ENOVIA VPLM General Licensing Principles

ENOVIA VPLM add-on (AOP) and shareable products may require prerequisite products that are not included in a standard purchased configuration. When a prerequisite product is not included in the selected standard configuration, both the AOP and its prerequisite products must be purchased and included as AOPs within a custom configuration. Prerequisites for shareable products can be satisfied by a standard configuration, by an AOP within a custom configuration, or by a shareable product.

Planning information

Direct customer support: Direct customer support is provided under a PLM enhanced support contract. This service for a fee enhances the customer’s productivity by providing voice and electronic access to the PLM Support Center. For eligible products, the PLM help desk can answer questions pertaining to the installation, administration, use, and handling of suspected software defects.

For additional information about the enhanced support contract and other available PLM services offerings, visit the PLM Technical Support Web site:

http://www.ibm.com/software/applications/plm/support/

Click on the “ECSR enhanced support details” link or contact the PLM marketing representative or authorized IBM Business Partner for more information.

Packaging

ENOVIA VPLM packaging

Note: The ENOVIA VPLM API CDs are shipped with CAA RADE as LCD4-7422. Refer to Software Announcement AP06-0198, dated September 5, 2006, for information on ordering CAA RADE.

ENOVIA 3d com / ENOVIA DMU box kit (LK4T-0077)

- Nine code CDs for ENOVIA 3d com (LCD4-4242) containing
  - AIX (2 CDs)
  - HP-UX (2 CDs)
  - IRIX (2 CDs)
- Solaris (2 CDs)
- Windows
- Seven code CDs for ENOVIA DMU (LCD4-4676) containing
  - AIX
  - AIX 64-bit
  - HP-UX
  - IRIX
  - Solaris
  - Windows
  - Windows 64-bit
- One ENOVIA VPLM Program Directory CD (LCD4-7618)
- One LUM Run Time V4.6.8 + patch 4.6.8.3 CD (LCD4-7882)
- English Online Documentation: 4 CDs in a 4-CD jewel case (SK3T-5188)
  - ENOVIA 3d com V5R17 English Online Documentation (2 CDs)
  - ENOVIA DMU V5R17 English Online Documentation (2 CDs)
- Informal documents
  - PLM Products Current User Memorandum (GI11-4403)
  - PLM Products Software Registration Memorandum (GI11-4404)

The following are shipped outside the box kit:
- Licensed Program Specification (GI11-6293)
- Eight CDs for ENOVIA MultiCAx products (LCD4-7456) in a one portfolio CD holder
  - AIX
  - AIX 64-bit
  - HP-UX
  - IRIX
  - Solaris
  - Windows
  - Windows 64-bit
  - Program directory

**ENOVIA LCA / ENOVIA V5 VPM box kit (LK4T-0078)**

Each shipment of ENOVIA LCA / ENOVIA V5 VPM includes:
- Eight code CDs for ENOVIA LCA (LCD4-5346) in cardboard CD holder containing:
  - AIX (2 CDs)
  - HP-UX (2 CDs)
  - IRIX
  - Solaris (2 CDs)
  - Windows
- Seven code CDs for ENOVIA V5 VPM (LCD4-7617) in cardboard CD holder containing:
  - AIX
  - AIX 64-bit
  - HP-UX
  - IRIX
  - Solaris
  - Windows
  - Windows 64-bit
- One ENOVIA VPLM Program Directory CD (LCD4-7618)
- One LUM Run Time V4.6.8 CD (LCD4-7882)
- English Online Documentation: 2 CDs in a double jewel case (SK3T-7835)
- ENOVIA LCA and ENOVIA V5 VPM English Online Documentation (2 CDs)
- Informal documents
  - PLM Products Current User Memorandum (GI11-4403)
  - PLM Products Software Registration Memorandum (GI11-4404)

The following are shipped outside the box kit:
- Licensed Program Specification (GI11-6293)
- DB2 V8.2 Enterprise Server Edition CDs (LCD4-7874) — 19 code CDs in CD holder
- DB2 V8.2 Enterprise Server Edition Fix Pack 9a (LCD4-7884), equivalent to V8.2.2 — 9 code CDs in a Univenture CD sleeve

**ENOVIA VPLM national language packaging:** Product integrated information (PII) is included on the code CDs at general availability. Softcopy collection kits of translated publications for each language are available after general availability.

Additional Softcopy Collection Kits can be ordered through the IBM representative or business partner using the following numbers:

<table>
<thead>
<tr>
<th>Publication name</th>
<th>Publication number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENOVIA V5 (ENOVIA 3d com / ENOVIA DMU) Softcopy Collection Kit</td>
<td>SK3T-0572</td>
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<tr>
<td>ENOVIA V5 (ENOVIA 3d com / ENOVIA DMU) Softcopy Collection Kit — German</td>
<td>SK3T-0573</td>
</tr>
<tr>
<td>ENOVIA V5 (ENOVIA 3d com only) Softcopy Collection Kit — Japanese</td>
<td>SK24-0016</td>
</tr>
<tr>
<td>ENOVIA V5 (ENOVIA LCA / ENOVIA V5 VPM) Softcopy Collection Kit — French</td>
<td>SK3T-0615</td>
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<tr>
<td>ENOVIA V5 (ENOVIA LCA / ENOVIA V5 VPM) Softcopy Collection Kit — German</td>
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<td>ENOVIA V5 (ENOVIA LCA / ENOVIA V5 VPM) Softcopy Collection Kit — Japanese</td>
<td>SK3T-0618</td>
</tr>
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<td>ENOVIA V5 (ENOVIA LCA / ENOVIA V5 VPM) Softcopy Collection Kit — Korean</td>
<td>SK24-0017</td>
</tr>
</tbody>
</table>

**ENOVIA WLS V5 packaging:** The ENOVIA VPLM WLS products are packaged so that all user companions for UNIX and Windows are under a single form number. The ENOVIA WLS V5 User Companion for DMU (LCD4-7848) includes:
- User Companion for DMU for UNIX
- User Companion for DMU for Windows

The ENOVIA WLS V5 User Companion for VPM (LCD4-7849) includes:
- ENOVIA User Companion for VPM for UNIX
- ENOVIA User Companion for VPM for Windows

The ENOVIA WLS V5 User Companion for LCA (LCD4-7850) includes:
- ENOVIA User Companion for LCA for UNIX
- ENOVIA User Companion for LCA for Windows

ENOVIA WLS V5 User Companion for V5 VPM (LCD4-7879) includes:
- ENOVIA User Companion for V5 VPM for UNIX
- ENOVIA User Companion for V5 VPM for Windows

In addition, all ENOVIA VPLM WLS V5 user companions include the following informal documents:
National language versions (NLVs) of WLS products: NLVs of WLS products at the current release level will be available after general availability. The standard order process applies. The ENOVIA VPLM WLS NLV products are packaged so that all user companions for UNIX and Windows are under a single form number:

User Companion for DMU for French (LCD4-7860) includes:
- User Companion for DMU for UNIX
- User Companion for DMU for Windows

User Companion for DMU for German (LCD4-7853) includes:
- User Companion for DMU for UNIX
- User Companion for DMU for Windows

User Companion for DMU for Japanese (LCD4-7856) includes:
- User Companion for DMU for UNIX
- User Companion for DMU for Windows

ENOVIA User Companion for VPM for French (LCD4-7859) includes:
- User Companion for VPM for Windows
- User Companion for VPM for UNIX

ENOVIA LCA WLS is available in English only. There will be no national language deliverables for ENOVIA LCA WLS for V5.17.

Security, auditability, and control

The announced programs use the security and auditability features of the operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering information

Current licensees

AP customers will receive a program reorder form that can be returned directly to IBM CSO SW Asset Fulfillment. Reorder forms will be mailed within two weeks of the planned availability date. Reorder forms returned to IBM CSO SW Assessment Fulfillment will be processed within 10 working days of receipt.

Shipment of this release of ENOVIA VPLM is scheduled to be completed by October 13, 2006; shipment of this release of ENOVIA VPLM WLS V5 is scheduled to be completed by November 3, 2006.

New licensees

Orders for new licenses can be placed now.

Unless a later date is specified, orders entered before the planned availability date will be assigned a schedule date of one week following availability.

Shipment will begin on the planned availability date.

Basic license: To order a basic license, specify the program number and feature number 9001 for asset registration. Specify the feature number of the desired distribution medium shown below.

New ENOVIA VPLM products: There are no new products for V5.17.

Withdrawn product: Effective December 4, 2006, ENOVIA — Catalog Management (5691-CTM) is withdrawn.

There is no replacement product.

Updated configurations: For V5.17, the DMU Dimensioning & Tolerancing Review 1 Add-on Product (5693-DT1) is included in the following configurations:

- 5691-DM1
- 5691-DM2
- 5691-DPS

Accordingly, effective September 5, 2006, the following indicator feature number:

4306 5693-DT1 AOP Indicator Code

is to be removed from the following configurations:

- 5691-DM1
- 5691-DM2
- 5691-DPS

The former ENOVIA — 3d com Web Viewer product has been renamed ENOVIA — Web Viewer product, now common to both ENOVIA 3d com and ENOVIA LCA. The product identifier remains W3V.

Billing feature numbers

New upgrade/migration paths

Primary license charge upgrade feature number

From CATIA — ENOVIA VPM Supply Change Engineering Exchange product to ENOVIA — VPM Supply Change Engineering Exchange product

L1RU 5691-WPE UPG from 5691-EWE

From CATIA — ENOVIA VPM Supply Change Engineering Exchange AOP to ENOVIA — VPM Supply Change Engineering Exchange AOP

A8FN 5693-WPE UPG from 5693-EWE

New upgrade/migration paths

One-time license charge (OTC) upgrade feature number

From CATIA — ENOVIA VPM Supply Change Engineering Exchange product to ENOVIA — VPM Supply Change Engineering Exchange product

L1RV 5691-WPE UPG from 5691-EWE

From CATIA — ENOVIA VPM Supply Change Engineering Exchange AOP to ENOVIA — VPM Supply Change Engineering Exchange AOP

A8FN 5693-WPE UPG from 5693-EWE
Configuring orders: For orders of ENOVIA VPLM for Microsoft Windows, IBM AIX, HP-UX, SGI IRIX, or Sun Solaris platforms, configure ENOVIA VPLM using the ECFGRS6000 configurator.

To configure orders, specify the platform feature number(s) specified below with a quantity equal to the number of users.

Note: The following platform feature numbers apply only to 5691 program numbers; they do not apply to 5693 program numbers.

<table>
<thead>
<tr>
<th>Software Feature</th>
<th>platform number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Windows</td>
<td>5353</td>
</tr>
<tr>
<td>AIX</td>
<td>5350</td>
</tr>
<tr>
<td>Hewlett Packard HP-UX</td>
<td>5351</td>
</tr>
<tr>
<td>SGI IRIX</td>
<td>5352</td>
</tr>
<tr>
<td>Sun Solaris</td>
<td>5354</td>
</tr>
</tbody>
</table>

Ordering examples

It is a licensing requirement that each unique custom configuration of ENOVIA VPLM is assigned a unique SW serial number. All ENOVIA VPLM products are built on custom configurations. To provide a unique serial for each custom configuration, an install record has to be created for each unique custom configuration. The number is assigned automatically by the IBM ordering systems each time the output from the configurator system is loaded into the IBM ordering system. The SW serial number becomes part of the permanent Customer Record Number.

Additional ENOVIA VPLM products can be added to an already established SW serial number through an MES order. Use of the MES procedure with the IBM configurators requires that the ordering representative first load the configurator with the complete list of unique SW serial numbers for the unique customer number ordering the MES.

System Program Order (SPO)

ENOVI A VPLM programs for all platforms (UNIX and Windows) will be shipped under either the 5628-DMU or 5628-LCA SPO. A SPO is required for all program shipments and future updates.

Initial orders placed for program type 5691 without a corresponding order or MES for the SPO will either fail order validation, or will not generate a media shipment. Each customer number must have its own SPO.

Initial shipments

<table>
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<tr>
<th>Feature</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>3470</td>
<td>Ship Media Only (suppresses initial shipment of documentation)</td>
</tr>
<tr>
<td>3471</td>
<td>Ship Documentation Only (suppresses initial shipment of media)</td>
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</table>

Update shipments

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<thead>
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<th>Feature</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>3480</td>
<td>Ship Media Updates Only (suppresses update shipment of documentation)</td>
</tr>
<tr>
<td>3481</td>
<td>Ship Documentation Only (suppresses update shipment of media)</td>
</tr>
<tr>
<td>3482</td>
<td>Suppress Updates (suppresses update shipment of media and documentation)</td>
</tr>
</tbody>
</table>

Unlicensed documentation: One English softcopy publication CD-ROM is automatically included in all shipments. National language versions (NLVs) of the softcopy publications in French, German, Japanese, and Korean at the current release level will be available after general availability at no charge.

To order additional copies, specify the language using the feature numbers below. Only one additional copy of a kit can be ordered per license.

<table>
<thead>
<tr>
<th>Publication name</th>
<th>Feature number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENOVIA V5 Softcopy Collection Kit -- English</td>
<td>7100</td>
</tr>
<tr>
<td>ENOVIA V5 Softcopy Collection Kit -- French</td>
<td>7101</td>
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<tr>
<td>ENOVIA V5 Softcopy Collection Kit -- German</td>
<td>7102</td>
</tr>
<tr>
<td>ENOVIA V5 Softcopy Collection Kit -- Japanese (ENOVI A 3d com / ENOVIA LCA / ENOVIA V5 VPM)</td>
<td>7103</td>
</tr>
<tr>
<td>ENOVIA V5 Softcopy Collection Kit -- Korean</td>
<td>7105</td>
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</table>
Additional Softcopy Collection Kits can be ordered through your IBM representative or business partner using the following numbers:

<table>
<thead>
<tr>
<th>Publication name</th>
<th>Publication number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENOVIA V5 (ENOVIA 3d com / ENOVIA DMU)</td>
<td>SK3T-5188</td>
</tr>
<tr>
<td>Softcopy Collection Kit — English</td>
<td>SK3T-0572</td>
</tr>
<tr>
<td>ENOVIA V5 (ENOVIA 3d com / ENOVIA DMU)</td>
<td>SK3T-5188</td>
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<tr>
<td>Softcopy Collection Kit — French</td>
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<td>ENOVIA V5 (ENOVIA 3d com / ENOVIA DMU)</td>
<td>SK24-0017</td>
</tr>
<tr>
<td>ENOVIA V5 (ENOVIA LCA / ENOVIA 3d com)</td>
<td>SK3T-7835</td>
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<tr>
<td>ENOVIA V5 (ENOVIA LCA / ENOVIA V5 VPM)</td>
<td>SK3T-0046</td>
</tr>
</tbody>
</table>

Licensed documentation: Subsequent updates (technical newsletters or revisions between releases) to the publications shipped with the product will be distributed to the user of record for as long as a license for this software remains in effect. A separate publication order or subscription is not needed.

**Terms and conditions**

**Agreement:** IBM Customer Agreement

**Designated machine:** Not required

**Variable charges apply:** No

**Location license applies:** No

**Use limitation applies:** Yes, as implemented by the license management model described.

**ENOVIA VPLM license management model**

ENOVIA VPLM controls the number of concurrent users of a ENOVIA VPLM configuration or product, according to the number of license keys acquired for the configuration or product.

ENOVIA VPLM delivers identical license management mechanisms on UNIX and Windows environments, based on LUM. The following license management principles apply:

- An ENOVIA VPLM configuration (standard or custom) will require a license key. License keys for ENOVIA VPLM configurations are acquired and released for the total configuration. The products within a configuration cannot be shared.
- Each ENOVIA VPLM shareable product will require a license key, in addition to one for the prerequisite configuration and any prerequisite product, if applicable.
- In all cases, ENOVIA VPLM configuration license keys are acquired at the beginning of the process and are released at its termination.
- ENOVIA VPLM add-on (AOP) and shareable products may require license keys for prerequisite products that are not already included in a standard configuration. Prerequisites for shareable products can be satisfied by a standard configuration, by an AOP within a custom configuration, or by a shareable product. However, because all add-on products are defined within one custom license key, any AOP prerequisites must be satisfied by either a standard configuration or by other AOPs purchased and defined within the same custom configuration.

Additional licenses, features, or authorizations, as appropriate must be obtained to extend use levels.

Additional licenses or features, as appropriate, must be obtained to exceed usage limits.

**ENOVIA 3d com products and ENOVIA PPR Hub MultiPDM plug-ins licensing**

All ENOVIA VPLM products are concurrent-user licensed in a manner similar to license use in CATIA V5. The license keys of ENOVIA 3d com configurations and shareable products are installed on the server and can be accessed by thin clients (no code is installed on clients). A license for one user gives one connection line. Any offline user is required to have a ENOVIA 3d com license access with which code can be downloaded. Code should not be duplicated from a previous download.

When accessing other systems via ENOVIA 3d com products, you need to have a license or required authorization on that system. For example, to work with data in ENOVIA VPLM ENOVIAVPM, ENOVIAPM, or Optegra, a license for the corresponding user role within those systems is needed. The ENOVIA 3D com Navigator and CAD Viewing configurations can have an optional corequisite loaded on the server for CAD access. For CATIA V5, the required CAD server is included and installed by default. When used in conjunction with CATIA V4, you need to install CATIA COM license keys on the server. One license of CATIA V4 COM authorizes 10 simultaneous connections. The ENOVIA 3d com Space Analysis product has an optional corequisite of the corresponding CATIA Space Product (5691-SPA) for CATIA V4 (with the same 10:1 ratio of users per license). If data such as CAD models are to be loaded into the authoring system such as CATIA V5, the corresponding product configuration and license must be available.

The ENOVIA 3d com Web Search (part of the ENOVIA PPR Navigator product) function can be installed on CPUs other than the server to which an authorized user connects. The user task uses the search function to go through its ENOVIA 3d com Web Browser for the correct connection. Because of this capability, the search function is restricted to users defined on the ENOVIA 3d com server. This restriction applies even if the search component is physically installed on a CPU other than ENOVIA 3d com Navigator server.

**ENOVIA DMU products licensing principles**

ENOVIA DMU Navigator Configuration licenses continue as already announced and in use within the ENOVIA VPLM Portfolio. Working under the CATIA V5 concurrent-user licensing scheme, ENOVIA DMU products use the same methods. This provides a consistent user seat designation across both CATIA V5 and ENOVIA VPLM. ENOVIA DMU products such as Kinematic Simulation or DMU Optimizer, licensed as shareable in CATIA V5, now also work and can be shared within the ENOVIA DMU environment.
**ENOVIA PPR Hub MultiCAx plug-in licensing principles**

All MultiCAx Plug-ins are licensed as concurrent-user shareable products available to ENOVIA 3d com, CAD Viewing, and ENOVIA DMU users. Specifying a MultiCAx license in the profile enables the workstation to use the MultiCAx capabilities within any simultaneous sessions on the same workstation (of ENOVIA 3d com Products, CAD Viewing, or ENOVIA DMU Products).

**ENOVIA VPLM general licensing principles**

ENOVIA VPLM add-on (AOP) and shareable products may require prerequisite products that are not included in a standard purchased configuration. When a prerequisite product is not included in the selected standard configuration, both the AOP and its prerequisite products must be purchased and included as AOPs within a custom configuration. Prerequisites for shareable products can be satisfied by a standard configuration, by an AOP within a custom configuration, or by a shareable product.

**Use of DB2 UDB components**

ENOVIA LCA V5.17, ENOVIA V5 VPM V5.17, and ENOVIA VPM V1.6 are shipped with the DB2 Universal Database® (DB2 UDB) program. (Both ENOVIA LCA and ENOVIA V5 VPM ship DB2; ENOVIA 3d com and ENOVIA DMU do not ship DB2.) You are authorized to use this DB2 UDB only in conjunction with and in support of the Solution (as defined below), and are authorized to install and use this DB2 UDB only in association with your licensed use of the ENOVIA VPLM products for the storage and management of data used or generated by the Solution and not for any other data management purposes. Only inbound and outbound data transactions in which the Solution directly either creates, reads, updates or deletes data are permitted.

Examples of uses not permitted include (i) inbound connections to the database from other applications for queries or report generation, or (ii) outbound database connections in which the Solution is not in the database data transaction.

The Solution and DB2 UDB can be installed on either the same server or separate servers. In the case where DB2 UDB is installed on a separate server, the access point to the DB2 UDB server must be solely through the Solution server.

Solution is defined as any ENOVIA VPLM or ENOVIA SMARTTEAM program product other than those listed as follows:

- SMARTTEAM — Development Suite, a component of the IBM program product SMARTTEAM — Development Suite Configuration (5691-SDV)
- All CAA RADE products and APIs

**Educational allowance available:** No.

**Volume orders:** Contact your IBM representative.

**Warranty applies:** Yes

**Licensed program material availability**

- Restricted materials of IBM: No
- Non-restricted source materials: None
- Object Code Only (OCO): All

**Program services:** Program services offer a method of reporting code-related problems for ENOVIA VPLM and WLS licensed software products. Program Services are available electronically using the problem submission process at the PLM Technical Support Web site at

http://www.ibm.com/software/applications/plm/support/

**Note:** In order to use this facility, you must use an IBM ID which has associated to it the licensed IBM customer number under which the product was purchased. If you have not yet obtained an IBM ID, visit

http://www.ibm.com/account/profile/

If you have not yet associated the licensed IBM customer number to your IBM ID, you will be prompted to do so when accessing the problem submission facility.

When using Program Services, the problem report is submitted via the PLM Technical Support web site; all subsequent communications will be via e-mail. The response time for these problem reports, regardless of the severity, will be within two business days. All communications must be in English.

Not all options of the Product Lifecycle Management (PLM) technical support e-services are available in all countries.

If the problem reported is not known to be a code-related problem, the customer will be informed that work will continue on it provided the customer has ECSR (Electronic Customer Support Representative) enhanced support (reference PRPQ 5799-C88) with the ENOVIA VPLM support feature. Enhanced support for WLS is included in the base product’s feature code; no separate enhanced support is required.

For additional information about the enhanced support contract and other available PLM services offerings visit

http://www.ibm.com/software/applications/plm/support/

Click on the “ECSR enhanced support details” link or contact your PLM marketing representative or authorized IBM Business Partner for more information.

Preventive Service is delivered through the next release of ENOVIA VPLM products. The new release also includes corrections to problems, depending on the time of their submission and their severity.

During the Program Services period, Corrective Service for ENOVIA VPLM releases is delivered through service packs on a regular basis. A service pack includes corrections for Blocking Problems in production systems reported on this release and all corrections available for all components at the time it is built. Service packs are provided at the same time for all platforms currently supported. Each service pack supersedes the previous one and may be installed on top of the released level or on top of a previous service pack. (The exception is WLS products, where Corrective Service is provided in the next release of the product. No maintenance for WLS products is provided in the service packs.)

Customers may request a correction via a service pack for Blocking Problems. A Blocking Problem is defined as:

- A problem that stops production: The customer is currently using the level for which a fix is requested in a production environment.
- A problem that prevents migration: The customer must provide the migration plan.
A problem that halts testing of a given level: A fix will allow customer to continue the testing.

Installation problem: A problem that prevents the customer from installing or using the product.

Regression: Problems reported as regressions may be due to an operation that was being performed erroneously or created incorrect data with a previous release and the current release no longer permits these operations. Therefore, each problem reported as a regression must be evaluated. True regressions will be handled as Severity 1 problems.

Note: Customers experiencing problems with DB2 UDB V8.2 delivered with the ENOVIA LCA V5 product may report these problems through PLM product support, as long as DB2 UDB is being used in conjunction with ENOVIA LCA and the DB2 and ENOVIA LCA products are still within their respective support periods. Customers will receive the same level of support as they are entitled to for their ENOVIA VPLM products.

Customers experiencing problems with IBM License Use Management (LUM) products when used with ENOVIA VPLM products may report these problems through PLM product support. Note this only applies when the LUM product is being used in conjunction with an ENOVIA VPLM product and the ENOVIA VPLM product is within its support period. LUM products are not included in the enhanced support offering; LUM problems will receive the Program Services level of support and must be submitted via the Problem Reporting process at the PLM Technical Support Web site at http://www.ibm.com/software/applications/plm/support/

Program Services will be provided for this release of ENOVIA VPLM and WLS products until September 29, 2008.

Note: The ENOVIA User Companion for VPM 1.5 Configuration (WLS) will follow the support terms and conditions as announced for ENOVIA VPM V1.5.

For a list of all currently supported releases of CATIA, ENOVIA VPLM and ENOVIA SMARTEAM products visit http://www.ibm.com/software/applications/plm/support/

At the bottom of the page, select "End of support dates" under Plan, Product life cycle.

IBM Operational Support Services — SupportLine: No

Other support: PLM Support Centers

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### Prices

For all local charges, contact your IBM representative.

### License charges

**Types of charges**

- Recurring License Charge (RLC)
- Primary License Charge (PLC)

### Billing feature numbers

**New upgrade/migration paths**

**Primary license charge upgrade feature number**

- From CATIA — ENOVIAVPM Supply Change Engineering Exchange product to ENOVIA — VPM Supply Change Engineering Exchange product
  - LIRU 5691-WPE UPG from 5691-EWE
- From CATIA — ENOVIAVPM Supply Change Engineering Exchange AOP to ENOVIA — VPM Supply Change Engineering Exchange AOP
  - ABFN 5693-WPE UPG from 5693-EWE

**One-time license charge (OTC) upgrade feature number**

- From CATIA — ENOVIAVPM Supply Change Engineering Exchange product to ENOVIA — VPM Supply Change Engineering Exchange product
  - LIRV 5691-WPE UPG from 5691-EWE
- From CATIA — ENOVIAVPM Supply Change Engineering Exchange AOP to ENOVIA — VPM Supply Change Engineering Exchange AOP
  - ABFP 5693-WPE UPG from 5693-EWE

### Use level charge:

Charges for this program are based on usage levels. When a customer upgrades to a higher level of usage, a usage upgrade charge will apply, equal to the difference between the charge for the current level of usage and the higher level of usage.

### IBM Global Financing

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