

Contents: EPLAN Creo Cabling Interface 2022 Status: 01/2022



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# 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.

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# 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 mechatronical engineering perspective. With neutral interfaces you can transfer the EPLAN project data into other software environments and continue working on them.

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#### 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.

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### **EPLAN Preplanning**

EPLAN Preplanning allows you to already acquire engineering data in the preplanning 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.

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### **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.

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### **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.

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#### **EPLAN eBUILD**

With EPLAN eBUILD you create your own template libraries which can be reused 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.

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#### **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.

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# **EPLAN Creo Cabling**

# **Functional Improvements in Performance**

The EPLAN Creo Cabling Interface offers efficient possibilities to increase the workflow and system integration in one's own company. As a key component it allows the exchange of EPLAN Platform Data with Creo Parametric.

## **Faster Task-based Processes**

The EPLAN Creo Cabling Interface gives you the possibility to use standardized work processes in the interaction of the EPLAN Platform with Creo Parametric.

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

Thanks to the support of the Creo Cabling Interface, data from the connected Creo Parametric 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.

## **Basic Functionalities**

The Creo Cabling Interface consists of an EPLAN Addon called Creo Cabling Add-on and a Creo Parametric Extension called ECIB (EPLAN Creo Interface Bridge). These components exchange connection information between EPLAN Platform and Creo Parametric for routing purposes.

EPLAN Creo Interface Bridge is a development of Virtual Interconnect Ltd, Glasgow, United Kingdom.

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# **Overview of Functions**

|                                                           | EPLAN<br>Platform | ECIB     |
|-----------------------------------------------------------|-------------------|----------|
| Export connection information in generic XML File         | ✓                 | <b>✓</b> |
| Export connected device information in generic XML File   | ✓                 |          |
| Export connected types in generic XML File                | ✓                 | ✓        |
| Import connection information from generic XML File       | ✓                 | ✓        |
| Import connected device information from generic XML File |                   | ✓        |
| Import connected types from generic XML File              | ✓                 | ✓        |
| XML content check when importing                          | ✓                 | ✓        |
| Typical exchange data                                     |                   |          |
| Connection point designation [source / target]            | ✓                 | ✓        |
| Connection properties (e.g. type, wire, cable, etc.)      | ✓                 | <b>✓</b> |
| Connection Part Number                                    | ✓                 | ✓        |
| Implicit and explicit terminals handling                  |                   | <b>✓</b> |
| Ferrule handling                                          |                   | ✓        |
| Connection auto assigning                                 |                   | ✓        |
| Device Part Number                                        | ✓                 | ✓        |
| Device connections (pins)                                 | ✓                 | ✓        |
| Device properties                                         | ✓                 | ✓        |
| Project properties                                        | ✓                 | ✓        |
| Assignment                                                |                   |          |
| Color mapping table                                       | ✓                 | <b>✓</b> |
| Units                                                     |                   |          |
| mm                                                        | ✓                 | <b>✓</b> |
| Inch                                                      | ✓                 | ✓        |

(Errors and changes reserved.)

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#### Note:

The Creo Cabling Interface encompasses the Creo Cabling Add-on and the Creo Parametric ECIB. 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 requirements 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 three years

RAM: 16 GB Hard disk: 500 GB

Monitor / graphics resolu- 2-screen solution with a resolution of

tion: at least 1280 x 1024

recommended 1920 x 1080

3D display: Graphics card from ATI or Nvidia with the latest OpenGL driver

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### **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

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

# **Software Approvals**

The Creo Cabling Add-on is available for the EPLAN Platform Version:

- 2.8
- 2.9

The ECIB is available for Creo Parametric Version:

- 4
- 6
- 7

For details about the prerequisites of the Creo Parametric software please refer to the information provided by PTC.

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# **Operating systems**

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

The Microsoft .NET framework 4.5.2 is required in order to use the EPLAN ERP/PDM Integration Suite.

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 1709,1803,1809,1903,1909

#### Citrix-Server

Terminal-Server with Citrix XenApp 7.15 and Citrix Desktop 7.15

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