DELMIA Version 5 Release 20 Modification Level 0

DELMIA V5.20 features:

- Major enhancement to DELMIA - Work Instruction Composer
- New NC milling operations
- Increased robotics process coverage
- Improved support for enterprise-wide deployments
- Three new products
  - DELMIA - Digital Product Rights Management 2 (MRM)
  - DELMIA - Flex Dynamic Cable Simulation 2 (FDS)
  - DELMIA - Extended Step Interface 2 (MXT)

Hardware Requirements

Common Hardware Requirements

Summary of DELMIA V5 Recommended Configurations

- Oracle server - Any hardware and operating system platform as certified by Oracle
- Manufacturing Hub server
  - Hardware - Any certified server with a 64-bit CPU (Intel® EM64T)
  - Operating system - Microsoft® Windows Server 2003® R2 SP2 (32 bit)
- DELMIA clients
  - Hardware - Any certified workstation with a 64-bit CPU (Intel EM64T)
  - Operating system

  Microsoft Windows XP Professional SP3 (32 bit)
  Microsoft Windows XP Professional x64 SP2 (64 bit)

Hardware Requirements for DELMIA Process Detailing and Validation

The following requirements are common to all operating systems supported by this release. Platform-specific requirements are specified in subsequent topics.

- Required components and features
  - **Disk drive**: An internal or external disk drive (minimum recommended size is 80 GB) is required to store program executables, program data, the user environment, and to supply paging space. Installation of all DELMIA Process Detailing and Validation products requires 2.0 GB on Microsoft Windows®, 2.4 GB on AIX®, and 2.3 GB on Solaris.
  - **Memory**: 1024 MB of RAM is the minimum recommended for all applications. 2048 MB of RAM is recommended for large manufacturing models. Requirements may be greater when large amounts of data are used.
  - **Internal/external drives:** A CD-ROM drive is required for program installation and for access to the online documentation, which can optionally be downloaded to disk.
  - **Display**: A graphics color display compatible with the selected platform-specific graphics adapter. The minimum recommended size for usability reasons is 17 inches. Minimum resolution for Windows workstations is 1024 x 768 and 1280 x 1024 for UNIX® workstations. When selecting a graphics adapter, hardware texturing capability is strongly recommended when using products that employ texture mapping, in which case the amount of texture RAM has to be adequate for the number and complexity of textures to be used.
  - **Keyboard**: A specific keyboard compatible with the selected installation locale may be required for national language support.
  - **Pointing device:** Three-button mouse. On Microsoft Windows workstations, a two-button mouse may alternatively be used (the third button is emulated with a keyboard sequence). The three-button mouse is recommended for usability reasons. IntelliMouse (two buttons plus a wheel instead of the third button) is an alternative to the three-button mouse on Windows workstations. The wheel acts as the middle button to allow additional manipulations, such as panning and scrolling.
- **Optional components and features**: For Platform 2 (P2) products, SpaceBall or SpaceMouse, in addition to the standard mouse, can be used to perform graphic manipulations (zoom, pan, and rotate). The required drivers are delivered with these devices. Support of these devices is also available with the DMU Navigator 1 (5674-MDU) add-on product.

The robustness of the overall solution is dependent on the robustness of the operating system and the hardware environment used. Configurations certified by Dassault Systemes for running DELMIA V5 are published at

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

Although DELMIA V5 products might run on configurations or with graphic adapters other than those specified for each of the following platforms, incidents specific to such configurations or adapters will not be accepted for support.

Microsoft Windows XP 32 bit

- **System unit**: An Intel Pentium® 4 or Xeon® based workstation running Microsoft Windows XP Professional Edition SP2.
- **Graphics adapter**: A graphics adapter with a 3D OpenGL accelerator is required.

  Note: Graphics performance on local transformations (panning, zooming, and rotating model) will depend on the selected graphics adapter. The graphics adapter should have the following capabilities:

  - 24 bits, true color, double buffered visual
  - 24 bits, Z-buffer
  - Stencil buffer
  - Minimum supported resolution: 1024 x 768. A resolution of 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.

Microsoft Windows x86 64 bit

- **System unit**: An Intel Xeon EM64T or AMD Opteron 64-bit based workstation running Microsoft Windows XP Professional x64 Edition.
- **Memory**: 4 GB is the recommended minimum.
- **Disk drive**: 40 GB is the recommended minimum.
- **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 bits, true color, double buffered visual.
  - 24 bits, Z-buffer.
  - Stencil buffer.
  - Minimum supported resolution: 1024 x 768. A resolution of 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.

AIX

Note: Any future release will not support IBM AIX.

- System unit: Any IBM workstation that is POWER processor-based and which is supported by AIX V6.1.
- Graphics adapter: One of the following graphics adapters is required.
  - GXT4000P
  - GXT4500P
  - GXT6000P
  - GXT6500P

Sun(TM) Solaris

Note: The Sun Solaris platform will not be supported in any future release.

- **System unit**: Any Ultra1, Ultra2, Ultra10, Ultra30, Ultra60, Sun Blade 100, Sun Blade 150, Sun Blade 1000, Sun Blade 1500, Sun Blade 1500+ (1.5 GHz), Sun Blade 2000, or SunBlade 2500 workstation based on the UltraSPARC processor supported on Solaris 10.
- **Graphics adapter**: One of the following graphics adapters is required.
  - Creator3D
  - Creator3D Series III
  - Elite 3D (U10-440MHz only for U10 workstations)
  - Elite 3D Lite
  - Expert 3D
  - XVR-500
  - XVR-600
  - XVR-1000
  - XVR-1200

Hardware Requirements for Manufacturing Hub Server

Any Microsoft Windows Server 2003 platform as certified by Microsoft.

Hardware Requirements for DELMIA Process Planning Clients

- **Processor**: Intel Pentium-4, minimum 2400 MHz.
- **Disk drive**: Minimum of 1024 MB; 2048 MB to install a client, server, and an Oracle server on the same machine.
- **Graphical interface**: 1024 x 768 OpenGL with a minimum of 32 MB onboard memory.
- **Network connection**: LAN (completely configured).
- **Communication protocol**: TCP/IP. The machine must have an IP address (either static or via DHCP)

Programming Requirements

Common Software Requirements

Important Notices

- DELMIA V5.20 does not support:
  - IBM AIX 5.3
  - Hewlett-Packard HP-UX
- Any future release will not support:
  - Sun Solaris
  - IBM AIX

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

Software Requirements for DELMIA Process Detailing and Validation

Microsoft Windows XP 32-bit

Microsoft Windows XP Professional SP3. Microsoft Windows XP 32-bit delivers an implementation of OpenGL libraries. Dassault Systemes provides recommendations related to driver levels based on certified configurations. These drivers may offer a DELMIA V5 application setting (see Control Panel, Display Properties tabs). These should be selected when available because they may contain application-specific features.

A localized version of the operating system may be required when the selected installation locale differs from Latin 1.

Orbix 3.3 is required on 32-bit operating systems.

For a list of certified configurations, visit

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

Microsoft Windows Vista 32-bit

Microsoft Windows Vista x32 Enterprise and Business Edition SP1. Starting with Windows Vista, IPv6 is installed and activated by default. However, a dual IPv4 and IPv6 layer is provided, and because V5 client-server communication does not support IPv6 in V5.20, it is recommended to deactivate IPv6 and use IPv4. To deactivate IPv6, refer to the following Microsoft Technet article:

http://technet2.microsoft.com/windowsserver/en/library/cba5a7ac-742a-49a6-8212-3844c768a0f81033.mspx?mfr=true

See sections:

- To Uninstall IPv6 Using the Network Connections Folder

  or

- To Uninstall IPv6 from a Computer from the Command Prompt

Note that this operation requires administrator credentials.

For a list of certified configurations, visit

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

Microsoft Windows XP 64-bit

Microsoft Windows XP Professional x64 Edition SP2. Microsoft Windows XP Professional x64 Edition delivers an implementation of Open GL libraries. Dassault Systemes provides recommendations related to driver levels based on certified configurations. These drivers may offer a DELMIA V5 application settings (see Control Panel, Display Properties tabs), which should be selected when available, as they may contain application-specific features. When installing 32-bit applications, they will be able to allocate up to 4GB of memory when running on the 64-bit operating system.

Note: Memory consumption for a 64-bit process is completely different than for a 32-bit process. In this situation, it is not pertinent to compare the performance monitor virtual bytes counter between a 32- and 64-bit process. Although the 4 GB limitation of global address space make this counter important when tracking a 32-bit process, virtual address space for 64-bit process can go up to 8 TB.

For a list of certified configurations, visit

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

Microsoft Windows Vista 64-bit

Microsoft Windows Vista x64 Enterprise and Business Edition SP1. Starting with Windows Vista, IPv6 is installed and activated by default. However, a dual IPv4 and IPv6 layer is provided, and because V5 client-server communication does not support IPv6 in V5.20, it is recommended to deactivate IPv6 and use IPv4. To deactivate IPv6, refer to the following Microsoft Technet article:

http://technet2.microsoft.com/windowsserver/en/library/cba5a7ac-742a-49a6-8212-3844c768a0f81033.mspx?mfr=true

See sections:

- To Uninstall IPv6 Using the Network Connections Folder

  or

- To Uninstall IPv6 from a Computer from the Command Prompt

Note that this operation requires administrator credentials.

For a list of certified configurations, visit

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

IBM AIX 32-bit and 64-bit Platforms

AIX 6.1 Technical Level 02 (using 64-bit kernel) with following components:

- XL C/C++ V10.1.0.0 Run-time Environment (part of AIX 6.1 TL02)
- XL Fortran V12.1.0.0 Run-Time Environment (part of AIX 6.1 TL02)
- OpenGL 1.3 as delivered on the AIX CDs

For a list of certified configurations, visit

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

Sun Solaris

Solaris 10 HW 03/05 (SPARC).

DELMIA Process Detailing and Validation General Packaging Principles

- A DELMIA P1 product or a DELMIA P1 configuration requires or must include (in the case of configurations) DELMIA - Object Manager 1 (DO1). P1 products can be used on P2, and in such cases, they operate with DELMIA - Object Manager 2 (DOM).
- A DELMIA P2 product or a DELMIA P2 configuration requires, or must include (in the case of configurations), DELMIA - Object Manager 2 (DOM).
- License keys for configurations are acquired and released for the total configuration.
- The functions within a configuration cannot be shared.
- A configuration is required for each DELMIA seat.
- DELMIA add-on 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.

Macro Replay Capabilities

DELMIA has built-in macro record and replay capabilities. For UNIX, the interpreter is VB Script 3.0 from Mainsoft. Its components are

included as shared libraries. For Microsoft Windows, the interpreter is Microsoft Visual Basic for Applications (VBA) at a minimum level of 6.0. VBA is delivered and installed by default with DELMIA Process Detailing and Validation.

Printer and Plotter Support

- UNIX - DELMIA Process Detailing and Validation supports the following 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
- Microsoft Windows - Printers and plotters are supported through the vendor's drivers for the targeted printer or plotter relative to the targeted version of the operating system. Contact the printer or plotter vendor for requirements and support.

Software Requirements for DELMIA Process Planning

ENOVIA Manufacturing Hub server

The Manufacturing Hub server is certified on the following operating systems:

- Microsoft Windows Server 2003 Standard Edition Service Pack 2 (32-bit)
- Microsoft Windows Server 2003 Enterprise Edition Service Pack 2 (32-bit)
- Microsoft Windows Server 2003 Standard Edition R2 Service Pack 2 (32-bit)
- Microsoft Windows Server 2003 Enterprise Edition R2 Service Pack 2 (32-bit)
- Microsoft Windows Server 2008 R2 Standard Edition (32-bit)
- Microsoft Windows Server 2008 R2 Enterprise Edition (32-bit)

DELMIA Process Planning Clients

Process Engineer clients are certified on the following operating systems:

- Microsoft Windows XP Professional Service Pack 3 (32-bit)
- Microsoft Windows XP Professional x64 Service Pack 2 (64-bit)
- Microsoft Windows Vista Service Pack 1 (32-bit)
- Microsoft Windows Vista Service Pack 1 (64-bit)

Certified Third-party Software (Windows-based)

- Oracle database - Oracle 11.1.06 or later is a prerequisite for the Manufacturing Hub server.
- Java(TM) is a prerequisite for:
  - The Manufacturing Hub server
  - Single Sign-On (SSO) on Process Planning clients
  - Manufacturing Hub integration and SSO on Process Detailing and Validation (32- and 64-bit)

    The required Java level is:

    - For Windows 32-bit - Sun JRE Version 6.0 Update 14
    - For Windows 64-bit - Sun JRE Version 6.0 Update 14 x64
  - Microsoft Visual J# V2.0 and Microsoft .NET Framework 3.5 SP1 is a prerequisite for SSO and Web Services for the Manufacturing Hub, and for SSO on Process Planning and Process Detailing and Validation clients.
  - FLEXlm Version 11.6.1 is a prerequisite for the licensing environment for the Manufacturing Hub server and Process Planning clients.
  - Microsoft Office Excel 2007 is a prerequisite for script-based reporting on Process Planning clients and for DPM Work Instructions on Process Detailing and Validation clients (32- and 64-bit).
  - Microsoft Internet Explorer 7 is a prerequisite for ErgoCheck on Process Planning clients and for documentation on Process Detailing and Validation clients (32- and 64-bit).

Notes:

- For 64-bit SSO, only JRE is supported. For 32-bit SSO, either JRE or J# with .NET can be chosen.
- WebServices is required for Change Management with ENOVIA VPM V5 (LCA) Engineering Hub.
- For the Java Runtime Environment on Windows XP, the environment variable JAVA_HOME has to be set on the Process Planning server to establish communication between it and Process Planning clients.
- To obtain the .NET Framework 3.5 SP1 redistributable, go to

http://www.microsoft.com/downloads

Database-related Prerequisites

Oracle RDBMS Server Standard Edition or Enterprise Edition Version 11.1.0.6 or later is required to store data on the Manufacturing Hub server.

Access to Product Information

Product information is delivered with the product CDs in HTML format. An HTML browser is required to access this documentation. Online documentation may be installed and used only in the same supported operating environments as DELMIA Process Detailing and Validation.

- In a UNIX environment

  For AIX - Mozilla 1.7
  For Sun Solaris - Firefox 3.0

- In a Microsoft Windows environment, one of the following browsers is required:

  Microsoft Internet Explorer 7.0
  Firefox 3.0

In addition to a Java-enabled Web browser, the Java Plug-in at level 1.5 to search online documentation:

- For AIX, Java Runtime Environment version Java 1.5.0 SR6 can be downloaded from

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

- For Sun Solaris, Java Runtime Environment Version 6, Update 14 can be downloaded from

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

- For Microsoft Windows, Java plug-in Version 6 Update 14 can be downloaded from

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

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

Prerequisites for the License Management Environment

Process Detailing and Validation

Process Detailing and Validation applications must have an active LAN card (Ethernet or token ring) and TCP/IP installed and properly configured, even in the case of nodelock keys, though for nodelock there is no need to have the workstations connected to the network. No additional license management software is required when accessing nodelock license keys.

Dassault Systemes License Use Management (LUM) is required to serve concurrent license keys across a network. A LUM configuration file (i4ls.ini) is required on DELMIA Process Detailing and Validation clients to access concurrent license keys from these servers. Server and Nodelock license management mechanisms are available on all supported operating environments.

Dassault Systemes LUM level V4.6.8.3 is the minimum level.

The latest release of Dassault Systemes LUM V4, together with any applicable patches, 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.

Process Planning

Process Planning applications require FLEXlm 11.6.1 on the Manufacturing Hub server and Process Planning clients.

FLEXlm technical information is provided at:

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

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

License Management for DELMIA Process Detailing and Validation

DELMIA V5 controls the number of concurrent users of a configuration or product, according to the number of license keys acquired for the configuration or product.

DELMIA V5 delivers identical license management mechanisms on UNIX and Windows environments, based on Dassault Systemes License Use Management (LUM). The following license management principles apply:

- A DELMIA Process Detailing and Validation configuration (standard or custom) will require a license key. License keys for configurations are acquired and released for the total configuration. The products within a configuration cannot be shared.
- Each shareable product will require a license key, in addition to one for the prerequisite configuration and any prerequisite product, if applicable.
- In all cases, configuration license keys are acquired at the beginning of the process and are released at its termination.
- 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.
- LUM keys must be renewed, typically every two years. The actual duration will depend on the order details.

DELMIA Process Detailing and Validation can be used in three license management modes: nodelock, with concurrent usage of license keys on a network, or concurrent offline license management.

Nodelock usage: The use of a local display is mandatory for usage in nodelock mode. There is no limit to the number of processes launched for a given license key (configuration or product). For instance, a user can launch the following simultaneous processes:

- An interactive session
- A process executed through an OLE container application
- Replay of macros recorded from captured sequences of user interactions

In the nodelock mode of operation, only one license key per configuration and shareable product can be registered per machine, and only one user can run at a time on that machine. If multiple license keys per configuration or shareable product, or multiple users on a single machine, are required, refer to the **Concurrent usage** section.

Concurrent usage: A user on one machine on one display uses one license key per configuration or shareable product used, regardless of the number of processes. If the display changes, then an additional license key is taken for the corresponding process.

Dynamic license management: Shareable product license keys can be acquired and released during the session. (The ability to acquire and release licenses is not available for configurations.) Shareable license keys acquired at the beginning of the session cannot be released before the end of the session; only license keys dynamically granted upon user request during the session can be released during the session.

Concurrent offline license management: A concurrent license key control technique is available via the LUM server. It gives applications running on a Windows laptop the ability to disconnect from the license key server for a specific period of time.

During the checkout period, the server license key is unavailable for use by another concurrent user. This feature is designed to add additional flexibility to a user's work environment. It is offered to accommodate short-term travel needs and collaboration while away from a fixed office environment or server connection. All terms and conditions, including cross-border licensing terms, are unchanged, and users will check-out and check-in license keys at their home server, where rules and procedures are controlled by LUM.

License Management for DELMIA Process Planning

Process Planning applications require FlexLM 11.6.1 on the Manufacturing Hub server and Process Planning clients for license management purposes. FlexLM supports three licensing methods:

- License file: A license file is supplied for each server and client based on the customer order.
- License server: The license server runs an NT-Service that manages a central license file for all servers and clients.
- Temporary license: The install process provides an option to create a temporary 30-day license. The license file is created after entering a license code.

Educational Allowance Available

The standard educational allowance does not apply to DELMIA.

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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Footnotes:

[1]

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