ENOVIA VPLM and ENOVIA Web-Based Learning Solutions Version 5 Release 18 Modification Level 0

ENOVIA VPLM V5.18:

- Delivers additional process richness to optimize concurrent work-in-process design activities and fully leverage all information contained in CATIA V5
- Strengthens the immersive management of configured products to speed the design of new variants and the exchange of configured product information
- Instantly notifies when there is changed feature level information and CATIA session refresh to streamline and harmonize change throughout the product definition phase
- Integrates ENOVIA VPLM with ENOVIA MatrixOne to synchronize engineering and business processes at the detailed design level, which speeds design innovation, ensures definition accuracy, and guarantees uptime by using an optimized and scalable architecture
- Reduces the risks of distributing and costs of protecting confidential V5 PLM information with the introduction of digital rights management technology
- Delivers to engineers and ergonomics specialists additional applications, including an out-of-the-box solution to validate vehicle interiors, reducing costs of regulatory conformance validation
- Lowers barrier to photorealistic rendering technology with a new entry-level product for small- and medium-sized business and casual users

Hardware Requirements

Common 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.

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®, 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 Platform 1 (P1) and Platform 2 (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.3ds.com/support/hardware-certification

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 XP

- System unit: Intel® Pentium® III-, Pentium 4-, or Xeon®-based workstations running Microsoft® Windows XP® Professional Edition SP2.
- Graphics adapter with 3D OpenGL accelerator is required.

  Note: 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 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 XP

For a current list of hardware configurations, certified by Dassault Systemes for running ENOVIA DMU products, visit

http://www.3ds.com/support/hardware-certification

Check the earlier Web site for changes.

Windows x86-64 64-bit Environment

- Disk drive: 2.5 GB
- Memory: 4GB 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 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.3ds.com/support/hardware-certification

IBM AIX

- System unit: Any IBM System P processor families, supported on AIX V5.3, provided that the following requirements are met.
- 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, PA8800, PA8900 processor family, supported on HP-UX 11.11 (HP-UX 11iv1), provided that the following requirements are met.
- 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

Sun™ Solaris

- System unit: any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, 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, provided that requirements are met.
- Graphics adapter -- One of the following graphics adapters:
  - Creator3D
  - Creator3D Series III
  - Elite 3D (U10-440 Mhz only, for U10 workstations)
  - Expert3D Lite
  - Expert3D
  - XVR-500
  - XVR-1000
  - XVR-1200
  - XVR 600

ENOVIA 3d com Client Hardware Requirements

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- or three-button mouse.

Platform-Specific Requirements

Windows XP

- System unit: Intel Pentium III- or Pentium 4-based workstations running Microsoft 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, Power5, or PowerPC® 970-based processor family supported on AIX V5.3
- Graphics adapter -- One of the following graphics adapters:
  - GXT500P
  - GXT550P
  - GXT800P
  - GXT800M
  - GXT2000P
  - GXT3000P
  - GXT4000P
  - GXT4500P
  - GXT6000P
  - GXT6500P

HP-UX

- Any B-Class, C-Class or J-Class workstation based on a PA8000, PA8800 and PA8900 processor, supported on HP-UX 11.11 (HP-UX 11iv1), 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

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 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

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) program data, usage environment, and paging space. Requirements may be larger 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 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 XP (classic ENOVIA 3d com)

- System unit - Any Intel Pentium 4, Intel Xeon workstation running Microsoft Windows 2003 Standard Edition or Windows 2003 Enterprise Edition.
- Graphics adapter: The same as for CATIA V5. For a list of supported graphics adapters, visit

http://www.3ds.com/support/hardware-certification

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

For system unit and graphics adapter requirements, refer to **ENOVIA 3d com Client Hardware Requirements** section.

Note: 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.

ENOVIA V5 VPM Client Hardware Requirements

Common Requirements

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

- **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).
- **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 XP

System unit: Intel Pentium III- or Pentium 4-based workstations running Microsoft Windows XP SP 1 or SP 2 Professional.

IBM AIX

System unit:

- Any RS/6000, based on Power4 processor family supported on 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).

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 10 (SPARC).

ENOVIA V5 VPM Server Hardware Requirements

Common Requirements

The following requirements are common to all operating systems supported by ENOVIA V5 VPM. System unit requirements are specific to the platform.

- **Disk drive:** Internal or external disk drive to store program executables, program data, usage environment, and paging space. Installation of all ENOVIA V5 VPM 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 V5 VPM 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 V5 VPM server is installed on the same server as the database, be sure to add the database memory requirement to that needed for ENOVIA V5 VPM.

  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).
- **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 V5 VPM Server side.

IBM AIX

System unit:

- Any RS/6000, based on Power4 processor family supported on 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, Sun Blade 100, Sun Blade 150, Sun Blade 1000, Sun Blade 1500, Sun Blade 2000, or Sun Blade 2500 workstation based on the UltraSPARC processor, supported on Solaris 10 (SPARC).

Note: ENOVIA VPLM application server and Web-client (ENOVIA VPM Lifecycle Navigator) deployment on WebSphere® Application Server are supported on Solaris (WebSphere Application Server V6.0.2 on Solaris 32).

Programming Requirements

Common Software Requirements 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 **Access to product information (ENOVIA DMU / ENOVIA 3d com)** section and **Access to product information (ENOVIA V5 VPM)**) section. 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

http://java.sun.com/products/archive/index.html

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 V5 VPM). Requirements for the J2EE Companion Server are:

- Application server setup - The application server used must support Servlet 2.4 and JSP 2.0 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 4 MultiCAx products that are only supported on 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

Note: As of V5.18, the following are no longer supported:

- Windows 2000 Professional
- AIX 5.2
- Solaris 8
- SGI IRIX

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.

Refer to the *Program Directory* or contact the Dassault Systemes Support Center for appropriate corrective service to apply to the following software.

ENOVIA DMU Platform-Specific Software Requirements

ENOVIA DMU V5 runs on selected system levels of:

- Microsoft Windows XP
- IBM AIX
- Hewlett Packard HP-UX
- Sun Solaris

Windows XP

Minimum level required: Microsoft Windows XP Professional Edition SP2, or higher, with the following components:

- Microsoft Windows XP delivers an implementation of OpenGL libraries. Dassault Systemes will provide recommendations related to driver levels based on tested graphic adapters at

  http://www.3ds.com/support/hardware-certification

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

Additional Windows XP Requirements

- MS06-075: Vulnerability in Windows could allow elevation of privilege. Information is available at

  http://www.microsoft.com/technet/security/bulletin/MS06-075.mspx

- MSI Installer 3.1: Windows Installer 3.1 v2 (3.1.4000.2435) available at

  http://support.microsoft.com/kb/893803

- Windows XP Professional x64 Edition (see following section for description)

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/support/hardware-certification

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/support/hardware-certification

The following set of patches is 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 for any questions regarding this patch.

AIX

Base support:

- AIX V5.3 ML03 (using 64-bit kernel) with the following components:
  - OpenGL and GL3.2 Runtime Environment (delivered with the operating system)
  - Common Desktop Environment (CDE), delivered with the operating system
  - XL C/C++ Enterprise Edition V7.0.0 Run-time Environment: XL 7 May 2005 PTF R/T (xlC.aix50.rte at level 7.0.0.6), delivered through APAR IY71976
  - XL Fortran Enterprise Edition V9.1.0 for AIX Run-Time: November 2004 XL Fortran for AIX V9.1 Runtime PTF

Available at

http://www.3ds.com/support

Additional support:

AIX V5.3 TL04-SP1 (using 64-bit kernel) with the following components:

- OpenGL and GL3.2 Runtime Environment (delivered with the operating system)
- Common Desktop Environment (CDE), delivered with the operating system
- XL C/C++ Enterprise Edition V8.0.0 Run-time Environment: January 2006 IBM C++ Runtime Environment Component for AIX, available at

  http://www.ibm.com/support/docview.wss?uid=swg24011532

- XL Fortran Enterprise Edition V10.1.0 for AIX Run-Time: Base level available at

  http://www-1.ibm.com/support/docview.wss?uid=swg24010669

- Support for the use of nodelock license requires:
  - IY80993: Workaround Application Dependency on System-ID
  - Firmware Version: AT061_061 or later
- Nodelock licensing requires the following patches:
  - IY82392: 0C9 System Crash with Graphics Adapter
  - Support of GXT4500P requires the following patch to be applied: IY80526: CATIA V4 Hangs on GXT4500P when rotating a model.

WAS 6.1 and WPS support or IBM IntelliStation P185 support requires AIX 5.3 TL04-SP1 with above recommendations

HP-UX

- HP-UX 11.v1 v2, including HP 11iv1 (11.11) December 2004 with the following requirements:
  - HP-UX Technical Computing OE (TCOE) Component December 2004
  - Hardware Enablement Patches for HP-UX 11i v1, December 2004
  - Gold Applications Patches for HP-UX 11i v1, December 2004
  - Gold Base Patches for HP-UX 11i v1, December 2004
  - With the following patches applied:
    - PHCO_31923: libc cumulative header file patch

- PHCO_33360: libc cumulative patch
- PHKL_31918: fsadm;ACL;locking order;8K mount;readdir
- PHNE_32477: ONC/NFS General Release/Performance Patch
- PHSS_29483: HP aC++ Compiler (A.03.52)
- PHSS_31271: PEX 5.1/Starbase/Hardcopy Run (PA2.0 only)
- PHSS_31274: Starbase/Hardcopy Dev (PA2.0 only)
- PHSS_31275: OpenGL 1.1 Dev (PA2.0 only)
- PHSS_32573: HP aC++ -AA runtime libraries (aCC A.03.61)
- PHSS_32928: 3D Common Run (PA2.0 only)
- PHSS_32934: OpenGL 1.1 Run (PA2.0 only)
- PHSS_32939: Xserver cumulative patch
- PHSS_33033: ld(1) and linker tools cumulative patch
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE, delivered with the operating system
  - A localized version of the operating system may be required when the selected installation locale differs from ISO code pages.

Note: WebSphere Application Server V6.1 and WPS support requires HP11iv2. V5 applications are not supported on HP 11iv2.

Sun Solaris

The minimum indicated level is Sun Solaris 10 H/W 05/03 with the following components:

- 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
- 119280-06 CDE 1.6: Runtime library patch for Solaris 10 is required

Notes:

- Additional support for SOLARIS Run time on SPARC system is Solaris 10.03/05 (on 32-bit only)
- 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, 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, Solaris)

- Mozilla 1.7 for AIX and HP-UX with Java plug-in installed
- Firefox 2.0 for SUN Solaris SPARC available at

http://www.mozilla.com/en-US/firefox/2.0.0.3/releasenotes

In a Windows environment, either

- Microsoft Internet Explorer at a minimum level of 7.0
- Firefox 2.0 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 to search online documentation.

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.

For Microsoft Windows, Java plug-in version 5 Update 7 may be downloaded from

http://java.sun.com/products/archive/index.html

For IBM AIX, Java Runtime Environment version Java 1.5.0 SR3 can be downloaded from

http://www-106.ibm.com/developerworks/java/jdk/aix/service.html

For HP-UX, Java Runtime Environment 5.0.0.1 can be downloaded from

http://www.hp.com/go/java/

For Sun Solaris, Java Runtime Environment version 5 Update 7 may be downloaded from

http://java.sun.com/products/archive/index.html

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 nodelock licenses.
- Dassault Systemes License Use Management (LUM) is required to serve concurrent licenses across a network. A LUM configuration file (i4ls.ini) is required on ENOVIA - DMU clients to access concurrent licenses 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:
    o A V5 interactive session
    o A V5 process executed through an OLE container application
    o Replay of macros recorded from captured sequences of V5 user interactions
- Dassault Systemes LUM level – The minimum release of Dassault Systemes License Use Management (LUM) V4 needed to run your application is LUM V4.6.8 (recommended with Patch 4.6.8.3). This 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..

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.

ENOVIA DMU Software Installation

- On Windows, installing and uninstalling rely on Windows-compliant tools such as InstallShield, which enables 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
    o Easy and fast installation: Any user can install and execute the product with a limited number of interactions.
    o Reduced user environment: When installed, a product requires customization.
    o Customizable installation: The user can select downloaded products.

ENOVIA 3d com Client Software Requirements

Common Client Software Requirements

Note: As of V5.18, the following are no longer supported:

- Windows 2000 Professional
- AIX 5.2
- Solaris 8
- SGI IRIX

Java-enabled Web browser on the client machines

- Windows

  Microsoft Internet Explorer 7.0 or Mozilla 1.7 on Windows with Java plug-in V5.0 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 1.5.0 SR3, which is available at

  http://www-106.ibm.com/developerworks/java/jdk/aix/service.html

- HP-UX

  When using Mozilla 1.7 browser, a Java plug-in is necessary. The recommended plug-in on HP-UX, at minimum level 5.0.0.1, is available at

  http://www.hp.com/go/java/

- Solaris

  Use Mozilla Firefox 2.0 browser, which is available at

http://www.mozilla.com/en-US/firefox/2.0.0.3/releasenotes

A Java plug-in is necessary for access to the Documentation search applet. The recommended plug-in on Solaris is Version 5.0 update 7, which is 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.

- Downloadable from

  SUN Solaris:
  http://java.sun.com/products/archive/index.html

  IBM AIX:
  http://www-106.ibm.com/developerworks/java/jdk/aix/service.html

  HP-UX:
  http://www.hp.com/go/java/

  Windows:
  http://java.sun.com/products/archive/index.html

Dynamic conversion to virtual reality modeling language (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 DB2® client or Oracle® client, refer to the appropriate VPM announcement for specific supported relational database management system (RDBMS) release levels. 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 XP

Microsoft Windows XP SP2 with the following components:

- Microsoft Windows XP delivers an implementation of OpenGL libraries. Dassault Systemes will provide recommendations related to driver levels based on certified configurations at

  http://www.3ds.com/support/hardware-certification

  These drivers may offer a CATIA Version 5 application setting (see Control Panel, Display Properties), which should be selected when available, as they may contain application specific features. The user can update these libraries depending on the graphics adapter selected when he installed the adapter and associated drivers.

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

Additional Windows XP Requirements

- MS06-075: Vulnerability in Windows could allow elevation of privilege. Information is available at

  http://www.microsoft.com/technet/security/bulletin/MS06-075.mspx

- MSI Installer 3.1 : Windows Installer 3.1 v2 (3.1.4000.2435) available at

  http://support.microsoft.com/kb/893803

- Windows XP Professional x64 Edition (see following section for description)

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/support/hardware-certification

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 2 GB 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 2 GB 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

Windows Server 2003 Standard Edition or Windows Server 2003 Enterprise Edition is required with Service Pack 1.

- 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.

AIX

Base support:

AIX V5.3 ML03 (using 64-bit kernel) with the following components:

- OpenGL and GL3.2 Runtime Environment (delivered with the operating system)
- Common Desktop Environment (CDE), delivered with the operating system
- XL C/C++ Enterprise Edition V7.0.0 Run-time Environment: XL 7 May 2005 PTF R/T (xlC.aix50.rte at level 7.0.0.6), delivered through APAR IY71976
- XL Fortran Enterprise Edition V9.1.0 for AIX Run-Time: November 2004 XL Fortran for AIX V9.1 Runtime PTF, available at

http://www.3ds.com/support

Additional support:

AIX V5.3 TL04-SP1 (using 64-bit kernel) with the following components:

- OpenGL and GL3.2 Runtime Environment (delivered with the operating system)
- Common Desktop Environment (CDE), delivered with the operating system
- XL C/C++ Enterprise Edition V8.0.0 Run-time Environment: January 2006 IBM C++ Runtime Environment Component for AIX, available at

  http://www.ibm.com/support/docview.wss?uid=swg2401 1532

- XL Fortran Enterprise Edition V10.1.0 for AIX Run-Time: Base level available at

  http://www-1.ibm.com/support/docview.wss?uid=swg24010669

- Support for the use of nodelock license requires:
  - IY80993: Workaround Application Dependency on System-ID
  - Firmware Version: AT061_061 or later
- Nodelock licensing requires the following patches:
  - IY82392: 0C9 System Crash with Graphics Adapter
  - Support of GXT4500P requires the following patch to be applied: IY80526: CATIA V4 Hangs on GXT4500P when rotating a model.

WebSphere Application Server V6.1 and WebSphere Portal Server support or IBM IntelliStation P185 support requires AIX 5.3 TL04-SP1 with respect to previously described recommendations

HP-UX

- HP-UX 11.v1 v2, including HP 11iv1 (11.11) December 2004 with the following requirements:
  - HP-UX Technical Computing OE (TCOE) Component December 2004
  - Hardware Enablement Patches for HP-UX 11i v1, December 2004

- Gold Applications Patches for HP-UX 11i v1, December 2004
- Gold Base Patches for HP-UX 11i v1, December 2004
- With the following patches applied:
  - PHCO_31923: libc cumulative header file patch
  - PHCO_33360: libc cumulative patch
  - PHKL_31918: fsadm;ACL;locking order;8K mount;readdir
  - PHNE_32477: ONC/NFS General Release/Performance Patch
  - PHSS_29483: HP aC++ Compiler (A.03.52)
  - PHSS_31271: PEX 5.1/Starbase/Hardcopy Run (PA2.0 only)
  - PHSS_31274: Starbase/Hardcopy Dev (PA2.0 only)
  - PHSS_31275: OpenGL 1.1 Dev (PA2.0 only)
  - PHSS_32573: HP aC++ -AA runtime libraries (aCC A.03.61)
  - PHSS_32928: 3D Common Run (PA2.0 only)
  - PHSS_32934: OpenGL 1.1 Run (PA2.0 only)
  - PHSS_32939: Xserver cumulative patch
  - PHSS_33033: ld(1) and linker tools cumulative patch
- HP-UX 700 OpenGL 3D API Runtime Environment
- CDE, delivered with the operating system
- A localized version of the operating system may be required when the selected installation locale differs from ISO code pages.

Note: V5 applications are not supported on HP 11iv2.

Sun Solaris

Sun Solaris 10 SPARC HW 03/05, including:

- C and C++ runtime environment (delivered with the operating system)
- OpenGL 1.3 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
- 119280-06 CDE 1.6: Runtime library patch for Solaris 10 is required
- WebSphere Application Server V6.1 is currently supported

Notes:

- 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 internet interoperability object protocol (IIOP) based, CORBA-compliant communications on the server side.

Java Virtual Machine (classic and modular 3d com)

- A Java Runtime Environment is required for the Workbook server at the following level:
  - Windows: SUN, Java Runtime Environment version 5 Update 7 may be downloaded from

http://java.sun.com/products/archive/index.html

  - IBM AIX: Java Runtime Environment version Java 1.5.0 SR3 can be downloaded from

http://www-106.ibm.com/developerworks/java/jdk/aix/service.html

  - HP-UX: Java Runtime Environment 5.0.0.1 can be downloaded from

http://www.hp.com/go/java/

  - Sun Solaris: Java Runtime Environment version 5 Update 7 may be downloaded from

http://java.sun.com/products/archive/index.html

Workbook can be managed through a WebSphere Application Server.

WebSphere Portal (ENOVIA 3d com Web Navigator and ENOVIA - VPM Lifecycle 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 - VPM Lifecycle Navigator portlets. For more information about WebSphere Portal, visit

http://www.ibm.com/websphere/portal

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.

- Dassault Systemes LUM level – The minimum release of Dassault Systemes License Use Management (LUM) V4 needed to run your application is LUM V4.6.8 (recommended with Patch 4.6.8.3). This 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.

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 operating system: Refer to Sametime release Note
- Client operating system: Windows, AIX V5.3, Solaris 10

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 Dassault Systemes Support for specific details, or visit

http://www.3ds.com/support

Select Fixes, tools on the left side.

ENOVIA V5 VPM Enterprise Process Definition (E-PD) Support

This product is supported on Windows XP only.

ENOVIA V5 VPM Client Software Requirements

Common Client Software Requirements

Note: As of V5.18, the following are no longer supported:

- Windows 2000 Professional
- AIX 5.2
- Solaris 8
- SGI IRIX

For ENOVIA VPM Product Editor and ENOVIA V5 VPM: Java Runtime environment, version 1.5 is required (Refer to Program Directories for further details.)

For Web-client ENOVIA V5 VPM (ENOVIA - VPM Navigator): The following Java-enabled Web-browsers on the client machines are supported:

- Windows
  - Microsoft Internet Explorer 7.0 or higher on Windows with Java plug-in 1.5.0_07 available at

  http://java.sun.com/products/archive/index.html

  - Mozilla 1.7 with Java plug-in 1.5.0_07 available at

  http://java.sun.com/products/archive/index.html

- IBM AIX

  Java Runtime Environment version Java 1.5.0 SR3 can be downloaded from

  http://www-106.ibm.com/developerworks/java/jdk/aix/service.html

- HP-UX

  Mozilla 1.7 with Java Runtime Environment 5.0.0.1 can be downloaded from

  http://www.hp.com/go/java/

- Sun Solaris

  Use Mozilla Firefox 2.0 browser, which is available at

  http://www.mozilla.com/en-US/firefox/2.0.0.3/releasenotes

  with Java Runtime Environment version 5 Update 7, which may be downloaded from

  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 V5 VPM server software requirements section.

Windows XP

Microsoft Windows XP Professional SP2 with the following components:

- Microsoft Windows XP delivers an implementation of OpenGL libraries. Dassault Systemes will provide recommendations related to driver levels based on certified configurations at

  http://www.3ds.com/implementation/technology/windows/certified-workstations-list/

  These drivers may offer a CATIA Version 5 application setting (see Control Panel, Display Properties), which should be selected when available, as they may contain application specific features. The user can update these libraries depending on the graphics adapter selected when he installed the adapter and associated drivers.

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

Additional Windows XP Requirements

- MS06-075: Vulnerability in Windows could allow elevation of privilege. Information is available at

  http://www.microsoft.com/technet/security/bulletin/MS06-075.mspx

- MSI Installer 3.1 : Windows Installer 3.1 v2 (3.1.4000.2435) available at

  http://support.microsoft.com/kb/893803

- Windows XP Professional x64 Edition (see following section for description)

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/

  These drivers may offer a CATIA V5 application setting (see Control Panel, Display Properties tabs), which should be selected when available, as they may contain application specific features.

- Although the V5 products are 32-bit applications, they can allocate up to 4GB of Memory when running on this operating system.
- 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 V5 VPM Server Software Requirements

Common Server Software Requirements

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

SUN Solaris:
http://java.sun.com/products/archive/index.html

IBM AIX:
http://www-106.ibm.com/developerworks/java/jdk/aix/service.html

HP-UX:
http://www.hp.com/go/java/

Windows:
http://java.sun.com/products/archive/index.html

Database Management System (DBMS) Requirements

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

- ENOVIA V5 VPM requirement on DB2

  When running on Windows, IBM AIX 5.3, HP-UX 11i, or Sun Solaris 10, IBM DB2 UDB Client Version DB2 V8.2.4.

- ENOVIA VPM requirement on ORACLE

  ORACLE 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 V8.2.4 is shipped with ENOVIA V5 VPM V5.18.
- 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 VPM Lifecycle 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/

Platform-Specific Server Software Requirements

Information in this section describes requirements specific to each supported operating system on ENOVIA V5 VPM servers.

Microsoft Windows

- Microsoft Windows Server 2003 Standard Edition, or Windows Server 2003 Enterprise Edition is required with Service Pack 1.
- 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.
- DirectX at minimum level 8.1 -- Required for correct operation of ENOVIA V5 VPM server in a multi-user environment. Available from

  http://www.microsoft.com/downloads/

  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

AIX V5.3 ML03 (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 (xlC.aix50.rte at level 7.0.0.6), delivered through APAR IY71976
- XL Fortran Enterprise Edition V9.1.0 for AIX Run-Time: November 2004 XL Fortran for AIX V9.1 Runtime PTF, available at

  http://www.3ds.com/support

Additional support:

AIX V5.3 TL04-SP1 (using 64-bit kernel) with the following components:

- OpenGL and GL3.2 Runtime Environment (delivered with the operating system)
- Common Desktop Environment (CDE), delivered with the operating system
- XL C/C++ Enterprise Edition V8.0.0 Run-time Environment: January 2006 IBM C++ Runtime Environment Component for AIX, available at

  http://www.ibm.com/support/docview.wss?uid=swg24011532

- XL Fortran Enterprise Edition V10.1.0 for AIX Run-Time: Base level available at

  http://www-1.ibm.com/support/docview.wss?uid=swg24010669

- Support for the use of nodelock license requires:
    - IY80993: Workaround Application Dependency on System-ID
    - Firmware Version: AT061_061 or later
- Nodelock licensing requires the following patches:
    - IY82392: 0C9 System Crash with Graphics Adapter
    - Support of GXT4500P requires the following patch to be applied: IY80526: CATIA V4 Hangs on GXT4500P when rotating a model.

WAS 6.1 and WPS support or IBM IntelliStation P185 support requires AIX 5.3 TL04-SP1 with above recommendations

HP-UX

- HP-UX 11.v1 v2, including HP 11iv1 (11.11) December 2004 with the following requirements:
  - HP-UX Technical Computing OE (TCOE) Component December 2004
  - Hardware Enablement Patches for HP-UX 11i v1, December 2004
  - Gold Applications Patches for HP-UX 11i v1, December 2004
  - Gold Base Patches for HP-UX 11i v1, December 2004
  - With the following patches applied:
    - PHCO_31923: libc cumulative header file patch
    - PHCO_33360: libc cumulative patch
    - PHKL_31918: fsadm;ACL;locking order;8K mount;readdir
    - PHNE_32477: ONC/NFS General Release/Performance Patch
    - PHSS_29483: HP aC++ Compiler (A.03.52)
    - PHSS_31271: PEX 5.1/Starbase/Hardcopy Run (PA2.0 only)
    - PHSS_31274: Starbase/Hardcopy Dev (PA2.0 only)
    - PHSS_31275: OpenGL 1.1 Dev (PA2.0 only)
    - PHSS_32573: HP aC++ -AA runtime libraries (aCC A.03.61)
    - PHSS_32928: 3D Common Run (PA2.0 only)
    - PHSS_32934: OpenGL 1.1 Run (PA2.0 only)
    - PHSS_32939: Xserver cumulative patch
    - PHSS_33033: ld(1) and linker tools cumulative patch
  - HP-UX 700 OpenGL 3D API Runtime Environment
  - CDE, delivered with the operating system
  - A localized version of the operating system may be required when the selected installation locale differs from ISO code pages.

Note: V5 applications are not supported on HP 11iv2.

Sun Solaris

Sun 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
- 119280-06 CDE 1.6: Runtime library patch for Solaris 10 is required

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

Note: A localized version of the operating system may be required when the selected installation locale differs from ISO-1. Additional Software Requirements on the Server Side

The following components are required or optional on thin client (ENOVIA - VPM Lifecycle Navigator) servers for all supported operating systems. It is also required for VPM Navigator customers who implement ENOVIA - VPM Navigator Instant Collaboration.

WebSphere Application Server

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

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

- ENOVIA VPM Lifecycle application server and the Web Application Server may run on different machines and are installed separately. This Web Application Server requires:
  - IBM 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 VPM Lifecycle 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 VPM Lifecycle 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 Web (E-PM) and ENOVIA - Enterprise Process Definition Web (E-PD), the following MQ applications are required in addition to the above middleware requirements:

- Message Oriented Middleware: IBM WebSphere MQ 6.0
- Workflow Engine: IBM WebSphere MQ Workflow 3.6

Additional ENOVIA V5 VPM Requirements

Access to Product Information (ENOVIA V5 VPM)

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 Windows, Mozilla 1.7 with Java plug-ins at level 1.5 (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 ENOVIA VPLM softcopy collection kit.

Prerequisites for the ENOVIA V5 VPM License Management Environment

- Nodelock license keys are not allowed with ENOVIA V5 VPM. 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.

- Dassault Systemes LUM level – The minimum release of Dassault Systemes License Use Management (LUM) V4 needed to run your application is LUM V4.6.8 (recommended with Patch 4.6.8.3). This 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.

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 V5 VPM 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 V5 VPM 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 V5 VPM products and configurations are licensed on a concurrent usage basis.

ENOVIA VPLM General Licensing Principles

ENOVIA VPLM add-on (AOP) and sharable 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.

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

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.

Softcopy Publications

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To support authorized use of the Program, printed copies of the displayable or source material may be made if the copyright notice and any other legend of ownership is reproduced on each copy or partial copy. [1]

Warranty

This program is warranted as specified in the Dassault Systemes license.

Licensed Program Specifications may be updated from time to time and such updates may constitute a change in specifications.

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

Footnotes:

[1]

Trademarks

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