



# CONNECTION OF A CLOUD MES TO THE PRIVATE CLOUD OF SAP S/4HANA

In brief ...

## Implementation Highlights

- State-of-the-art SAP standard through use of the CPI integration platform
- Simplified monitoring – even for non-interface experts
- Graphical interface for high usability
- Ability to access data sources across systems



**100 %**  
In Time &  
in Budget



**8**  
Business  
Objects



**6**  
Months  
Project duration



**5**  
Company  
codes

## INITIAL SITUATION

At the start of the project, Mynaric was using an S/4HANA private cloud system in which mainly SAP standard processes were mapped. The SAP system was to be connected to the Manufacturing Execution System (MES) Manufacturo.

As part of the project requirements, numerous processes were to be outsourced from the SAP system and transferred to the MES. At this point, CONSILIO came into play via a customer recommendation.

## CHALLENGE

One difficulty in connecting the MES to the S/4HANA private cloud system was that several complex processes had to be mapped in the MES especially when integrating with the complex production structure of industrialized laser communication terminal manufacturing.

Standard MES systems did not cover enough processes to meet Mynaric's requirements. An example of this is the handling of inventory management in the MES and the carve-out of the EWM module from the SAP system that this requires.

MES updates continued throughout the project. For example, individual features, such as time confirmation for individual operations in the production order, were available in the SAP system at the start of the project, but not yet in the MES. For the transfer of information between the systems, these had to be developed during the Cloud Platform Integration (CPI) connection.

## PROJECT GOAL

The aim of the project was to connect the MES with CPI to the existing SAP S/4HANA system.

This connection was preceded by a design phase in which processes for the individual modules were drawn, discussed and approved by Mynaric.

Examples are the PP module for production planning, the subcontracting process, the delivery process and the purchase order process.

Based on this, the connection of the processes from the SAP system to the MES was planned, including the definition of the business objects required for this purpose.



We supported  
Mynaric throughout the  
connection of the MES to the  
S/4HANA system and  
actively assisted in the transfer of  
SAP processes to the MES.

Maxim Eirich, Consultant SAP SCM,  
CONSILIO GmbH



## BENEFITS OF THE SOLUTION

### **State-of-the-art SAP standard with CPI:**

With SAP CPI, the latest technology was used for the connection to the S/4HANA system. S/4HANA and the CPI are cloud-hosted, so Mynaric benefits from an end-to-end standard via the cloud.

### **Simplified monitoring also for non-interface experts:**

The SAP standard offers monitoring functionalities, which are supplemented by additional monitoring screens with CPI.

### **No use of the SAP solution PI/PO, whose support will be discontinued as of 2027:**

A later migration project can thus be avoided, the required features of SAP PI/PO are successively implemented in the CPI.

### **Graphical interface for high usability:**

The graphical interfaces enable the user to quickly understand and display complex scenarios.

### **Ability to access data sources across systems:**

The data is transferred continuously between the SAP and the MES system.

With the customized MES, Mynaric benefits from a high degree of flexibility regarding the mapped processes.

The system covers all the requirements that would have involved greater development effort if implemented in the SAP system.



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## Quickly explained ...

### **Manufacturing Execution System (MES):**

A production control system or manufacturing Execution System (MES) is a comprehensive, dynamic software system that monitors, tracks, and monitoring, tracking, documenting, and controlling the process of manufacturing goods from raw material to finished product.

Source: SAP

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## Mynaric AG

- Industry: Aerospace, Laser Communication Equipment
- Business segment: Manufacturer of optical communications terminals for space, airborne and terrestrial applications. Laser communication networks provide connectivity from the sky, enabling ultra-high data rates and secure data transmission over long distances between moving objects for wireless terrestrial/mobile, airborne and space-based applications.
- Employees: 290 (2022)
- Web: [www.mynaric.com](http://www.mynaric.com)
- Solution: SAP S/4HANA, Manufacturo
- Consulting Partner: CONSILIO GmbH



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