ENOVIAVPM 1.6 Version 1 Release 6 Modification Level 0

ENOVIAVPM V1.6 includes the following features and benefits:

- Delivers ENOVIAVPM V1.6 UNIX® functional coverage on the Microsoft® Windows® platform, enabling Virtual Product Manager (VPM) users to migrate from UNIX-based CATIA (V4 or V5) to CATIA V5 running on Microsoft Windows.
- Provides excellent CATIA V5 integration within ENOVIAVPM V1.6, including a wide set of support and management capabilities for V5 data entities that strengthens V5 relational design practices with enhanced impact analysis capabilities.
- Introduces an XML-based distribution process for multi-site support, addressing heterogeneous environments, customization and selective checking of the delta replication. Moreover, V1.6 widens the scope of supported objects to replicate.
- Enhances DELMIA integration, SAP interoperability, Product Structure Navigator (PSN), and product configuration and action management.
- Delivers significant performance improvements to the user's daily tasks of action and product structure management, and greatly reduces V5 data loading time.
- Further protects a user's existing investment in IT technology by supporting newer versions of operating systems and middleware.

Hardware Requirements

Common Hardware Requirements

Because ENOVIAVPM V1.6 is a workstation application, consideration should be given to the type of workstation, operating systems, amount of disk space and real memory required, supported relational databases, and recommended software levels. These prerequisites are outlined below. Depending on the implementation, use of a license management tool, such as Dassault Systemes License Use Management (LUM), may be required.

**Hardware Requirements in an AIX® Environment**

**Processor Requirements**

ENOVIAVPM may be used on any RS/6000®, based on PowerPC® 604 (166 MHz minimum clock speed), Power4 or Power5 processor families, supported on AIX Version 5.3 ML03, provided that requirements described below are met.

**Optional Components and Features**

- Locally-connected plotters:
  ENOVIAVPM V1.6 directly supports locally attached IBM color pen plotters and can be used with other OEM plotters. (Refer to the Software Requirements for AIX section for more details).

- The following plotter/printer languages are supported:
  - CGM-ISO, ATA, CALS
  - Hewlett Packard HP-GL/2-RTL and HP-GL or IBM-GL subsets
  - OCE Graphics GPR50: VDF plotting routines
  - PostScript

**Note:** Customers should contact the appropriate plotter vendor for plotter connection and technical support.

Configuration Requirements:
RS/6000                        Required
Graphics device adapter        Required
Color graphics display         Required
Keyboard                       Required
3-button mouse                 Required
CD-ROM drive                   Required*

(*) For installation only.

Required Processor Components and Features

Graphics devices (one of the following):

- POWER GXT500P 12-Bit and GXT550P 24-Bit (feature numbers 2854 and 2855)
- POWER GXT800P 24-Bit and GXT800M 24-Bit (feature number 2853 or 2859 and 2850)
- POWER GTX2000P
- POWER GTX3000P (feature number 2825)
- POWER GTX4000P
- POWER GTX4500P
- POWER GTX6000P
- POWER GTX8500P

Note: Other adapters are not supported by ENOVIAVPM V1.6. Although this product might run with other adapters, incidents encountered that are specific to other adapters will not be accepted for analysis or correction.

Peripheral Requirements:

Required components and features:

- Three-button mouse (feature number 6041)
- Alphanumeric keyboard
- Display

One display compatible with the graphics devices is listed.

Hardware Requirements in a Hewlett-Packard Environment

Processor Requirements:

Any B-Class, C-Class or J-Class workstation based on a PA8000 processor family, supported under HP-UX 11.11 (HP-UX 11i Dec 2004), provided that requirements described below are met

Required Processor Components and Features:

- Real memory: A minimum of 256 MB of real memory is required.
- An internal or external CD-ROM drive is required for program installation.

This equipment is required to perform an initial installation. Product documentation explains installation on other network-connected HP workstations after the initial installation with the drive.

A CD-ROM drive is required to view the online documentation in HTML format.

- Disk space: ENOVIAVPM V1.6 licensed programs and configurations, user data, and user programs may be stored on any internal or external disk by the HP workstation.

Approximate disk space requirements are as follows:

- All installed products of ENOVIAVPM V1.6: 700 MB + usage environment
- Refer to the Program Directory to estimate disk space requirements for specific products and configurations.
- Minimum swap space: 256 MB

Configuration Requirements:

HP Workstation Processor       Required
Graphics card                  Required
Color graphics display         Required
Keyboard                       Required
3-button mouse                 Required
CD-ROM drive                   Required*

(*) For installation only

Required Graphics Processors:

Graphics cards:

- VISUALIZE FXE
- VISUALIZE FX2
- VISUALIZE FX4
- VISUALIZE FX5
- VISUALIZE FX6
- VISUALIZE FX10
- Fire GL-UX
- Fire GL T2-128
- Fire GL X1
- FireGL X3

Peripheral Requirements:

Two types of connectors can be used for a peripheral component:

- HP-HIL connector
- Serial connector

Required Components and Features

- Three-button mouse (A2839B or A2838A)
- Alphanumeric keyboard
- One display compatible with the graphics cards listed above

Hardware Requirements in an SGI Environment

Important note: SGI platforms (clients and servers) are no longer supported (end of support - ENOVIAVPM V1.5 PTF34)

Hardware Requirements in a Sun™ Environment

Processor Requirements:

Any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, Ultra80, SUN Blade 100, SUN Blade 150, SUN Blade 1000, SUN Blade 1500, SUN Blade 2000, SUN Blade 2500 or SUN Blade 1500+ (1.5GHz) workstation based on UltraSPARC processor, supported on Solaris 10.03/05, provided that requirements described below are met.

Required Processor Components and Features

- Real memory: A minimum of 256 MB of real memory is required.
- A CD-ROM drive is required for program installation; this drive must be compatible with the following Sun models:
Product documentation explains installation on other network-connected SUN machines after the initial installation with CD drive.

A CD-ROM drive is required to view the on-line documentation in HTML format.

- Disk space: ENOVIAVPM V1.6 licensed programs and configurations, user data and user programs may be stored on any internal or external disk by the SUN machines.

Approximate disk space requirements are as follows:

- All installed products of ENOVIAVPM V1.6 solutions: 700 MB + usage environment
  Refer to the Program Directory to estimate disk space requirements for specific products and configurations.
- Minimum swap space: 256 MB

Configuration Requirements:

<table>
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<tr>
<th>Requirement</th>
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<tr>
<td>SUN workstation</td>
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<td>Graphics card</td>
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<td>Color graphics display</td>
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<td>Keyboard</td>
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<td>3-button mouse</td>
<td>Required</td>
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<tr>
<td>CD-ROM drive</td>
<td>Required*</td>
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</table>

(*) For installation only

Required Processor Components and Features:

Graphic device adapter (one of the following):

- Creator3D
- Creator Series III
- Elite3D model M3 for Ultra10 440MHz workstation
- Elite 3D model M3 and M6 for Ultra60 workstation
- Expert3D
- Expert3D-Lite
- XVR-500
- XVR-1000
- XVR-1200
- XVR 600 (Support of XVR-600 requires OpenGL 1.3)

Peripheral Requirements:

- SUN three-button mouse
- Alphanumeric keyboard
- One display compatible with the graphics card listed above

Relational Database DASD Requirements

A relational database is required for proper operation of ENOVIAVPM V1.6. A minimum of 700 MB of hard disk space is necessary for system installation. 150 MB should be available for database application and data files. Refer to the Software Requirements section for supported database products.

Compatibility:

ENOVIAVPM provides a consistent user, database, and application programming interface. Data is compatible among the supported operating systems: AIX, HP-UX, and Solaris, and ENOVIAVPM can use and exchange data in industry-standard formats including STEP AP203 and AP214.

Performance Considerations:

Performance and response time are influenced by several factors including processor and operating system, amount of system memory, channel speeds, the number, type, and organization of terminals, and the size of the data elements being used. ENOVIAVPM is designed for optimum benefit under all supported operating systems.

Programming Requirements

Common Software Requirements

CATIA and DELMIA plug-ins are supplied with the products and require no additional prerequisites. However, for CATIA V4, CDA and CDR must be separately installed. If ENOVIAVPM is used to manage CATIA V5 data only, there is no requirement to install CATIA V4.

Refer to the Program Directory for interoperability level required relative to CATIA V5 and DELMIA V5.

Software Requirements in the AIX Environment

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 5.3 Maintenance Level 03 (using 64-bit kernel) with the following components:

- XL C/C++ Enterprise Edition V7.0.0 Run-time Environment
- XL 7 May 2005 PTF R/T (xIC.aix50.rte at level 7.0.0.6), delivered through APAR IY71976
- IBM eServer P5 Server Support and IBM IntelliStation POWER 285 support requires AIX 5.3 ML03.

Note: AIX V5.3 ML03 is supported on Power 4 and Power 5 based system only.

- Compiler: Visual Age C++ 6 for AIX V5 at level 6.0.0.7 (March 2004 Visual Age C++ 6 for AIX PTF)
- An HTML browser is required to access this documentation: for example, Mozilla 1.7 with Java plug-in installed.

Note: Refer to RETAIN® or the ENOVIAVPM Version 1 Release 6 Program Directory for the appropriate PTF to be applied.

DBCS Support Requirements

DBCS-enabled version of the operating system.

Software Requirements in the HP Environment

HP 11i December 2004 support requires:
**Software Requirements in the SGI Environment**

**Important Note:** SGI platforms (clients and servers) are no longer supported (end of support - ENOVIA VPM V1.5 PTF34)

**Software Requirements in the Sun Environment**

ENOVIA VPM V1.6 is designed to operate with the following system software:

- Solaris 10 SPARC Operating System Release 03/05, no additional patches: C, C++ Sun Studio 10 compiler

**Note:** Refer to RETAIN and/or ENOVIA VPM Version 1 Release 6 Program Directory for the appropriate PTF to be applied.

**DBCS Support Requirements**

DBCS-enabled version of the operating system.

**Software Installation**

Refer to the Virtual Product Model Installation and Administration Guide.

**National Language Support**

English is the only language delivered for ENOVIA VPM V1.6.

**Double Byte Character Set Enabled**

Yes.

**Documentation**

- Virtual Product Model Installation and Administration Guide
- Virtual Product Model User’s Guide
- Generative Technical Publications
- ENOVIA VPM/PM Interoperability
- ENOVIA VPM/SAP Interoperability

**License**

**Named User and Concurrent User Licensing:**

ENOVIA VPM Version 1 up to and including Release 4 was available only with named-user licensing. To provide customers with additional purchasing and licensing flexibility, ENOVIA VPM V1.5 introduced concurrent-user licensed, role-based configurations (Engineer, Manager, and so on)

ENOVIA VPM utilizes a People & Organization (P&O) database to define and manage these configurations and the individual usage profiles available to users. At sign-on, ENOVIA VPM looks identical to users whether a customer continues to use named-user licensing or moves to the new concurrent-user licensing method. Licenses for configurations defined in usage profiles will be taken at sign-on time and released when the user session is discontinued.

Named-user requires that one role-based configuration is available for each corresponding user defined in the P&O database. Concurrent-user requires users to have sufficient quantities of each role-based configuration available for concurrently signed-on users of that configuration.

**Use of CATIA Licenses:**

When an ENOVIA VPM V1.6 user first calls CATIA V4 for design in context, the CATIA V4 plug-in is called which takes one each of CATIA CDA, CDR, and COM licenses. Similarly, CATIA COM licenses are also taken if one of the following operations is attempted:

- Create a part
- “Version” a part with same or new part number
- Duplicate a part

**DBMS Requirements**

- IBM DB2® Universal Database
  - On the database server side, IBM DB2 UDB V8.2.2
  - On Client side: when running on Windows, IBM AIX, HP-UX 11i or Sun Solaris, IBM DB2 UDB Client V8.2.2 minimum.
- Oracle Enterprise Edition
  - On the database server side, ORACLE Enterprise Edition, 9.2.0.3 or 10.2.0.2

**Notes:**

- Refer to RETAIN and/or ENOVIA VPM Version 1 Release 6 Program Directory for the appropriate PTF to be applied.

Contact your HP representative for further information on hardware and software migration programs.

**Software Requirements in the DBCS Support Requirements**

- DBCS-enabled version of the operating system.

**Note:** Refer to documentation for ENOVIA 3d com when using ENOVIA VPM client functions on Windows platforms.

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 VPM softcopy collection kit.

**DBCS Support Requirements**

- DBCS-enabled version of the operating system.

**DBMS Requirements**

- IBM DB2® Universal Database
  - On the database server side, IBM DB2 UDB V8.2.2
  - On Client side: when running on Windows, IBM AIX, HP-UX 11i or Sun Solaris, IBM DB2 UDB Client V8.2.2 minimum.
- Oracle Enterprise Edition
  - On the database server side, ORACLE Enterprise Edition, 9.2.0.3 or 10.2.0.2

**Notes:**

- Refer to RETAIN and/or ENOVIA VPM Version 1 Release 6 Program Directory for the appropriate PTF to be applied.

Contact your HP representative for further information on hardware and software migration programs.
• Revise a CATIA model
• Perform a quick import
• Create a read STEP file

Note: If ENOVIAVPM is used to manage CATIA V5 data only, there is no requirement to install CATIA V4 products or licenses.

Use of ENOVIA PM Licenses:

When an ENOVIAVPM V1.6 user calls ENOVIA PM for any of the interoperability functions, an ENOVIA PM Software Development Kit (SDK) Author license is requested. If the SDK license is not available, an ENOVIA PM Director license is requested.

Multi-user Environment:

When using ENOVIAVPM in a multiuser environment with LUM, LUM Runtime code V4.5.5 is the minimum level required on AIX, HP-UX, and Sun license servers and clients. An up-to-date version can be downloaded at no charge from http://www.3ds.com/support/resource-library or a request for a physical media can be placed through the Dassault Systemes Support.

LUM is available to licensed ENOVIAVPM users whose installations include multiple IBM, HP, or Sun workstation machines that are interconnected by a TCP/IP-supported Token-Ring or Ethernet local area network or for concurrent execution of ENOVIAVPM programs on a single workstation.

ENOVIAVPM for UNIX workstations use LUM to control the number of licenses acquired for the program. Using LUM administration facilities, system administrators can configure ENOVIAVPM products for workstations to permit access to ENOVIAVPM programs on one of the several workstation platforms provided.

Single-user Environment Without License Manager:

In an installation without LUM, ENOVIAVPM Solutions for workstations licensed programs can be licensed to operate on a single workstation. In this mode of operation, ENOVIAVPM program use is restricted to the workstation for which it is registered during the installation process. In any configuration, either stand-alone or LAN when more than one use of an ENOVIAVPM licensed program is desired on a single workstation, LUM is required.

Licensed Program Materials Availability

• Restricted materials - No. This licensed program is available without source licensed program materials. It is available in object code only.

Supplemental Terms

Type/Duration of Program Services (also referred to as “Support Services”)

You will find all necessary information including processes, on Dassault Systemes web site:

http://www.3ds.com/terms/support-policies

Use of DB2 UDB Components:

ENOVIAVPM V1.6 is shipped with the DB2 Universal Database (DB2 UDB) program. 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 provides no added value to the 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 SmarTeam program product other than those listed as follows:

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

Designated Machine Identification

No

Test Period

No

Use-Based Charges/Usage Restrictions

Charges for this program are based on the number of users logged on at any time. The total number of users logged on may not exceed the number for which you have been authorized. If the total number exceeds your authorization, you must notify Dassault Systemes and obtain additional authorizations.

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Following the discontinuance of all program services, this program will be provided "As Is" as specified in the Dassault Systemes license.

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**Footnotes:**

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March 2010