

Cobot-Integration

Connection of Machines and Sensors via SAP PCo

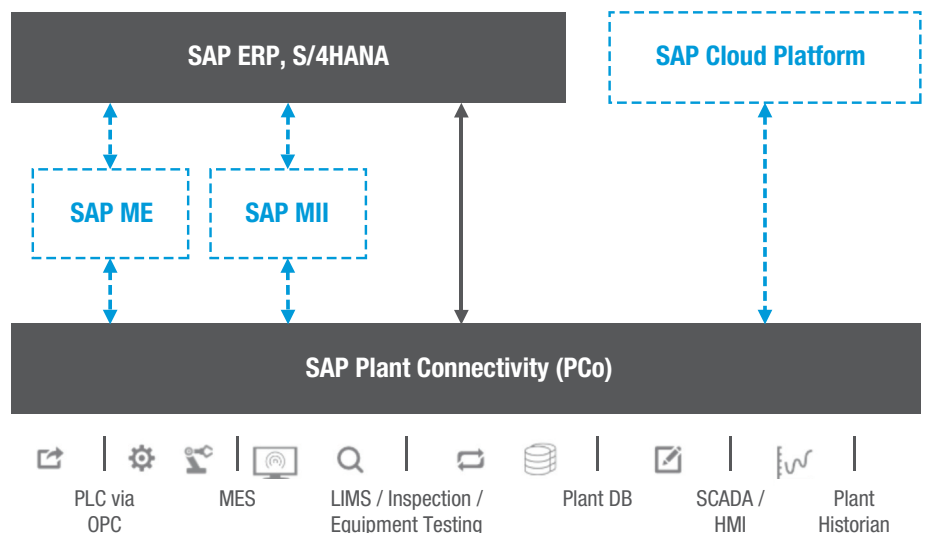


Advanced Applications GmbH is the SAP Partner for manufacturing industries: High-Tech, Medical Engineering, Automotive, Mechanical Engineering, Plastics and Process / Pharmaceuticals.

With a comprehensive service portfolio, Advanced Applications covers all services along the value chain: Process Consulting, SAP Application Support, SAP Development, SAP Implementation, Analytics, SAP Maintenance and SAP Hosting / Cloud Services (Plan - Build - Run).

The integration of shop floor activities in SAP ERP and S/4HANA is a central element for establishing transparent and efficient production processes in discrete manufacturing. Besides the well-known process integration on the base of manual or automated confirmations, the connections of machines and sensors gain increasing importance.

For integration of sensors, machines, robots or testing systems in SAP ERP and S/4HANA on the base of SAP Plant Connectivity (PCo), Advanced Applications offers an integration template which can be developed specifically for the customer or application-related. The interface is available as an integrated part of the Solution Advanced Manufacturing and offers the great advantage of direct connection to SAP ERP or S/4HANA.



With PCo you can receive tags and events from the connected source systems in the production automatically or on request and transfer them to the connected SAP systems. The component Plant Connectivity offers you the following advantages:

- PCo can be configured quickly. No additional in-house developments are needed to connect the source systems to the production.
- PCo can communicate with different software systems in the shop floor.
- A PCo system can be configured for one or several locations.



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Add the possibility to include a collaborative robot (Cobot) to your SAP ERP or S/4HANA system by means of Advanced Manufacturing.

So you can continually automate your production process, but still ensure that your SAP ERP will furthermore stay in the center and that all digital information converges here.

An industrial robot which works together with people and which is not separated from the production process by protective devices is designated as a collaborative robot - or „Cobot” in brief (derived from: collaborative robot).

You can find more information about Advanced Manufacturing on a further [FactSheet](#) or in the [FAQ](#) (only available in German).

Further Possibilities of Application

Besides the integration of the Cobot in the production process, the following integration possibilities can be realized:

- Transfer of error messages for documentation of Cobot failures
- Execution of transport orders for order picking for production orders or deliveries
- Connection of scales for weight recording during the delivery preparation
- Integration of testing stations or software for the transfer of testing and recording of measurement results

We would like to explain the application examples during a live demo.

Example of Application

For the automation of process steps, a bidirectional connection of the Cobot is a great advantage because human intervention is no more mandatory. So interaction of Cobot and human being is no contradiction, but still a possibility, as the following application will show.

During the printing of Powerbanks the Cobot assumes the provision and removal of the Powerbanks. The employee executes the printing procedure himself.

The transmission of process data to the Cobot and feedback data from the Cobot are automatically recorded in real time. The following steps are passed during the exemplary process:

