

Integration of the RAPID production planning cockpit "PPC" in S/4HANA embedded PP/DS

The RAPID production planning cockpit "PPC" is used as an extension of the S/4HANA embedded PP/DS. There are no interfaces as it is fully integrated into S/4HANA and works directly with the data models in S/4HANA embedded PP/DS.

How is the RAPID production planning cockpit integrated in S/4HANA embedded PP/DS?

With S/4HANA embedded PP/DS the RAPID production planning cockpit "PPC" has found a new platform.

The S/4HANA embedded PP/DS itself is already a comprehensive Advanced Planning System. The decision to bring ITeanova's planning add-on "PPC" to this platform, including specific enhancements, has the following goals:

- Rounding off the PP/DS from SAP
- Offering a flexible planning tool that orchestrates the numerous functions of PP/DS (evaluations, manual planning, automated planning)
- Complementing and enriching the S/4HANA embedded PP/DS for special topics
- Bridging gaps in S/4HANA embedded PP/DS (e.g. flexible aggregation of capacity data according to defined resource hierarchies).

Synchronisation

Everything that is changed in SAP S/4HANA is immediately reflected as a change in the RAPID production planning cockpit and vice versa: Everything that is changed in the PPC is reflected on the SAP S/4HANA side.

The role of the database in SAP ERP is fulfilled by the live cache in embedded PP/DS: The live cache can be updated both by simulation and by making persistent changes that will be visible when re-entering and as well to other users.

Synchronisation also has two main points:

- **Simulated changes:** From the PPC, SAP functions can be called up in a simulated mode (for example, production order maintenance). Here from either side (PPC or S/4HANA) changes can be made in planning, which are reflected in the PPC or S/4HANA in simulation mode without the need to save in both.

- **Persistent changes in the live cache:** All simulated changes can be saved in the RAPID planning cockpit "PPC". All changes made directly in the PPC user interfaces or by PPC algorithms, as well as all changes made by jumping to S/4HANA functions, are saved persistently to the live cache.

Master data

S/4HANA with embedded PP/DS has a reservoir of flexible master data for production planning, which is also fully used by PPC: both for creating and maintaining the **most important transaction data in PPC (planned orders/production orders)** as well as their parameters for planning purposes.

In embedded PP/DS master data is mirrored, i.e. the data exists on the S/4HANA side as well as for PP/DS (transformation from one side to the other is analogous to the CIF in APO). The PPC always accesses the PP/DS master data, for example:

- **Product master**
 - for example, lot-sizing parameters, planning strategies and ATP fields
- **Product data structure**
 - Input and output: Which products are manufactured and which components are required
 - Production sequence of operations when determining alternative resources, buffer time and overlap settings for scheduling/simulation in PPC
- **Resource**
 - Parameters for scheduling and executing simulations in PPC
- **Source of supply ID (analogous to production version)**
 - Consideration of the sources of supply when creating new planned orders in PPC

PPC master data

In addition to the master data in SAP S/4HANA with embedded PP/DS, you can create your own master data in the PPC in order to achieve certain planning functionalities that cannot be mapped with this flexibility using just SAP PP/DS master data. These data always have a direct reference to existing PP/DS master data (for example, product master, resource, product data structure).

These include:

- Referencing a resource to a PPC resource
- Grouping of resources into resource groups and hierarchies
- Feasibility matrix: determination of alternative resources per operation (alternative mode)
- Maintenance of product allocations according to available capacities

Data model and data transfer

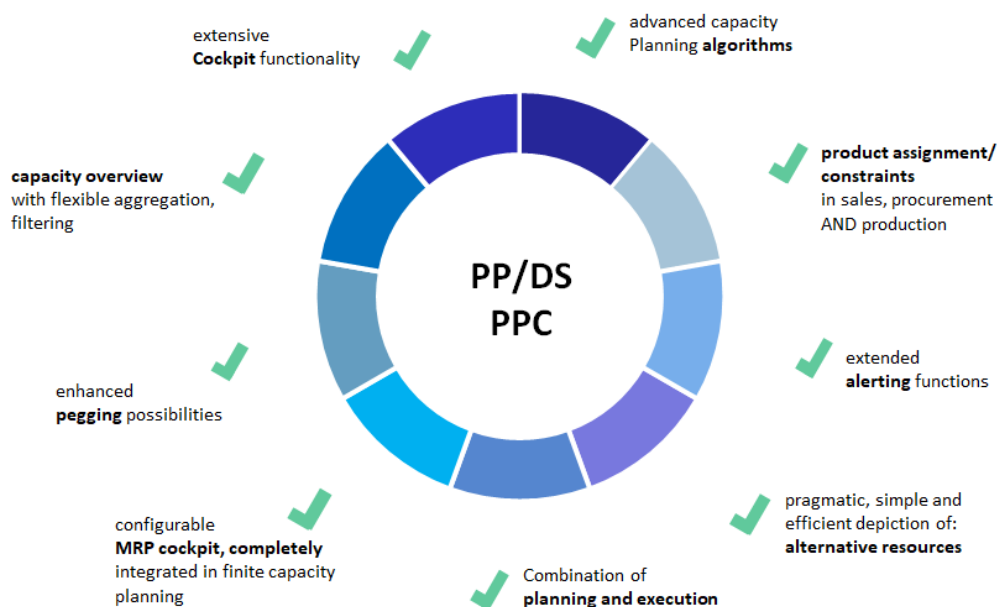
Due to the complete ease and integration of the RAPID production planning cockpit in S/4HANA embedded PP/DS, the planning objects used (master and transaction data) are identical to those already known from working with S/4HANA embedded PP/DS.

Whenever SAP S/4HANA external planning tools are used, the data model of these tools is not always identical to that of SAP S/4HANA! As a result, the customer must acquire mapping knowledge as to which SAP S/4HANA data on one side corresponds to which data on the external planning tool. This is completely eliminated with the PPC, which many customers appreciate simplifying the introduction, training and explanation enormously.

This also eliminates the need for physical data transfer to the RAPID production planning cockpit and back, avoiding the risk of data inconsistencies.

Benefits of the RAPID production planning cockpit versus S/4HANA with embedded PP/DS

ADVANTAGES: ENRICHED SAP PP/DS WITH PPC-FUNCTIONS



In short, the following advantages of full integration in SAP S/4HANA with embedded PP/DS can be noted:

- Real-time mapping of changes in S/4HANA with embedded PP/DS and PPC, in both directions
- Same data model on both sides
- No data transfer necessary
- No need to maintain master data separately