Improvements of Selected Applications for Production Planning and Control (PP-*) Delivered with ERP 2004 and ERP 2005

Applies to:
Applications for production planning and control (PP-*) of SAP ERP e.g. kanban, demand planning, material requirement planning and repetitive manufacturing; release ERP 2004 [ECC 5.00] & ERP 2005 [ECC 6.00].

Summary
This article provides a quick overview about improvements and new development for selected applications for production planning and control (SAP component PP-*) extracted from the corresponding SAP release notes. The mentioned new functionalities will support you to optimize your business processes.

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Introduction

Have you been able to be informed about the functional enhancements concerning applications for production planning and control in the SAP ERP area? Most of us don’t find the time to read the comprehensive release notes of ERP 2004 and ERP 2005. Therefore this smart document was created. Please read it and have a look at the new functions and applications SAP provided to ease your daily work. Stay tuned!

PP Production Planning and Control

Plant Manager Role (ERP 2004 [ECC 5.00])

Use:

As of SAP ECC 5.00, you can use the Plant Manager role for the Business Package for Manufacturing in the SAP Enterprise Portal 6.0 SP 02. (Plant and production managers have similar areas of responsibilities; the role is therefore aimed at both target groups.)

This role offers compiled information for plant managers who are responsible for production processes in one plant or different production plants in one company. The information is displayed on one page in a structured format. With the information provided in the portal, the manager is given a quick overview of the strategic, tactical, and operational situation in the plant, and is able to perform the required follow-up actions in a timely manner. The portal technologies allows managers to quickly access and easily integrate information from different source systems, such as SAP R/3, the SAP Business Information Warehouse, or an external system.

The work set Plant Management provides you with the following iViews:

- **KPI Watch List:**
  The KPI watch list provides compiled information in a clear format. Status traffic lights and trends allow the plant manager to quickly recognize and respond to critical situations. You use the target and threshold values to define with which status to display the individual KPIs. KPIs are defined for each client, and can also be adjusted for specific users. You can display detailed information about individual KPIs as a graphic or in a table.

- **Alert Monitor:**
  The alert monitor informs the plant manager in a timely manner about critical situations that may have occurred. These alerts can be selected for specific users. The central alert management of SAP NetWeaver is used for the alerts and contains functions such as different notification types and substitution and escalation guidelines.

Effects on Customizing

You make the settings for the Plant Manager role in the Implementation Guide. In Customizing, choose Production -> Portal -> Plant Manager.

Plant Manager Role (2.0) (ERP 2005 [ECC 6.00])

Use:

As of SAP ECC 6.00 (SAP APPL 600), new functions for the Plant Manager role are available in the portal. The role with the work et Plant Management includes the functions for the plant manager's daily tasks. The plant manager can quickly and easily find the relevant information for all tasks, as well as quickly respond to production-specific alerts.

- **Overview**
  The work overview provides you with a personal overview with a KPI monitor, alerts issued, and regular reports. The system also displays the data from the SAP NetWeaver Business Intelligence as well as personal contacts.
• Reports
In this work set, the relevant production data is displayed for the plant. It is also possible to create reports via the Report Launch pad.

• Service Map
In this work set, the relevant application links are listed for the plant manager.

Effects on Existing Data:
The plant manager can use this role to access the relevant data. The data can originate from an SAP or non-SAP system.
The data created with the Plant Manager role (1.0) are not influenced by the Plant Manager role (2.0).

Effects on System Administration:
The system administrator must make default settings for the KPIs. The users can also make additional settings in the personalization.

Effects on Customizing:
You can make settings for the generic key figure monitor and the Report Launchpad under Integration with Other mySAP.com Components -> Business Packages / Functional Packages -> Plant Manager 2.0.

See also:
For more information, see component Production Planning (PP) in the SAP Library under Business Package for Plant Manager.

Navigation Profiles (ERP 2005 [ECC 6.00])

Use:
As of SAP ECC 6.0 (SAP_APPL 600) you can use a general navigation profile in Production Planning and Control (PP) to insert additional functions and transactions into the application toolbar or the context menu.

• You can create, change, save, and manage non user-specific and user-specific navigation profiles.
• In navigation profiles you can determine which functions, transactions, class calls, or menus are displayed in the application toolbar or context menu.
• You can also delete, transport, or import navigation profiles.

You can use the navigation profile in the following transactions:

• Shop Floor Control (PP-SFC)
  o COOIS - Order Information System
  o COHV - Mass Processing
  o COO1, COO2, COO3 - Production Order (in the Collective Order Overview)
  o CO24 - Missing Parts Information System
  o CO27 - Picking List

• Production Planning - Process Industry (PP-PI-POR)
  o COOISPI - Order Information System - PI
  o COHVPI - Mass Processing - PI

• Material Requirements Planning (PP-MRP)
  o MDVP - Collective Availability Check for Planned Orders
  o MD09 - Determine Pegged Requirements

• Kanban (PP-KAB)
Manage Navigation Profiles

Manage Navigation Profiles (NAVP_MANAGE) to manage the navigation profiles directly. You can delete, transport, or import navigation profiles in this transaction.

Navigation Profiles in Your Own Programs or Reports

In addition to using navigation profiles in selected functions of Production Planning and Control, you can also incorporate them into your own applications using ALV Grid Controls and ALV Tree Controls.

Navigation Profile for MRP

In contrast to the navigation profile in PP described above you can only call the navigation profile for MRP in the Current Stock/Requirements List and in the MRP List.

The MRP navigation profile is a collection of transaction calls that are assigned to a specific user role and can be directly activated from the MRP list and the stock/requirements list.

Effects on System Administration:

You can use the authorization object C_NAV_PROF Navigation Profile to control the authorizations for the navigation profile in PP.

You can define whether users are allowed to carry out the following functions:

- Process Standard Navigation Profiles (Activity 23 - Maintain)
- You allow users to create, change, or set as a default navigation profiles that are not user-specific.
- Create New Class Calls (Activity 01 - Add or Generate)
- You allow users to add a new class call to a navigation profile or to change one.

See also:

For more information, see the SAP Library under SAP ERP Central Component -> Logistics -> Production Planning and Control (PP) -> Production Orders (PP-SFC) -> Order Information System -> Navigation Profile.

PP-KAB KANBAN

Kanban (ERP 2005 [ECC 6.00])

Use:

As of SAP ECC 6.00 (SAP_APPL 600), you can use the following additional functions for kanban:

- Improved processing of control cycles
- Print control cycles
- Fast data entry of production supply areas
- Process authorizations for status changes in kanban board
- Mass processing for deleting event-driven kanban
- You can manage the storage location of the production supply area with the Warehouse Management system (LE-WM).
- You can store packing instructions in control cycles that the system takes into consideration when creating the kanban.
Effects on Customizing:

To use these additional functions for the kanban process, you must change the following settings for production in the Implementation Guide (IMG):

- If you want to use mass processing for deleting event-driven kanban, you can make the relevant standard settings for the deletion report. To do so, use the process step Set Deletion for Event-Driven Kanbans.

- If you want to use the Warehouse Management system for storage locations for kanban, assign the plants and the storage locations to the warehouse number. To do so, use the process step Assign Warehouse Number to Plant/Storage Location. You may need to define new storage types.

- If you want to store packing instructions in control cycles, you must define the packing instruction usage in the control cycle. Use the following process steps, depending on your replenishment strategy:
  - Define In-House Production Strategies
  - Define External Procurement Strategies
  - Define Stock Transfer Strategies

See also:

For more information, see the SAP Help Portal under help.sap.com -> Documentation -> mySAP ERP -> ECC 6.0 -> SAP ERP Central Component -> Logistics -> Production Planning and Control (PP) -> PP - KANBAN.

Business Add-Ins for Kanban (ERP 2005 [ECC 6.00])

Use:

As of SAP ECC 6.00 (SAP_APPL 600), you can use the following Business Add-Ins (BAdIs) for kanban:

- BAdI: Displaying User-Specific Data When Creating Kanbans/SumJCs
- BAdI: Consider Additional Requirements in Kanban Calculation
- BAdI: Defining User-Specific Select. Screens f. Maintaining Control Cycles
- BAdI: Canceling Kanbans
- BAdI: Scheduling Summarized JIT Calls

Effects on Customizing:

To implement the BAdIs, choose Production -> KANBAN -> Business Add-Ins (BADIs) in the Implementation Guide (IMG), and follow the instructions in the IMG documentation.

SAP List Viewer in Functions and Reports (Changed in ERP 2005 [ECC 6.00])

Use:

As of SAP ECC 6.00 (SAP_APPL 600) the following reports and transactions and/or their sub functions) have been converted to SAP List Viewer:

Reports

Repetitive Manufacturing (PP-REM)

- PPARBFDL - Archiving Program for Deleting Document Logs for PP_BKFLUSH
- PPARBFRED - Archiving Program for Evaluating an Archive File for PP_BKFLUSH

You can choose between a list-based output and an output that uses the SAP List Viewer.

Demand Management (PP-MP-DEM)
• RM60IN01 - Copying Planned Independent Requirement Data Using the Direct Input Method (Results List)

Kanban (PP-KAB-BF)
• RMAFRU00 - Reprocessing Incorrect Confirmations

Plant Data Collection (PP-PDC)
• CIBDOPGR - Transfer of Operations to Subsystems
• CIBDOPDE - Delta Transfer of Operations to Subsystems
• CIBDKAGR - Transfer of Master Data to Subsystems
• CIBDSTTA - Transfer of Master Data to Subsystems

Transactions/Functions

Material Requirements Planning (PP-MRP)
• Maintain BOM Explosion Numbers (MDSP)
  (This function has undergone a technical conversion, although not to SAP List Viewer.)

Master Data (PP-MRP-BD)
• Create Planning Calendar (MD25)

Planning Evaluation (PP-MRP-PE)
• Evaluations of the planning situation and the planning results (MD44, MD45, MD46, MD47, MD48) and evaluations in long-term planning (MS44, MS47). In these functions you can choose between a list-based output and an output that uses the SAP List Viewer.

Long-Term Planning (PP-MP-LTP)
• Change Planning Scenario (MS32).
  The planned independent requirements that you have activated in this function are displayed in a hierarchical results list.

Repetitive Manufacturing (PP-REM)
• Repetitive Manufacturing Profile ASSISTANT (OSPT)
  The summary of the settings that you have chosen has been converted and is displayed in the SAP List Viewer.
• Post processing List (MF47) - Report RMSERI11
  The post processing list has been converted to the SAP List Viewer; in addition, you can now branch to the stock overview (عان) and delete post processing items (١١) via icons.

Demand Management (PP-MP-DEM)
• Planning Profile (MDPH) and Create Planning Profile (MDP6)
  In the planning profile, you can branch to the detail view via the following icons, which are displayed in a separate column: ١١ Detail Display of the Characteristics Combinations and ١١ Display Planning Characteristics.
• Create, Change, Display Planned Independent Requirement (MD61, MD62, MD63)
  New icons ١١ Detail Display of the Characteristics Combinations and ١١ Display Planning Characteristics on the screen Configuration Supporting Point (Configuration: Maintain Usage Probabilities)
• Message Log Converted to SAP List Viewer

See also:
For more information about reports and transactions that have already been converted, see SAP Note 747469.

**PP-MP-DEM Demand Management**

Transfer to Planning: Conversion of the Output List to SAP List Viewer (ERP 2004 [ECC 5.00])

**Use:**
As of SAP ECC 5.00, the output lists in the following functions for transferring requirements to planning have been converted to SAP List Viewer (ALV):

- **Copying Simulative Dependent Requirements** (transaction MS66)
- **Copy Total Forecast** (transaction MD70)
- **Copy Version** (transaction MS64)
- **Staggered Split** (transaction MD67)

You see a clear list, in the form of a hierarchy, with improved navigation, and filter and sort functions. On the initial screen of the functions, you can define the output format of the list, for example, a detailed list or a list without schedule lines.

In the output list, you can go to the function Display Planned Independent Requirements (MD63) by double-clicking the material number of requirements that have been successfully transferred. By double-clicking the message, the system displays the long text for the message. In addition, you can also see the status of the items that are to be transferred to planning.

**PP-MRP Material Requirements Planning**

Navigation to Batch Information in Material Requirements Planning (ERP 2004 [ECC 5.00])

**Use:**
As of SAP ECC 5.00, you can branch to the following batch information from the Requirements/Stock List or MRP List:

- **Display Batch Master**
  You can branch to the batch master from the MRP element details. In the detailed display, choose the batch symbol ( froze).
- **Batch Information Cockpit**
  In the menu, choose Goto -> Stock Statistics in the current requirement/stock list or in the MRP list. In the following stock statistics dialog box, choose Batch Information Cockpit.

**MRP: BAdI and BAPI (ERP 2004 [ECC 5.00])**

As of SAP ECC 5.00, new Business Application Programming Interfaces (BAPI) and Business Add-Ins (BAdI) for Material Requirements Planning (MRP) are available.

**BAdI**
- Change the Planning Parameters (MD_MRP_PARAMETERS)
- Additional Columns in the Material Overview (MD_ADD_COL_OVERVIEW)
- Additional Columns in the MRP Evaluation (MD_ADD_COL_EZPS)

For more information, see the Implementation Guide (IMG) under Production -> Material Requirements Planning -> Business Add-Ins for Requirements Planning.

**BAPI**
- Selection of the Current Requirements/Stock List (GetStockRequirementsList)
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Selection of the MRP List (GetMRPList)
Single and Multilevel Planning (MaterialRequirementsPlanning)
For more information on the methods, see the BAPI Explorer (transaction BAPI) under Logistics - General -> Basic Data Logistics -> Material.

Safety Time Less than one Day (ERP 2004 [ECC 5.00])

Use:
From SAP ECC 5.00 SCM Extension (EA-SCM 500), you can use the period profile for safety time/actual range of coverage to define a safety time that is less than one day to achieve a more detailed setting of the actual range of coverage. Until now, you could only define a specific number of days for the safety time.

The IMG activity Define Period Profile for Safety Time/Actual Range of Coverage has been extended by the Safety Time % field.

Example:
To define a sub-day safety time of 2.2, for example, proceed as follows:
1. You create a Safety Time Period Profile and enter the period in which the safety time of 2.2 days is to apply.
2. Enter 2 (Days) in the Safety Time field.
3. Enter 20 (Percent) in the Safety Time % field.
4. You set the safety time indicator and enter the safety time period profile in the material master record.

In the planning run, the system splits the daily requirement: 80% of the requirement quantity is brought forward 2 days on the time axis, 20% is brought forward 3 days on the time axis. The system brings the quantities forward in simulative mode only. The actual requirements date does not change. The receipt elements are created on a suitable date. You can display the safety time in the stock/requirements list using the function key Switch on ST. Note that, when using the sub-day safety time, the requirement quantity of an individual requirement is always displayed according to the percentage value defined - even if you have not switched on the safety time in the display.

A requirement for 100 pieces with the requirements date 09.09.2004 and a safety time of 2.2 days results in the following split:

- Date Quantity
  - 09.06.04. 20 pieces
  - 09.07.04. 80 pieces

See also:

PP-MRP Material Requirements Planning

Business Add-Ins in Material Requirements Planning (ERP 2005 [ECC 6.00])

Use:
As of SAP ECC 6.0 (SAP_APPL 600) you can use the following Business Add-Ins (BAdIs):

- Change the Calendar for the Days' Supply Calculation (MD_CHANGE CALENDAR) (New)
  You can use this BAdI in Material Requirements Planning to use your own calendar instead of the factory calendar (for example, one that is material-specific) for the safety time and for evaluations of the days' supply data.
- Update Planned Orders ( MD_PLDORD_POST) (Enhanced)
Up to and including SAP ECC 5.0 it was only possible to use the BAdI to publish the header data and components of planned orders.

You can now use this BAdI to publish capacity data and/or its change status as well.

See also:
For more information, see the documentation for the BAdIs: MD_CHANGECALENDAR and MD_PLDORD_POST.

PP-MRP-PE Planning Evaluation

Standardized Order Report and Order Progress Report and Improved Usability (ERP 2005 [ECC 6.00])

Use:
As of SAP ECC 6.00 (SAP_APPL 600) the order report for Material Requirements Planning (transaction MD4C) and the order progress report for Shop Floor Control (transaction CO46) have been standardized and usability has been improved.

Shop Floor Control Order Progress Report (CO46)
In this function you can either display the list-based order progress report or the multi-level order report. You can view order data either from a Shop Floor Control or MRP point of view:

- If you select the list-based order progress report, the system displays the order data in a hierarchical list.
- If you do not select the indicator, the system displays the order report.

MRP Order Report (MD4C)
The following functions are now available in the order report:

- Edit Profile
  - You can edit the profile for the order report on the initial screen. Previously, this was only possible in Customizing for MRP.
  - You can make the following settings, among others, in the profile:
    - Display additional materials, for example, consumption-based planning materials, bulk materials, pipeline products, co-products and by-products.
    - Number of hierarchy levels that are read
    - Display additional material data, for example, stocks, standard price or production scheduler.
    - Display additional data for receipt elements, for example, planned total quantity, start date and end date, release date or system status.
  - Buffering of the order report:
    - If you have already called the order report and want to call the order report for another order from the requirements/stock situation, the system does not reread the data from the database. Instead it reads it from the buffer.

- Multiple Selection
  - You can execute the order report for multiple sales orders and items, and materials.
    - If you call the order report from the Current Requirements/Stock List, the system uses the profile that you have defined in the user settings of the requirements/stock list for the order report.
    - You can specify the profile that is to be used when the order report is called in the user settings, on the tab page General Settings. If you have not specified a profile, the system uses the SAP standard profile SAP000000001.
You can use the Business Add-In MD_EXPORT_TREE to export and carry out further processing of the order tree. This BAdI belongs to the enhancement spot MD_ORDER_REPORT.

For more information about enhancement spots and enhancement implementations, see the SAP Library for SAP NetWeaver under Enhancement Framework.

**Effects on System Administration:**

You can use the following user parameters (SET/GET parameters):

- **MTOLD Display Old Order Tree**
  To choose the list-based display for the order report

- **PROFIDCO46 Profile for Order Report**
  The profile for displaying the order report that the system proposes when the order report is accessed from CO46

- **PROFID Profile for Order Report**
  The profile for displaying the order report that the system proposes in MD4C

**Effects on Customizing:**

- **Order Progress Report for Shop Floor Control (CO46)**
  You process the overall profile for the list-based order progress report in Customizing for Shop Floor Control under Information System -> Profiles for Order Progress Report -> Define Overall Profiles and Define Profiles for Displayed Fields.

- **Order Report for Material Requirements Planning (MD4C)**
  You process the profile for the order report in Customizing for Material Requirements Planning under Evaluation or in Customizing for Shop Floor Control under Information System -> Define Profiles for Order Report.

  The following standard profiles are delivered:
  - SAP000000001.Standard profile MD4C
  - SAP000000002.Standard profile CO46

  **See also:**
  For more information see the SAP Library under SAP ERP Central Component -> Logistics -> Production Planning and Control (PP) -> Material Requirements Planning (PP-MRP-PE) Evaluating the Planning Run (PP-MRP-PE) -> Order Report and under Production Orders (PP-SFC) -> Order Progress Report.

**PP-REM Repetitive Manufacturing**

**Business Add-In for Backflush in Repetitive Manufacturing (New in ERP 2005 [ECC 6.00])**

**Use:**
As of SAP ECC 6.00 (SAP_APPL 600) you can use the Business Add-In (BAdI) Goods Movements in Backflush (RM_BFLUSH_GOODSMVT) in Repetitive Manufacturing to modify the automatically determined goods movements in the backflush according to your own requirements, or to add new goods movements.

**Effects on Customizing:**

You can find the BAdI in Customizing for Repetitive Manufacturing under Business Add Ins for Repetitive Manufacturing.

**See also:**
For more information, see the documentation on the BAdI RM_BFLUSH_GOODSMVT.
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