

DELMIA Automation Version 5 Release 21

Product Enhancement Overview

This document lists both new and enhanced product functionality for the current release.

Infrastructure

- Installation and Deployment
- Infrastructure
- Product Structure
- Component Catalog Editor

Digital Mockup

- DMU Space Analysis

Resource Simulation

- Device Task Definition
- Production System Analysis
- Device Building
- Resource Layout

Logic Design

- CSM Module & Block Editor
- CLM SFC Editor
- CLM FBD Editor
- CLM Ladder Logic Editor
- CLM Device Logic Design
- CSM Device Control Connection
- HMI Control Panel Design

Installation and Deployment

New Functionality

New Licensing Middleware

Dassault Systèmes License Server (DSLS) is introduced as the new default Licensing middleware in addition to License Use Management (IBM LUM).

Supporting Platforms on Vault Server

Vault (64-bit) is supported on Windows (64-bit) and AIX (64-bit) platforms.

Supporting Windows Server 2008

ENOVIA V5 Server (32-bit) installation is also supported on Windows Server 2008 SP2 / R2 (64-bit).

Supporting DB 2 9.7

DB 2 9.7 is also supported by Vault and Windows Server.

Enhanced Functionality

There are no enhancements in R21.

Infrastructure

Enhanced Functionality

Customizing

Document

A new option lets you load a file even if you are not authorized to access some of its sub-documents.

Product Structure

Enhanced Functionality

Defining Contextual Links

You can **reroute** broken unpublished external references using the `Reroute` button.

Component Catalog Editor

No enhanced functionalities in this release

DMU Space Analysis

No enhancements in this release.

Device Task Definition

New Functionality

Editing the mount offset

Double-clicking on a mounted tool displays the Set Tool dialog box and snaps the compass to the tool base. The compass can then be used to change the offset between the mount plate and the tool device base.

Production System Analysis

No enhancements in this release.

Device Building

New Functionality

Controller Synchronization

Controller synchronization allows you to to synchronize a controller profile instance with the reference. Data can be imported from the reference, as well as propagated from the instance down to the reference.

Enhanced Functionality

Resource Layout

New Functionality

Mri CATSettings

This will provide users to automatically generate a report of actual status of CATSettings in use. You will be able to easily find the difference between different versions of CATSettings. See: Installation and Deployment Guide/Common Installation and Administration Tools / Managing Settings / Importing and Exporting Setting Files to/from XML Format.

Enhanced Functionality

Customizing option for Newly Created Attachments

The second option, Newly created attachments in the Attachment display options is never used in the product. Hence it is being deprecated.

CSM Module & Block Editor

Enhanced Functionalities

Partial Import

Some data can be added to a block using the **partial import**.

Ergonomics Improvements

New icon in the Product tree for the Internal Logic, Control Logic and Runtime view

The user can sort names and types by alphanumerical order in the dialog box

The user can add comments in the different editors (the comment are represented by a kind of post-it).

CLM SFC Editor

Enhanced Functionalities

Usability Improvement

The user can add comments in the SFC+ and Block editors (the comments are represented by a kind of post-it).

CLM FBD Editor

Enhanced Functionalities

Usability Improvement

The user can add comments in the FBD editor (the comment are represented by a kind of post-it).

CLM Ladder Logic Editor

Enhanced Functionalities

Usability Improvement

The user can add comments in the Ladder editor (the comment are represented by a kind of post-it).

CLM Device Logic Design

Enhanced Functionalities

Automatic Internal Logic Generation

A new command allows the user to generate automatically the code of the internal logic that manages Device Tasks, Robot Tasks and Robotic IO's.
Refer to **Generating Internal Logic Automatically**.

New Commands Replacing the External Functions

The 3D interaction functions in the SmartDeviceLib library are now replaced by commands. It is no longer necessary to enter the name of the function and its parameters in an SFC action.
Refer to:
Piloting a Device Task
Getting and Setting the Joints of a Device
Moving a Device to a Home Position
Setting a Device Color
Tracking the Click on a Device
Selecting a Home Position
Getting and Setting TCP values
Reading and Writing Robotic IO's
Defining a Device Motion from the DOF Values

Partial Import

Ports, instances, signals, connections and SFC behaviors can be updated/added to an existing block using the command `Partial Import`. Refer to **Using Partial Import**.

New Management of the Resource Sensors

In order to ease the management of the data returned by the sensors, the behavior of the signals Detected and Value has been changed. Refer to **Creating a Resource Sensor**.

CSM Device Control Connection

New Functionality

Mitsubishi EZsocket Gateway

This new functionality allows DELMIA Automation virtual cells to be connected to MELSEC controllers and simulators directly through the EZsocket layer.

HMI Control Panel Design

New Functionalities

- **Save and Restore Panel State**
During a simulation, the user can save and restore the state of the panel by controlling the inputs SaveValues and ReadValues.
The new function `Edit Saved Values` allows the user to edit the state of the panel and to modify it if necessary.
Refer to **Editing Saved Values**

Enhanced Functionalities

- **"Display" gadget in write/read mode**
Until now, the gadget "Display" displayed values of the input signal. Now, the user can enter the value in the gadget field during the simulation.
Refer to **Inserting a Display Value**