

# Performance Description

Contents: EPLAN ERP/PDM Integration Suite 2022  
Status: 09/2021



## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



Copyright © 2021 EPLAN GmbH & Co. KG

EPLAN GmbH & Co. KG assumes no liability for either technical or printing errors, or for deficiencies in this technical information and cannot be held liable for damages that may result directly or indirectly from the delivery, performance, and use of this material.

This document contains legally protected information that is subject to copyright, trademark law, design law and other legal provisions. All rights are protected. This document or parts of this document may not be copied or reproduced by any other means without the express prior consent of EPLAN GmbH & Co. KG.

The software described in this document is subject to a licensing agreement and, if applicable, other contractual provisions. The utilization and reproduction of the software are only permitted in accordance with the specifications of this license agreement and, if applicable, any further existing contractual specifications.

RITTAL® is a registered trademark of Rittal GmbH & Co. KG.

EPLAN®, EPLAN Electric P8®, EPLAN Fluid®, EPLAN Preplanning®, EPLAN Pro Panel®, EPLAN Smart Wiring®, EPLAN Harness proD®, ePULSE®, eVIEW®, eBUILD, SYNGINEER and EPLAN Cogineer® are registered trademarks of EPLAN GmbH & Co. KG.

Windows 7®, Windows 8.1®, Windows 10®, Windows Server 2008 R2®, Windows Server 2012®, Windows Server 2012 R2®, Microsoft Windows®, Microsoft Office®, Microsoft® Excel®, Microsoft® Access® and Notepad® are registered trademarks of the Microsoft Corporation (in accordance with the laws of the State of Washington).

PC WORX®, CLIP PROJECT®, INTERBUS® and PROFINET® are registered trademarks of Phoenix Contact GmbH & Co. KG.

AutoCAD® and AutoCAD Inventor® are registered trademarks of Autodesk, Inc.

STEP 7®, SIMATIC® and SIMATIC HW Config® are registered trademarks of Siemens AG.

InstallShield® is a registered trademark of InstallShield, Inc. FLEXERA SOFTWARE LLC.

Adobe® Reader® and Adobe® Acrobat® are registered trademarks of Adobe Systems Inc.

Intel® is a registered trademark of Intel Corporation.

Citrix® is a registered trademark of Citrix Systems, Inc.

TwinCAT® is a registered trademark of Beckhoff Automation GmbH.

Unity Pro® is a registered trademark of Schneider Electric S.E.

RSLogix 5000® and RSLogix Architect® are registered trademarks of Rockwell Automation Inc.

All other product names and trade names are trademarks or registered trademarks of their respective owners.

EPLAN uses the Open Source software 7-Zip (7z.dll), Copyright © by Igor Pavlov. The source code of 7-Zip is subject to the GNU Lesser General Public License (LGPL). The source code of 7-Zip and details on this license can be found on the following Web site: <http://www.7-zip.org>

EPLAN uses the Open Source software Open CASCADE, Copyright © by Open CASCADE S.A.S. The source code of Open CASCADE is subject to the GNU Lesser General Public License (LGPL). The source code of Open CASCADE and details on this license can be found on the following website: <http://www.opencascade.org>

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



EPLAN makes an import function available which uses ECLASS. The use of the ECLASS standard is subject to a license and requires registration and downloading in the download portal:

<http://www.eclassdownload.com>

EPLAN uses the dotNetRDF © library: <http://www.dotnetrdf.org>, Copyright (c) 2009-2013 dotNetRDF Project (dotnetrdf-develop@lists.sf.net). The source code is subject to the MIT license: <https://open-source.org/licenses/MIT>

EPLAN uses Google Chromium ©. <https://www.chromium.org>, Copyright © 2015 The Chromium Authors. The source code is subject to the BSD license.

EPLAN uses the Chromium Embedded Framework ©. <https://bitbucket.org/chromiumembedded/cef>, Copyright © 2008-2020 Marshall A. Greenblatt. Portions Copyright © 2006-2009 Google Inc. The source code is subject to the BSD license.

EPLAN uses CEFSharp ©. <https://cefsharp.github.io>, Copyright © The Cef Sharp Authors. The source code is subject to the BSD license.

EPLAN uses Microsoft Unity ©. <https://github.com/unitycontainer/unity>, Copyright © Microsoft. The source code is subject to the Apache license, Version 2.0.

This application incorporates Open Design Alliance software pursuant to a license agreement with Open Design Alliance. Open Design Alliance Copyright © 2002–2020 by Open Design Alliance. All rights reserved.

EPLAN uses the PDFlib library, Version 9.2.0, Copyright © by PDFlib GmbH. Copyright reserved.

EPLAN uses the PLOP library, Version 5.3p1, Copyright © by PDFlib GmbH. All rights reserved.

The license management portion of this Licensee Application is based upon one or more of the following copyrights: Sentinel® RMS, © 2005 SafeNet, Inc., all rights reserved, and Sentinel® EMS, © 2009 SafeNet, Inc., all rights reserved. Sentinel® is a registered trademark of SafeNet, Inc.

EPLAN uses the the Open Source software QR Code generator library. <https://www.nayuki.io/page/qr-code-generator-library>, Copyright © by Project Nayuki. The source code is subject to the MIT License.

The complete license texts for the Open Source licenses mentioned above are available in the following file (for on-premises programs):

<Installation directory>\bin\License.txt

The complete license texts for ePULSE applications and services are available at the following link:

<https://goto.epulse.com/ePULSELicTxt>



# Table of Contents

|  |           |
|--|-----------|
| <b>Introduction .....</b>                    | <b>5</b>  |
| All from one provider: EPLAN Solutions ..... | 6         |
| <b>EPLAN ERP/PDM Integration Suite .....</b> | <b>13</b> |
| Functional Improvements in Performance.....  | 13        |
| Faster Task-based Processes .....            | 13        |
| Basic Functionalities .....                  | 13        |
| <b>Overview of Functions.....</b>            | <b>15</b> |
| <b>Hardware Requirements .....</b>           | <b>17</b> |
| Workstation .....                            | 17        |
| Recommended Workstation Configuration.....   | 17        |
| Network .....                                | 18        |
| Multi-user.....                              | 18        |
| <b>Software Approvals .....</b>              | <b>19</b> |
| Operating Systems .....                      | 19        |
| Software Requirements .....                  | 20        |

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



# Introduction

EPLAN offers Engineering software and service in the fields of electrical engineering, automation and mechatronics. The company develops one of the world's leading software solutions for engineering, plant engineering and enclosure design. EPLAN is also the ideal partner for simplifying challenging engineering processes.

Standardized and individual ERP and PLM/PDM interfaces ensure consistent data along the entire value chain. Working with EPLAN means unrestricted communication across all engineering disciplines. Whether small or large companies: Customers can use their expertise more efficiently. EPLAN aims to keep growing with its customers and partners and furthers integration and automation in engineering. "Efficient Engineering" is our motto.

EPLAN was founded in 1984 and is part of the Friedhelm Loh Group.

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



## All from one provider: EPLAN Solutions



EPLAN supports you with establishing your engineering across multiple disciplines. The basis is formed by the EPLAN platform that interconnects our software solutions. For you this means a clear increase in efficiency when it comes to working on your EPLAN project. Since your digital data flow seamlessly from solution to solution and are enriched further in every process step. The Cloud products of EPLAN offer added values for collaboration in teams - in particular for tasks across all your locations.

Together the EPLAN Platform and the supplementary Cloud applications form EPLAN Solutions - or, in other words: the key for your future-oriented engineering.

EPLAN offers a comprehensive framework for your daily work. This way interfaces allow the bidirectional exchange with ERP and PDM systems. With the connection to mechatronic processes you expand your view to a mechatronic engineering perspective. With neutral interfaces you can transfer the EPLAN project data into other software environments and continue working on them.

## **Performance Description**

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



### **Extensions and modules for all cases**

No matter to what extent you are already working with EPLAN solutions in your company and which requirements have to be fulfilled in the future: Extensions in all directions can be implemented easily thanks to the add-on concept of EPLAN - flexibly and individually for your tasks.

To this purpose EPLAN offers comprehensive extension options through extension modules and in the form of service packages - the "Elements".

You can find a comprehensive overview of the current extension modules in the licensing overview. Should you have any further questions on this topic, please do not hesitate to ask your EPLAN contact person.

### **EPLAN Electric P8**

With EPLAN Electric P8 you configure your electrical design for machines and plants in an engineering system consistently, coherently and quickly. The software supports diverse engineering methods: from manual creation to standardized and template-based work. EPLAN Electric P8 automatically creates detailed reports for you as an integral part of the project documentation - if desired continuously or bundled after project completion. This way you supply the downstream process steps with all required information from the engineering process.

### **EPLAN Fluid**

EPLAN Fluid is your engineering tool, especially for the configuration and automated documentation of circuits of fluid-power plants in the fields of hydraulics, pneumatics, cooling and lubrication.

## **Performance Description**

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



### **EPLAN Preplanning**

EPLAN Preplanning allows you to already acquire engineering data in the pre-planning phase. This, for example, includes the actuators and sensors of a plant, machine or a building. You can import data both from external tabular sources as well as plant and machine overviews and furthermore graphically acquire process and instrumentation diagrams. You can also access data that have been collected and enriched in EPLAN Preplanning for downstream planning phases in the engineering.

### **EPLAN Pro Panel**

With EPLAN Pro Panel Professional you conceive and design control system enclosures, switchgear and power distribution systems for the energy supply in 3D. This way you can solve diverse engineering tasks in one software: from the electrical schematic creation through the planning of the mounting layout in 3D to the virtual routing of connections. A variety of data and information for the manufacturing are provided in an automated way - from the component labeling to the support of manual wiring processes.

### **EPLAN Smart Wiring**

EPLAN Smart Wiring is your virtual assistant for manual wiring in the enclosure production. From the connecting point to the exact routing track, the software provides you - as the wirer - with all the required information in digital form - if necessary, also in 3D. You can note the status of the wiring with the traffic light principle. If you need to reassure yourself, you can call up the electrical schematic and counter-check it - on the basis of each individual connection. The provision of the project data on a central server makes it possible to manufacture many identical enclosures in parallel or work together with several wirers.



## **Performance Description**

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



### **EPLAN Harness proD**

Use EPLAN Harness proD for the efficient design and documentation of cables and wire harnesses. With the software you digitize the typical work processes in cable and wire harness design: From the importing of the connection information as well as the 3D panel layout from the EPLAN Platform through the intuitive routing up to the creation of manufacturing documentation. The software is open for MCAD systems and can in this way be seamlessly integrated into existing system landscapes.

### **EPLAN Cogineer**

With EPLAN Cogineer you gain the full potential from your engineering in a short time as well as increase the quality of your electrical and fluid-power documentation. You use the switching templates you have already created to structure a macro library and with EPLAN Cogineer realize the automatic schematic creation at the push of a button. Profit from the innovative methods with added value in engineering without long implementation - in all industries and in companies of all sizes.

### **EPLAN Engineering Configuration (EEC)**

With EPLAN Engineering Configuration (EEC) you illustrate your product portfolio in a modular system with interdisciplinary function units. On this stable basis, EEC becomes your tool for the design and application of configuration user interfaces as well as the automated creation of documentations. The interdisciplinary working method integrates sales, order processing, mechanical engineering, electrical engineering and control technology as well as production and documentation.

## **Performance Description**

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



### **EPLAN ERP/PDM Integration Suite**

Continuous data flows ensure transparency in the product development process. Through the EPLAN Integration Suite, EPLAN manages the integration into existing ERP, PDM and PLM system landscapes. You can optimize your work processes from the schematic through to the master data. The quick and individual provision of the data takes place in bidirectional exchange with the systems, without you having to leave the work environment within the EPLAN platform.

### **EPLAN eVIEW Free**

EPLAN eVIEW Free lets you implement engineering review processes digitally. This free software allows structured collaboration with co-workers, customers and service providers. It enables you to view and comment on changes to a project through redlining workflows by using a browser and irrespective of your location.

### **EPLAN eBUILD Free**

New methodology for your engineering process: With EPLAN eBUILD Free you have the possibility to compile schematics from template libraries with a few clicks. Registered users have this application automatically available as a free service. eBUILD Free offers you predefined libraries and a configurator that allows you to create parts of schematic projects in EPLAN practically at the click of a button.

## **Performance Description**

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



### **EPLAN eBUILD**

With EPLAN eBUILD you create your own template libraries which can be re-used by employees and colleagues within the EPLAN Cloud environment. This way you can automatically create schematics in EPLAN across the company. eBUILD is composed of two functional areas which are available to you completely in the full version: In Designer experienced users create their own template libraries on the basis of the EPLAN macro technology. In Project Builder they can then be used repeatedly at any time to compile elements of schematics which are frequently used in day-to-day work with a few clicks.

### **EPLAN Data Portal**

With the EPLAN Data Portal you have direct online access to high-quality product catalogs from a continuously growing pool of notable component manufacturers. All the solutions anchored in the EPLAN platform access this Web service equally. Simple transfer of the offered components into the EPLAN documentation reduces the required configuration work and increases the quality of the machine and plant documentation. With its Data Standard based on ECLASS Advanced, EPLAN Data Portal provides a systematic framework for device attributes.

### **EPLAN eMANAGE Free**

EPLAN eMANAGE Free is your Cloud application for collaborations across all your projects and locations with colleagues, partners, suppliers and clients. eMANAGE enables you to share EPLAN projects with selected project partners across all teams and across the company in a protected Cloud environment. The solution enables simple uploading of projects from the EPLAN Platform or via web browser.

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



## EPLAN eMANAGE

Beyond the functions of the free version, the full version of EPLAN eMANAGE offers you practical, functional extensions as well as additional storage for your data. Share project data via eMANAGE at an extended scope - with familiar access control and the same ease of use. Make your master data available with eMANAGE from the EPLAN Platform 2022 and thus make their usage easier for other users. With a click you make current EPLAN projects available in earlier Platform versions as well. This way you allow project partners who do not yet use the current EPLAN version access to the project data you provided in the Cloud.



### **Note:**

The properties and functionalities specified in this performance description are based on the maximum scope of performance of the product including all extension modules, Elements and add-ons. Extension modules, Elements and add-ons are available optionally and separately and as a rule cost an additional fee. For further details of the available product variants please refer to the "Licensing Overview" chapter.



# **EPLAN ERP/PDM Integration Suite**

## **Functional Improvements in Performance**

The EPLAN ERP/PDM Integration Suite offers efficient possibilities to increase the workflow and system integration in one's own company. As a key component it allows the inclusion of the EPLAN Platform in the specific system infrastructure of your company and the coupling to existing as well as future ERP and PDM solutions for supporting your PLM strategy.

## **Faster Task-based Processes**

The EPLAN ERP/PDM Integration Suite gives you the possibility to automate standardized work processes in the interaction of the EPLAN Platform with existing ERP or PDM systems.

Integration times can be reduced, handling of the overall solution is simplified for the user and familiarization times can be reduced.

Through the support of the ERP/PDM Integration Suite data from connected ERP and PDM systems can be used without having to leave the working environment. The consistent data flow between the applications involved allows the accelerated and specific provision of data, thus resulting in more efficiency in the engineering processes in the long term.

## **Basic Functionalities**

Mechanisms that are required to couple the EPLAN Platform with ERP and PDM systems and to support PLM system integrations are available as basic functionalities of the EPLAN ERP/PDM Integration Suite.

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



The basic functionalities of the EPLAN ERP/PDM Integration Suite allow, for example, new projects to be created, projects to be checked in and out, bills of materials and order lists to be created, and parts data to be synchronized within and between the systems involved - directly from the EPLAN working environment.

The function overview within this performance description provides an overview of the basic functionalities of the EPLAN ERP/PDM Integration Suite.



# Overview of Functions

|  | EPLAN Platform |
|--|----------------|
| <b>PDM: Create project</b>   |                |
| EPLAN project – creating on the basis of a project template  | ✓              |
| EPLAN project – importing meta data from the PDM system to EPLAN (project properties)                      | ✓              |
| EPLAN project – checking into the PDM system   | ✓              |
| EPLAN project – transferring meta data from the EPLAN project (project properties) to the PDM system       | ✓              |
| EPLAN project – saving the intermediate result (additionally) in the PDM system                            | ✓              |
| EPLAN project – setting "read only" locally after checking in  | ✓              |
| EPLAN project – deleting locally after checking in   | ✓              |
| EPLAN project – inserting again into the PDM system (importing)  | ✓              |
| Using selected EPLAN project as a basis  | ✓              |
| Start / calling of the PDM system from EPLAN   | ✓              |
| <b>PDM: Checking out project or fetching for view</b>  |                |
| EPLAN Project – creating or restoring from a native file   | ✓              |
| EPLAN project – transferring the meta data from the PDM system into the EPLAN project (project properties) | ✓              |
| EPLAN project – opening EPLAN editing or view for the project  | ✓              |
| Transfer of EPLAN project structure information  | ✓              |
| <b>PDM: Update project</b>   |                |
| Transferring the updated meta data from the PDM system into the EPLAN project (project properties)         | ✓              |
| <b>PDM: Reject project check-out</b>   |                |
| EPLAN project – setting "read only" locally  | ✓              |
| EPLAN project – deleting locally   | ✓              |
| <b>ERP/PDM: Bill of materials generation</b>   |                |

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



|  | EPLAN Platform |
|--|----------------|
| EPLAN project export – total bill of materials                                 | ✓              |
| EPLAN project export – individual bill of materials                            | ✓              |
| EPLAN project export – structured total bill of materials                      | ✓              |
| EPLAN project export – structured individual bill of materials                 | ✓              |
| Preliminary creation and exporting of bill of materials header data            | ✓              |
| Importing of bill of materials header data                                     | ✓              |
| <b>ERP/PDM: Parts synchronization</b>  |                |
| Parts synchronization between ERP and EPLAN parts database                     | ✓              |
| Complete part export possible  | ✓              |
| Filter for exporting the parts data  | ✓              |
| <b>PDM: Generating / exporting documents</b>                                   |                |
| Generate EPLAN project pages as a neutral format – DXF/DWG/TIF/BMP/JPG         | ✓              |
| EPLAN: Generating neutral formats (project-specific) – PDF                     | ✓              |
| EPLAN: Generating report files (based on the labeling output) – TXT and others | ✓              |
| EPLAN: Export of 3D graphic data, for example in the STEP format               | ✓              |
| <b>PDM: Release process – supporting functions</b>                             |                |
| EPLAN project – restoring  | ✓              |
| EPLAN project – updating properties  | ✓              |
| EPLAN project – generation of the neutral format documents                     | ✓              |
| EPLAN project – archiving  | ✓              |
| <b>Advanced functions</b>  |                |
| Display of PDM system messages   | ✓              |
| Starting of independent processes  | ✓              |
| Pre- and post-processes for all functions                                      | ✓              |
| Optional translation of the project  | ✓              |
| Optional inclusion of the project path   | ✓              |

(Errors and changes reserved.)



## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



### Note:

With EPLAN ERP/PDM Integration Suite the customer receives the corresponding installation media. To enable the basic functions described in the performance descriptions, the customer requires an adjustment of the configuration in a software environment, performed by EPLAN Consulting to be commissioned separately.

## Hardware Requirements

The following hardware requirements apply for the EPLAN products as well as the EPLAN ERP/PDM Integration Suite.

Hardware releases for the systems of the ERP/PDM manufacturers are not listed and have to be obtained from the manufacturer.

## Workstation

The computer platform is a PC with an Intel Core i5, i7, i9 or compatible processor. Rather select a high-speed computer with less CPU cores than a slower computer with more CPU cores.

## Recommended Workstation Configuration

|                                |  |
|--------------------------------|--|
| Processor:                     | Multicore CPU, not older than 3 years  |
| RAM:                           | 8 GB   |
| Hard disk:                     | 500 GB   |
| Monitor / graphics resolution: | 2-screen solution with a resolution of at least 1280 x 1024<br>recommended 1920 x 1080 |
| 3D display:                    | Graphics card from ATI or Nvidia with the latest OpenGL driver                         |

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



## Network

We recommend using a Microsoft Windows network.

|   |             |
|---|-------------|
| Net transfer rate of the server:          | 1 Gbits/s   |
| Net transfer rate of the client computer: | 100 Mbits/s |
| Recommended latency                       | < 1 ms      |

## Multi-user

With regard to minimum requirements for multi-user operation, please contact EPLAN Support. We can advise you specifically according to your individual requirements.



# Software Approvals

In the current Version 2022 the programs of the EPLAN platform are available as a 64-bit version.

Software information about the systems of the ERP/PDM manufacturers is not listed and has to be obtained from the manufacturer.

## Operating Systems

The EPLAN Platform supports the 64-bit variants of the Microsoft operating systems Windows 10.

The EPLAN user interface language installed must be supported by the operating system.

The Microsoft .NET framework 4.7.2 is required to operate the EPLAN platform.

The program is identified by EPLAN as compatible in accordance with the requirements specified in this performance description on the following operating systems:

### Workstation

- Microsoft Windows 10 (64-bit) Pro, Enterprise Version 1809, 1903, 1909, 2004, 20H2

### Server

- Microsoft Windows Server 2012 R2 (64 bit)
- Microsoft Windows Server 2016 (64 bit)
- Microsoft Windows Server 2019 (64 bit)

### Citrix-Server

- Terminal-Server with Citrix XenApp 7.15 and Citrix Desktop 7.15

## Performance Description

Contents: EPLAN ERP/PDM Integration Suite Version 2022

Status: 09/2021



## Software Requirements

The ERP/PDM Integration Suite 2022 is approved for the following systems:

- EPLAN Platform 2022  
Versions: Select and Professional

You can find the most up-to-date compatibility under the following link:

[https://www.eplan.help/en-us/Infoportal/Content/htm/portal\\_epis\\_approvals.htm](https://www.eplan.help/en-us/Infoportal/Content/htm/portal_epis_approvals.htm)