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# Demand Planning Integration Best Practices: SAP SCM Perspective – PART 2

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**ABSTRACT**

SAP Supply Chain Management is one of the key modules in SAP ERP and controls Production Planning, business forecasting and demand planning. It helps the organization to manage their supply chain process in a dynamic environment. SAP SCM is a complete software to cover key processes such as supply chain networking, supply chain planning and coordination, and supply chain execution.

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## Introduction

Demand planning integration we now offer an integration of key figures from SAP Integrated Business Planning (SAP IBP) into the new flexible constraint framework available in SAP S/4HANA Production Planning and Detailed Scheduling (PP/DS). Will detail all the steps in Demand Planning. The purpose of this article is to describe the general configuration steps required to manually set up the configuration within the system landscape that has already been installed using the corresponding installation or configuration guides for installation.

This article supplements the existing Customizing documentation in the Implementation Guide (IMG) and provides additional information where required.

## Configuration

For your planning process, you need to make a selection that restricts the range of products and locations. To do this, you create one or more selection profiles. The demand planner uses the selection profile to quickly access frequently used selections. Here we will create one selection profile for mass process job, 3 profiles for Interactive Planning by each local planner, another 1 profile for Interactive Planning by central planner.

## Prerequisites

You need to have initialized the planning version 001 for your planning area. To access the planning book choose one of the following navigation options:

| Transaction code | /SAPAPO/SDP94 |
|---|---|
| SAP SCM menu | Advanced Planning and Optimization → Demand Planning → Planning → Interactive Demand Planning |

On the Planning Book screen, choose one Planning Book and Data View, in the third window from above on the left side. If the No valid version exists for planning area '9ADP0 Do you want to initialize a planning version? dialog box is displayed; choose No in the Initialize planning version?

Choose Data View. Choose Selection window in the left screen area. The Object Selection dialog box is displayed. From the possible entries list in the Show field, select Product. The planning version 001 is automatically assigned in the field to the right of the APO Planning Version field. In the second row, restrict the range of products by specifying only those products that you actually need for your planning task. To do this, select Product and choose Multiple Selection for Object. On the Select Single Values tab page, enter the following products with extensions, for example:
L*
S*
……
In the third row, restrict the range of products by specifying only those areas that you actually need for your planning task. To do this, select Area and choose Multiple Selection for Object. On the Select Single Values tab page, enter the following products with extensions, for example:
AME
APJ
EU
In the Objects Selection dialog box, choose Save selection. Enter YDP_MP_ALL_PROD_LOC as the selection description, and choose Save.

## Choose Adopt

To store the saved selection in your selection profile, choose Maintain selection profile in the second window from above in left screen area. In the Maintain Selection Profiles for Users dialog box, use drag and drop to transfer the saved selection from the right area to your selection profile on the left.

## Choose Save and Copy

To display objects that belong to a selection profile, choose the

selection. The system displays the objects in the upper left screen area.
Repeat the steps 2 - 14 to create the other selection profiles, according to the following table:

| Selection Description | Area (for step 8) |
|---|---|
| YDP_IP_CENTRAL_ALL | AME, APJ, EU |
| YDP_IP_LOC_AME | AME |
| YDP_IP_LOC_APJ | APJ |
| YDP_IP_LOC_EU | EU |

**Result**
All selection profiles have been created.
YDP_PB_MASS_JOB and Data View
YDP_DV_DATAPRE

**Methodology**
Access the activity, use one of the following navigation options:

| | |
|---|---|
| SAP SCM menu | Advanced Planning and Optimization → Demand Planning→ à Environment → Current settings→ Macro Workbench |
| Transaction code | /SAPAPO/ADVM |

Choose the row of the planning book: YDP_PB_MASS_JOB and data view YPD_DV_DATAPRE

**Macro**
Calc. Hist. Sales without add. demand
Calculate the key figure Historical Sales without additional demand by subtracting Additional demand from Sales Quantity 1

**Methodology**
Right-click the node Macros in Macro Book below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Calc. Hist. Sales without add. demand. Choose Continue. Right-click the macro and choose Add macro Element → Step.

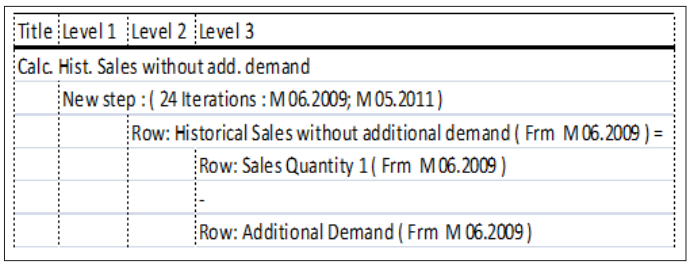
In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, First Step, then choose Past in Processing Area, and choose Continue. Right-click the macro step and choose Add Element (Result Level)→ Add results row. In the APO Macro Builder dialog box, choose Historical Sales without additional demand in the Row field. Choose Adopt.

Right-click the operator/function you have just created and choose . Add Element (Argument Level) → Planning Table Element →Add argument row. In the APO Macro Builder dialog box, choose Sales Quantity 1 in the Row field, and choose Continue.

Right-click the result row you have just created and choose. Add Element (Argument Level) → Append Operator/Function.

In the APO Macro Builder dialog box, choose "-", and choose Continue. Right-click the operator/function.you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Additional demand in the Row field, and choose Continue. Select the macro and choose Check to check it. Generate the macro by choosing Generate. Move the macro by using drag and drop to the Events section and to the Start folder in the upper right screen area. If you want to continue with the configuration, proceed with the next activity to create new macros. If you want to discontinue the configuration at this point, we recommend that you save your settings.

**Result**




The Final Events list (on the top left of Macro Workbench) for the data view YDP_DV_DATAPRE should be like this:

| Event | Macro |
|---|---|
| Default | |
| Level Change | |
| Start | Calc. Hist. Sales without add. demand |
| Exit | |

Macros for Planning Book YDP_PB_MASS_JOB and Data View YDP_DV_FCST. Access the activity, use one of the following navigation options

| | |
|---|---|
| SAP SCM menu | Advanced Planning and Optimization → Demand Planning → Environment→ Current settings → Macro Workbench |
| Transaction code | /SAPAPO/ADVM |

Choose the row of planning book: YDP_PB_MASS_JOB and data view YPD_DV_FCST
Initial val: calc to corr hist sales

Calculate key figure Corrected Sales History, It equals to Historical Sales Override if this key figure is not initial, otherwise, it equals Historical Sales without additional demand minus Historical Sales Correction.

**Methodology**
Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Initial val: calc to corr hist sales. Choose Continue. Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, First Step, choose Past in Processing Area, and choose Continue. Right-click the macro step and choose Add Element (Result Level) → Add control statement. In the APO Macro Builder dialog box, choose IF. Choose Continue. Right-click the result row you have just created and choose. Add Element (Result Level) → Append Condition. In the APO Macro Builder dialog box, input Description Sales override = Initial, and choose Continue. Right-click the operator/function you have just created and choose Add Element (Argument Level) → Add Operator/Function. In the APO Macro Builder dialog box, choose "IS_INITIAL(". Choose Continue.

Right-click the operator/function you have just created and choose . Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales Override in the Row field, and Row Attributes in Data field in the part of Data Source: Value or Row/ Column Attributes. Choose Continue.

Right-click the argument row you have just created and choose. Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose ") = 1". Choose Continue. Right-click the condition you have created in step 4 and choose. Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Corrected Sales History in the Row field. Choose Adopt. Right-click the result row you have just created and choose. Add Element (Argument Level) → Planning Table Element → Add argument row. In the APO Macro Builder dialog box, choose Historical Sales without additional demand in the Row field. Choose Continue. Right-click the operator/function you have just created and choose Add Element (Argument Element) → Append Operator/Function.

In the APO Macro Builder dialog box, choose "+".Choose Continue. Right-click the operator/function you have just created and choose Add Element (Argument Element) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales Correction in the Row field. Choose Continue. Right-click the result row you have created in step 8 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ELSE" and choose Continue. Right-click the control statement you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Corrected Sales History in the Row field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales Override in the Row field. Choose Continue. Right-click the result row you have created in step 13 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue. Select the macro and choose Check to check it. Generate the macro by choosing Generate. If you want to continue with the configuration, proceed with the next activity to create the next macro. If you want to discontinue the configuration at this point, we recommend that you save your settings.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Initial val: calc to corr hist sales | | | |
| | First Step : ( 24 Iterations : M 06.2009; M 05.2011 ) | | |
| | | IF | |
| | | Sales override = Initial | |
| | | | IS_INITIAL( |
| | | | Row: Historical Sales Override ( Frm M 06.2009 ) |
| | | | ) = 1 |
| | | Row: Corrected Sales History ( Frm M 06.2009 ) = | |
| | | | Row: Historical Sales without additional demand ( Frm M 06.2009 ) |
| | | | + |
| | | | Row: Historical Sales Correction ( Frm M 06.2009 ) |
| | | ELSE | |
| | | Row: Corrected Sales History ( Frm M 06.2009 ) = | |
| | | | Row: Historical Sales Override ( Frm M 06.2009 ) |
| | | ENDIF | |

Copy Key Figure Statistical Forecast to Manual Forecast. Key figure Statistical Forecast will not be changed any more in the future processing steps.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Copy stat. Fcst to man. fcst. Choose Continue. Right-click the macro and choose Add macro Element → Step.In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, First Step, choose Future in Processing Area, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Add Control Statement. In the APO Macro Builder dialog box, choose "IF" and choose Continue.

Right-click the control statement you have just created and choose Add Element (Result Level) à Append Condition. In the APO Macro Builder dialog box, inputs Description Manual F/C fixed, and choose Continue. Right-click the condition you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "IS_FIXED(". Choose Continue.

Right-click the Operator/Function you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Manual Forecast in the Row field and Row Attribute in Data field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function.
In the APO Macro Builder dialog box, choose "**) = 1**". Choose Continue.

Right-click the condition you have created in step 4 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Manual Forecast in the Row field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Level) → Planning Table Element → Add argument row. In the APO Macro Builder dialog box, choose Manual Forecast in the Row field. Choose Continue. Right-click the result row you have created in step 8 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ELSE" and choose Continue. Right-click the control statement you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Manual Forecast in the Row field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Statistical Forecast in the Row field. Choose Continue. Right-click the result row you have created in step 11 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue.Select the macro and choose Check to check it. Choose Generate to generate the macro. Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Copy stat. Fcst to man. fcst | | | |
| | First Step : ( 24 Iterations : M 06.2011; M 05.2013 ) | | |
| | | IF | |
| | | Manual F/C fixed | |
| | | | IS_FIXED( |
| | | | Row: Manual Forecast ( Frm M 06.2011 ) |
| | | | ) = 1 |
| | | Row: Manual Forecast ( Frm M 06.2011 ) = | |
| | | | Row: Manual Forecast ( Frm M 06.2011 ) |
| | | ELSE | |
| | | Row: Manual Forecast ( Frm M 06.2011 ) = | |
| | | | Row: Statistical Forecast ( Frm M 06.2011 ) |
| | | ENDIF | |

Access the activity, use one of the following navigation options:

| | |
|---|---|
| SAP SCM menu | Advanced Planning and Optimization → Demand Planning → Environment → Current settings → Macro Workbench |
| Transaction code | /SAPAPO/ADVM |

Choose the row of the planning book: YDP_PB_MASS_JOB and data view YPD_DV_MACRO.

Clear all the data in the key figures of the planning area.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Clear data for demo - starting point. Choose Continue.

Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, First Step, choose Total in Processing Area, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Add result row. In the APO Macro Builder dialog box choose Local Planners Forecast Adjustment in the Row field, and choose Initialization in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Statistical forecast in the Row field, and choose Initialization in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field, and choose Initialization in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Additional demand in the Row field, and choose Initialization in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Demand Plan in the Row field, and choose Initialization in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Manual Forecast in the Row field and choose Initialization in Change mode field. Choose Adopt. Select the macro and choose Check to check it. Choose Generate to generate the macro.
Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Clear data for demo - starting point | | | |
| | Step1: clear KF values except Hist.Sales : ( 48 Iterations : M 06.2009; M 05.2013 ) | | |
| | | Row: Statistical Forecast ( Frm M 06.2009 ) = Initial | |
| | | Row: Additional Demand ( Frm M 06.2009 ) = Initial | |
| | | Row: Local Planners Forecast Adjustment ( Frm M 06.2009 ) = Initial | |
| | | Row: Central Planners Forecast Adjustment ( Frm M 06.2009 ) = Initial | |
| | | Row: Demand Plan ( Frm M 06.2009 ) = Initial | |
| | | Row: Statistical Forecast ( Frm M 06.2009 ) = Initial | |
| | | Row: Manual Forecast ( Frm M 06.2011 ) = | |

Copy stat. fcst to man. Fcst. Copy Key Figure Statistical Forecast to Manual Forecast. Key figure Statistical Forecast will not be changed any more in the future processing steps.

**Methodology**

The macro is exactly the same with macro in Planning Book YDP_PB_MASS_JOB, View YDP_DV_FCST, you don't need to create the macro step by step again, but import from the view YDP_DV_FCST, just like copying. Choose Menu Edit and then choose Import Macro(s)

Choose Macro Book YDP_PB_MASS_JOB View (YDP_DV_FCST), and choose Macro Copy stat. fcst to man. fcst. And choose Continue.

When a warning message appears, choose Continue or choose Enter. Select the macro and choose Check to check it. Choose Generate to generate the macro.
Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Copy stat. Fcst to man. fcst | | | |
| | First Step : ( 24 Iterations : M 06.2011; M 05.2013 ) | | |
| | | IF | |
| | | Manual F/C fixed | |
| | | | IS_FIXED( |
| | | | Row: Manual Forecast ( Frm M 06.2011 ) |
| | | | ) = 1 |
| | | Row: Manual Forecast ( Frm M 06.2011 ) = | |
| | | | Row: Manual Forecast ( Frm M 06.2011 ) |
| | | ELSE | |
| | | Row: Manual Forecast ( Frm M 06.2011 ) = | |
| | | | Row: Statistical Forecast ( Frm M 06.2011 ) |
| | | ENDIF | |

**Determine KF FORECAST ADJ.CENTRAL**

Copy the key figure Local Planners Forecast Adjustment to Central Planner Forecast Adjustment, if Planners Forecast Adjustment is not initial and Central Planner Forecast Adjustment is initial.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Determine KF FORECAST ADJ.CENTRAL. Choose Continue. Right-click

the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, First Step, choose Future in Processing Area, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "IF" and choose Continue. Right-click the control statement you have just created and choose Add Element (Result Level) à Append Condition. In the APO Macro Builder dialog box, input Description Central Adj. is Initial & Local Adj. is not initial and choose Continue. Right-click the condition row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

In the APO Macro Builder dialog box, choose "IS_INITIAL(". Choose Continue. Right-click the Operator/Function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Central Planners Forecast Adjustment in the Row field, and Row Attributes in the Data field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose ") = 1 AND IS_INITIAL(".Choose Continue. Right-click the Operator/Function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Local Planners Forecast Adjustment in the Row field, and Row Attributes in the Data field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose ") = 0". Choose Continue. Right-click the condition you have created in step 4 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Central Planners Forecast Adjustment in the Row field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Level) → Planning Table Element → Add argument row. In the APO Macro Builder dialog box, choose Local Planners Forecast Adjustment in the Row field. Choose Continue. Right-click the result row you have created in step 10 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue. Select the macro and choose Check to check it. Choose Generate to generate the macro.
Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Determine KF FORECAST ADJ.CENTRAL | | | |
| | New step : ( 24 Iterations : M 06.2011; M 05.2013 ) | | |
| | | IF | |
| | | *Central Adj. is Initial & Local Adj. is not initial* | |
| | | | IS_INITIAL( |
| | | | Row: Central Planners Forecast Adjustment ( Frm M 06.2011 ) |
| | | | ) = 1 AND IS_INITIAL( |
| | | | Row: Local Planners Forecast Adjustment ( Frm M 06.2011 ) |
| | | | ) = 0 |
| | | Row: Central Planners Forecast Adjustment ( Frm M 06.2011 ) = | |
| | | | Row: Local Planners Forecast Adjustment ( Frm M 06.2011 ) |
| | | ENDIF | |

**Calc. Demand Plan**
Calculate the key figure Demand Plan by adding the following key figures together: Manual Forecast, Central Planner Forecast Adjustment, and Additional Demand.

**Methodology**
Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Calc. Demand Plan. Choose Continue. Right-click the macro and choose Add macro Element → Step.

In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, First Step, choose Future in Processing Area, and choose Continue.

Right-click the step you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Demand Plan in the Row field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Level) → Planning Table Element → Add argument row. In the APO Macro Builder dialog box, choose Manual Forecast in the Row field. Choose Continue.

Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "+".Choose Continue. Right-click the Operator/Function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Central Planners Forecast Adjustment in the Row field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "+". Choose Continue.

Right-click the Operator/Function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Additional demand in the Row field. Select the macro and choose Check to check it. Choose Generate to generate the macro. Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Calc. Demand Plan | | | |
| | New step : ( 24 Iterations : M 06.2011; M 05.2013 ) | | |
| | | Row: Demand Plan ( Frm M 06.2011 ) = | |
| | | | Row: Manual Forecast ( Frm M 06.2011 ) |
| | | | + |
| | | | Row: Central Planners Forecast Adjustment ( Frm M 06.2011 ) |
| | | | + |
| | | | Row: Additional Demand ( Frm M 06.2011 ) |

His Sale override > 30% -BG Color =RED
This macro gives warning if the key figure Historical Sales Override deviates from Historical Sales without additional demand more than 30% by changing the background color of the cell to RED.

**Methodology**
Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder

dialog box, enter a descriptive text for the macro, His Sale override > 30% -BG Color =RED. Choose Continue. Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Change color if percentage > 30%, choose Past in Processing Area, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Add Control Statement. In the APO Macro Builder dialog box, choose "IF" and choose Continue. Right-click the result row you have just created and choose Add Element (Result Level) à Append Condition. In the APO Macro Builder dialog box, input Description Is Sales override Initial, and choose Continue.

Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "IS_INITIAL(".Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales override in the Row field and Row Attributes in Data field in the part of Data Source: Value or Row/Column Attributes. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function.
In the APO Macro Builder dialog box, choose ") = 1". Choose Continue. Right-click the condition row you have created in step 4 and choose
Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Historical Sales Override in the Row field and Attribute change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose
Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "CELL_BG( 2 )". Choose Continue. Right-click the result row you have created in step 8 and choose Add Element (Result Level) → Append Control Statement.
In the APO Macro Builder dialog box, choose "ELSEIF" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Result Level) à Append Condition. In the APO Macro Builder dialog box, input Description Percentage > 30%, and choose Continue. Right-click the condition row you have just created and choose
Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ABS( (". Choose Continue.

Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales Override in the Row field. Choose Continue.

Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "/". Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element→ Append argument row. In the APO Macro Builder dialog box, choose Historical Sales without additional demand in the Row field. Choose Continue.

Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose ") – 1 ) * 100 > 30". Choose Continue. Right-click the condition you have created in step 11 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Historical Sales Override in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "CELL_BG( 26 )". Choose Continue. Right-click the result row you have created in step 17 and choose Add Element (Result Level) → Append Control Statement.

In the APO Macro Builder dialog box, choose "ELSE" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Historical Sales Override in the Row field and Attribute Change in Change mode field. Choose Continue. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

In the APO Macro Builder dialog box, choose "CELL_BG( 2 )". Choose Continue. Right-click the result row you have created in step 20 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue.

Select the macro and choose Check to check it. Choose Generate to generate the macro.- Use drag and drop and move the macro to the Events section and to the Default folder in the upper right screen area.
Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| His Sale override > 30% -BG Color =RED | | | |
| | Change color if percentage > 30% : ( 24 Iterations : M 06.2009; M 05.2011 ) | | |
| | | IF | |
| | | *Is Sales Override initial* | |
| | | | IS_INITIAL( |
| | | | Row: Historical Sales Override ( Frm M 06.2009 ) |
| | | | ) = 1 |
| | | Row: Historical Sales Override ( Attributes ) = | |
| | | | CELL_BG( 2 ) |
| | | ELSEIF | |
| | | Percentage > 30% | |
| | | | ABS( ( |
| | | | Row: Historical Sales Override ( Frm M 06.2009 ) |
| | | | / |
| | | | Row: Historical Sales without additional demand ( Frm M 06.2009 ) |
| | | | ) - 1 ) * 100 |
| | | | > 30 |
| | | Row: Historical Sales Override ( Attributes ) = | |
| | | | CELL_BG( 26 ) |
| | | ELSE | |
| | | Row: Historical Sales Override ( Attributes ) = | |
| | | | CELL_BG( 2 ) |
| | | ENDIF | |

Cor. Sale / HIS Sale >30% BG COL=RED
This macro gives warning if the key figure Historical Sales Correction is greater than 30% of Historical Sales without

additional demand by changing the background color of the cell to RED.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Cor. Sale / HIS Sale >30% BG COL=RED. Choose Continue.

Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dia log box, in the descriptive text section, enter a name for the macro step, for example, Change color if percentage > 30%, choose Past in Processing Area, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) →Add Control Statement. In the APO Macro Builder dialog box, choose "IF" and choose Continue.

Right-click the control statement row you have just created and choose Add Element (Result Level) à Append Condition. In the APO Macro Builder dialog box, input Description Percentage > 30%, and choose Continue.

Right-click the condition row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

In the APO Macro Builder dialog box, choose "ABS( (".Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales Correction in the Row field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "/".Choose Continue.

Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Historical Sales without additional demand in the Row field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose ") * 100 ) > 30". Choose Continue. Right-click the condition you have created in step 4 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Historical Sales Correction in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "CELL_BG( 26 )". Choose Continue. Right-click the result row you have created in step 10 and choose Add Element (Result Level) → Append Control Statement.

In the APO Macro Builder dialog box, choose "ELSE" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Historical Sales Correction in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose CELL_BG( 2 )". Choose Continue. Right-click the result row you have created in step 13 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue. Select the macro and choose Check to check it. Choose Generate to generate the macro.

Use drag and drop and move the macro to the Events section and to the Default folder in the upper right screen area.
Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Cor. Sale / HIS Sale >30% BG COL=RED | | | |
| | Change color if percentage > 30% : ( 24 Iterations : M 06.2009; M 05.2011 ) | | |
| | | IF | |
| | | *Percentage > 30%* | |
| | | | ABS( ( |
| | | | Row: Historical Sales Correction ( Frm M 06.2009 ) |
| | | | / |
| | | | Row: Historical Sales without additional demand ( Frm M 06.2009 ) |
| | | | ) * 100 ) > 30 |
| | | Row: Historical Sales Correction ( Attributes ) = | |
| | | | CELL_BG( 26 ) |
| | | ELSE | |
| | | Row: Historical Sales Correction ( Attributes ) = | |
| | | | CELL_BG( 2 ) |
| | | ENDIF | |

Calculate the key figure Corrected Sales History, It equals to Historical Sales Override if this key figure is not initial, otherwise, it equals Historical Sales without additional demand minus Historical Sales Correction.

**Methodology**

The macro is exactly the same with macro in Planning Book YDP_PB_MASS_JOB, View YDP_DV_FCST. You don't need to create the macro step by step again, but import from the view YDP_DV_FCST, just like copying. Choose Menu Edit and then choose Import Macro(s) Choose Macro Book YDP_PB_MASS_JOB View (YDP_DV_FCST), and choose Macro Initial val: calc to corr hist sales. And choose Continue.

When a warning message appears, choose Continue or choose Enter. Select the macro and choose Check to check it. Choose Generate to generate the macro. Use drag and drop and move the macro to the Events section and to the Default folder in the upper right screen area.
Choose Save.

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Initial val: calc to corr hist sales | | | |
| | First Step : ( 24 Iterations : M 06.2009; M 05.2011 ) | | |
| | | IF | |
| | | Sales override = Initial | |
| | | | IS_INITIAL( |
| | | | Row: Historical Sales Override ( Frm M 06.2009 ) |
| | | | ) = 1 |
| | | Row: Corrected Sales History ( Frm M 06.2009 ) = | |
| | | | Row: Historical Sales without additional demand ( Frm M 06.2009 ) |
| | | | + |
| | | | Row: Historical Sales Correction ( Frm M 06.2009 ) |
| | | ELSE | |
| | | Row: Corrected Sales History ( Frm M 06.2009 ) = | |
| | | | Row: Historical Sales Override ( Frm M 06.2009 ) |
| | | ENDIF | |

Access the activity, use one of the following navigation options: he activity, use one of the following navigation options:

| | |
|---|---|
| SAP SCM menu | Advanced Planning and Optimization → Demand Planning → Environment → Current settings → Macro Workbench |
| Transaction code | /SAPAPO/ADVM |

Choose the row of the planning book: YDP_PB_CENTRAL_PLAN and data view YPD_DV_FC_REV

**Read Planning Status**

We use a field in the table to control the planning status. There are 3 macros that are created to modify the value of the field to indicate the current planning status: No Planning, Local Planner, and Central Planner. This macro is used to read the value in the table, and modify the attribute of some key figure rows according to the planning status.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Read Planning Status. Choose Continue. Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, TS_GET, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Add action box. In the APO Macro Builder dialog box, input Description TS_GET. Choose Continue. Right-click the action box row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose LAYOUTVARIABLE_SET( 'LV_CYCLE' ; TS_GET(".Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose 'DEMAND_PLANNING' ; 'PLANNING_CYCLE' ; '*' ; '*' ; 1". Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "; 1 ) )". Choose Continue. Right-click the step row you have created in step 2 and choose Add Element (Step Level) → Append Control Statement for steps. In the APO Macro Builder dialog box, choose "IF" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Step Level) à Append Condition for steps. In the APO Macro Builder dialog box, input Description LOCAL, and choose Continue. Right-click the condition row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

In the APO Macro Builder dialog box, choose "LAYOUTVAR_VALUE( 'LV_CYCLE' ) = 1". Choose Continue.

Right-click the condition row you have created in step 9 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Local, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Local Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) →Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_INPUT( 1 )". Choose Continue. Right-click the result row you have created in step 12 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Local Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt.

Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 48 )". Choose Continue. Right-click the step row you have created in step 11 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Central, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

In the APO Macro Builder dialog box, choose "ROW_INPUT( 0 )". Choose Continue. Right-click the result row you have created in step 17 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 17 )". Choose Continue. Right-click the step row you have created in step 16 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Output Pop-up, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Add action box. In the APO Macro Builder dialog box, input Description Output Pop-up. Choose Continue. Right-click the action box row you have just created and choose Add Element (Argument Element)

→ Add Operator/Function. In the APO Macro Builder dialog box, choose "OUTPUT_POPUP( 'CYCLE' ; 'STATUS' ; 'Local_ Planner' )". Choose Continue.

Right-click the step row you have created in step 21 and choose Add Element (Step Level) → Append Control Statement for steps. In the APO Macro Builder dialog box, choose "ELSEIF" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Step Level) à Append Condition for steps. In the APO Macro Builder dialog box, input Description CENTRAL, and choose Continue. Right-click the condition row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "LAYOUTVAR_VALUE( 'LV_CYCLE' ) = 2". Choose Continue.

Right-click the control statement row you have created in step 24 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, LOCAL, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Local Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_INPUT( 0 )". Choose Continue. Right-click the result row you have created in step 28 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Local Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt.

Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 17 )". Choose Continue. Right-click the step row you have created in step 27 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Central, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function.
In the APO Macro Builder dialog box, choose "ROW_INPUT( 1 )". Choose Continue.
Right-click the result row you have created in step 33 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 48 )". Choose Continue. Right-click the step row you have created in step 35 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Output Pop-up, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Add action box. In the APO Macro Builder dialog box, input Description Output Pop-up. Choose Continue. Right-click the action box row you have just created and choose Add Element (Argument Element) □ Add Operator/Function. In the APO Macro Builder dialog box, choose "OUTPUT_POPUP( 'CYCLE' ; 'STATUS' ; 'Central_Planner' )". Choose Continue.

Right-click the step row you have created in step 37 and choose Add Element (Step Level) → Append Control Statement for steps. In the APO Macro Builder dialog box, choose "ELSE" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, LOCAL, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue.

Right-click the step row you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Local Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

In the APO Macro Builder dialog box, choose "ROW_INPUT( 0 )". Choose Continue. Right-click the result row you have created in step 42 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Local Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 17 )". Choose Continue. Right-click the step row you have created in step 44 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Central, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue.

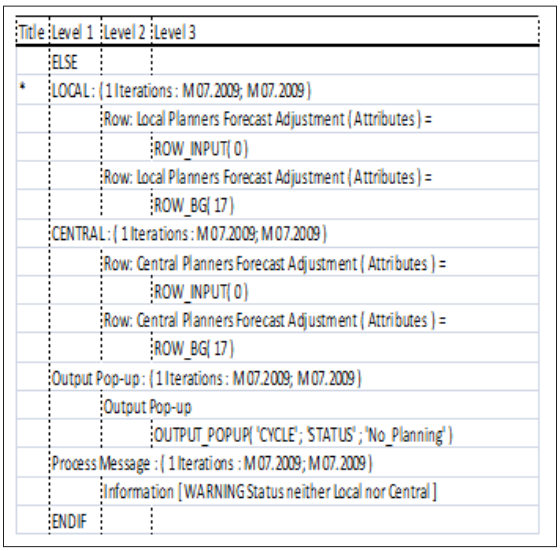
Right-click the step row you have just created and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_INPUT( 0 )". Choose Continue. Right-click the result row you have created in step 47 and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Central Planner Forecast Adjustment in the Row field and Attribute Change in Change mode field. Choose Adopt.

Right-click the result row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 17 )". Choose Continue.

Right-click the step row you have created in step 46 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Output Pop-up, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Add action box. In the APO Macro Builder dialog box, input Description Output Pop-up. Choose Continue. Right-click the action box row you have just created and choose Add Element (Argument Element) → Add Operator/Function. In the APO Macro Builder dialog box, choose "OUTPUT_POPUP( 'CYCLE' ; 'STATUS' ; 'No_Planning' )". Choose Continue.

Right-click the step row you have created in step 51 and choose Add Element (Step level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Process Message, choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Add process message. In the APO Macro Builder dialog box, in the descriptive text section, enter WARNING: Status neither Local nor Central, choose Information in Message Type field, and choose Continue. Right-click the step row you have created in step 54 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue. Right-click the step with name Local, Choose Active/Inactive in the context menu. Repeat the same operation for all the 3 steps with name Local. Select the macro and choose Check to check it. Choose Generate to generate the macro. Use drag and drop and move the macro to the Events section and to the Start folder in the upper right screen area. Choose Save.

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Read Planning Status | | | |
| | TS_GET : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | TS_GET | |
| | | | LAYOUTVARIABLE_SET( 'LV_CYCLE' ; TS_GET( |
| | | | 'DEMAND_PLANNING'; 'PLANNING_CYCLE' ; '*' ; '*' ; 1 |
| | | | ; 1 ) ) |
| | IF | | |
| | LOCAL | | |
| | | LAYOUTVAR_VALUE( 'LV_CYCLE' ) = 1 | |
| * | LOCAL : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Row: Local Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 1 ) |
| | | Row: Local Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 48 ) |
| | CENTRAL : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 0 ) |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 17 ) |
| | Output Pop-up : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Output Pop-up | |
| | | | OUTPUT_POPUP( 'CYCLE' ; 'STATUS' ; 'Local_Planner' ) |
| | ELSEIF | | |
| | CENTRAL | | |
| | | LAYOUTVAR_VALUE( 'LV_CYCLE' ) = 2 | |
| * | LOCAL : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Row: Local Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 0 ) |
| | | Row: Local Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 17 ) |
| | CENTRAL : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 1 ) |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 48 ) |
| | Output Pop-up : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Output Pop-up | |
| | | | OUTPUT_POPUP( 'CYCLE' ; 'STATUS' ; 'Central_Planner' ) |



| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| | ELSE | | |
| * | LOCAL : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Row: Local Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 0 ) |
| | | Row: Local Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 17 ) |
| | CENTRAL : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 0 ) |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 17 ) |
| | Output Pop-up : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Output Pop-up | |
| | | | OUTPUT_POPUP( 'CYCLE' ; 'STATUS' ; 'No_Planning' ) |
| | Process Message : ( 1 Iterations : M 07.2009; M 07.2009 ) | | |
| | | Information [ WARNING Status neither Local nor Central ] | |
| | ENDIF | | |

Modify the value of the field in the table to 1. This means that, currently, the planning status is Local Planner.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Set Planning Cycle to "Local Planner". Choose button Choose to assign a suitable icon for this macro (Please make sure the icon is different with the often used ones, and different with the icon assigned to other Macros). Choose Continue. Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, TS_SET: "Local Planner", choose User-Defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Add action box. In the APO Macro Builder dialog box, input Description TS_SET: "Local Planner". Choose Continue. Right-click the action box row you have just created and choose Add Element (Argument Element) → Add Operator/Function.

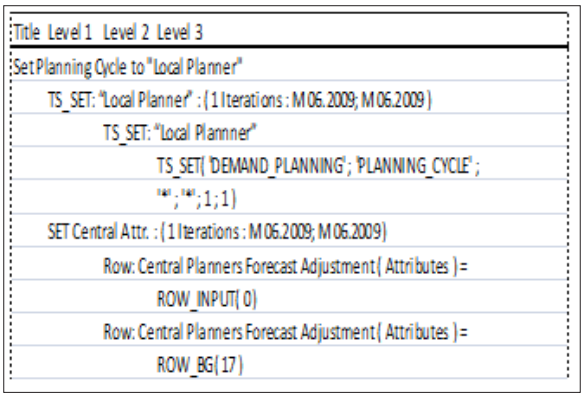
In the APO Macro Builder dialog box, choose "TS_SET( 'DEMAND_PLANNING' ; 'PLANNING_CYCLE' ;". Choose Continue.

Right-click the operation/function row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "'*' ; '*' ; 1 ; 1 )". Choose Continue. Right-click the step you have created in step 2 and choose Add Element (Step Level) → Append macro step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Set Central Adj to no input, choose User-defined in Processing Area, choose 1 in Iterations, and choose Continue. Right-click the step you have just created and choose Add Element (Result Level) → Planning Table Element → Append result row. In the APO Macro Builder dialog box choose Central Planners Forecast Adjustment in the Row field, and Attribute change in Change mode field. Choose Adopt. Right-click the result row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "ROW_INPUT( 0 )". Choose Continue. Right-click the result row you have created in step 7and choose Add Element (Result Level) → Planning Table Element → Append result row In the APO Macro Builder dialog box choose Central Planners Forecast Adjustment in the Row field, and Attribute change in Change mode field. Choose Adopt.

Right-click the result row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "ROW_BG( 17 )". Choose Continue.

Select the macro and choose Check to check it. Choose Generate to generate the macro.
Choose Save.

**Result**



| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Set Planning Cycle to "Local Planner" | | | |
| | TS_SET: "Local Planner" : ( 1 Iterations : M 06.2009; M 06.2009 ) | | |
| | | TS_SET: "Local Planner" | |
| | | | TS_SET( 'DEMAND_PLANNING' ; 'PLANNING_CYCLE' ; '*' ; '*' ; 1 ; 1 ) |
| | SET Central Attr. : ( 1 Iterations : M 06.2009; M 06.2009 ) | | |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_INPUT( 0 ) |
| | | Row: Central Planners Forecast Adjustment ( Attributes ) = | |
| | | | ROW_BG( 17 ) |

Automatic Fix "Central Planner Adj

Fix the key figure cell Central Planners Forecast Adjustment, if it does not equal to Local Planners Forecast Adjustment. This macro is used for making sure the changed value of Central Planners Forecast Adjustment will not be overwritten by macro Copy fcst Local Adj. to Central Adj.

**Methodology**

Right-click the macro node below the planning table and choose Create New Macro → Add macro. In the APO Macro Builder dialog box, enter a descriptive text for the macro, Automatic Fix "Central Planner Adj.". Choose Continue. Right-click the macro and choose Add macro Element → Step. In the APO Macro Builder dialog box, in the descriptive text section, enter a name for the macro step, for example, Automatic Fix "Central Planner Adj.", choose Future in Processing Area, and choose Continue. Right-click the step row you have just created and choose Add Element (Result Level) → Add Control Statement. In the APO Macro Builder dialog box, choose "IF" and choose Continue. Right-click the control statement row you have just created and choose Add Element (Result Level) à Append Condition. In the APO Macro Builder dialog box, input Description Central adj. <> Local adj., and choose Continue. Right-click the condition row you have just created and choose Add Element (Argument Level) → Planning Table Element → Add argument row. In the APO Macro Builder dialog box, choose Central Planners Forecast Adjustment in the Row field. Choose Continue.

Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "<>".Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Local Planner Forecast Adjustment

in the Row field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "AND IS_FIXED(".Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Central Planner Forecast Adjustment in the Row field, and Row Attribute in Data field. Choose Continue. Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose "AND IS_INITIAL(".Choose Continue. Right-click the operator/function row you have just created and choose Add Element (Argument Level) → Planning Table Element → Append argument row. In the APO Macro Builder dialog box, choose Central Planner Forecast Adjustment in the Row field, and Row Attribute in Data field. Choose Continue.

Right-click the argument row you have just created and choose Add Element (Argument Element) → Append Operator/Function. In the APO Macro Builder dialog box, choose ")= 0".Choose Continue.

Right-click the condition row you have created in step 4 and choose Add Element (Result Level) → Planning Table Element → Add result row. In the APO Macro Builder dialog box choose Central Planners Forecast Adjustment in the Row field, and Value Change with Following Fixing in Change mode field. Choose Adopt.

Right-click the result row you have just created and choose Add Element (Argument Level) → Planning Table Element → Add argument row. In the APO Macro Builder dialog box, choose Central Planners Forecast Adjustment in the Row field. Choose Continue. Right-click the result row you have created in step 13 and choose Add Element (Result Level) → Append Control Statement. In the APO Macro Builder dialog box, choose "ENDIF" and choose Continue. Select the macro and choose Check to check it. Choose Generate to generate the macro. Use drag and drop and move the macro to the Events section and to the Exit folder in the upper right screen area.
Choose Save.

**Result**

| Title | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| Automatic Fix "Central Planner Adj. | | | |
| | Automatic Fix "Central Planner Adj. : ( 24 Iterations : M 07.2011; M 06.2013 ) | | |
| | | IF | |
| | | *Central adj. <> Local adj* | |
| | | | Row: Central Planners Forecast Adjustment ( Frm M 07.2011) |
| | | | <> |
| | | | Row: Local Planners Forecast Adjustment ( Frm M 07.2011 ) |
| | | | and is_fixed( |
| | | | Row: Central Planners Forecast Adjustment ( Frm M 07.2011) |
| | | | ) = 0 and is_initial( |
| | | | Row: Central Planners Forecast Adjustment ( Frm M 07.2011) |
| | | | ) = 0 |
| | | Row: Central Planners Forecast Adjustment ( Frm M 07.2011 ) = | |
| | | | Row: Central Planners Forecast Adjustment ( Frm M 07.2011) |
| | | ENDIF | |

**Conclusion**

In this article able to describe few case studies, methodologies and results related to Process flow, Bucket Profile in Demand Planning, Planning Area, Planning Book and Data View and Forecasting. SAP Supply Chain Management, Demand planning, Forecasting will have more number of case studies and methodologies. We'll cover few more in next article [1-25].

**References**

1. Analyzing Demand Planning. Learning SAP https://learning.sap.com/learning-journey/discovering-end-to-end-business-processes-for-the-intelligent-enterprise/analyzing-demand-planning_c51b50fc-7ec6-43e9-96e0-5842d1122d4d.
2. Demand Planning. SAP HELP https://help.sap.com/docs/SAP_SUPPLY_CHAIN_MANAGEMENT/d8a0d82aa9c041028502c8c175143205/7ee8fd508d67e85ee10000000a44538d.html?version=7.0.
3. Demand Sensing in IBP (2023) SAP Blogs https://blogs.sap.com/2023/03/23/demystifying-demand-sensing-in-sap-ibp-how-it-brings-value-to-your-supply-chain/.
4. Demand Planning. SAP HELP https://help.sap.com/doc/saphelp_scm700_ehp02/7.0.2/en-US/7e/e8fd508d67e85ee10000000a44538d/content.htm?no_cache=true.
5. Jomerce PJ (2018) PP/DS for SAP S/4HANA (Advanced Planning) : A powerful planning and scheduling tool SAP Blogs https://blogs.sap.com/2018/02/12/ppds-for-sap-s4hana-advanced-planning-a-powerful-planning-and-scheduling-tool/.
6. Berthold von Haaren (2023) Production Planning Integration – Synchronized Planning for Production Using Key Figure Integration and the New Flexible Constraint Heuristic. SAP Blogs https://blogs.sap.com/2023/11/02/production-planning-integration-synchronized-planning-for-production-using-key-figure-integration-and-the-new-flexible-constraint-heuristic/.
7. Ulrich Mast (2022) SAP S/4HANA Manufacturing for planning and scheduling – Release 2022 is now available, SAP Blogs https://blogs.sap.com/2022/11/01/sap-s-4hana-manufacturing-for-planning-and-scheduling-release-2022-is-now-available/.
8. Gayatree Bhattacharyya (2022) Flexible Integration with PP/DS for SAP S/4HANA. SAP Blogs https://blogs.sap.com/2022/01/05/flexible-integration-with-pp-ds-for-sap-s-4hana/.
9. Ahmet Tasdelen (2021) Basic configuration of embedded PP/DS in S/4 HANA. SAP Blogs https://blogs.sap.com/2021/01/04/basic-configuration-of-embedded-pp-ds-in-s-4-hana/.
10. Gerhard Welker (2020) Highlights for Manufacturing in SAP S/4HANA 2020. SAP Blogs https://blogs.sap.com/2020/12/15/highlights-for-manufacturing-in-sap-s-4hana-2020/.
11. Phillip Dent (2019) Production Planning and Detailed Scheduling in SAP S/4HANA – What Does It Mean to Me?. SAP Blogs https://blogs.sap.com/2019/02/19/production-planning-and-detailed-scheduling-in-sap-s4hana-what-does-it-mean-to-me/.
12. Venkadesh Seetharaman (2019) PP/DS on S/4 HANA (Advanced Planning) Insights. SAP Blogs https://blogs.sap.com/2019/01/17/ppds-on-s4-hana-advanced-planning-insights/.
13. Jomerce PJ (2018) Production Scheduling Board with PP/DS for SAP S/4HANA (Advanced Planning) on SAP S/4HANA 1709 FPS1. SAP Blogs https://blogs.sap.com/2018/02/15/production-scheduling-board-with-ppds-for-sap-s4hana-advanced-planning-on-sap-s4hana-1709-fps1/.

14. Pranit Bankar (2023) Planning with Characteristics using SAP S/4HANA DSC Edition of PP/DS. SAP Blogs https://blogs.sap.com/2023/06/21/planning-with-characteristics-using-sap-s-4hana-dsc-edition-of-pp-ds/.
15. Berthold von Haaren (2023) Exploring the Benefits of Synchronized Planning for Production. SAP Blogs https://blogs.sap.com/2023/05/25/exploring-the-benefits-of-synchronized-planning-for-production/ .
16. Tom Arne Altmueller (2021) Business benefits of a PP/DS for SAP S/4HANA implementation. SAP Blogs https://blogs.sap.com/2021/03/17/business-benefits-of-a-pp-ds-on-sap-s-4hana-implementation/.
17. Pradeep Vijay (2015) SCM Core Interface- Handbook (PART-1). SAP Blogs https://blogs.sap.com/2015/01/21/scm-core-interface-handbook-part-1/.
18. Roman Gorbenko (2020) Integrate It! SAP EWM and SAP ERP integration via CIF. Step-by-step guide. SAP Blogs https://blogs.sap.com/2020/08/17/integrate-it-sap-ewm-%d0%b8-sap-erp-integration-via-cif.-step-by-step-guide/.
19. Balakrishna Gajula (2020) Master Data transfer through CIF using BTEs. SAP Blogs https://blogs.sap.com/2020/08/24/master-data-transfer-through-cif-using-btes/.
20. CIF Customizing in SAP ECC or SAP S/4HANA. SAP HELP https://help.sap.com/docs/SAP_INTEGRATED_BUSINESS_PLANNING/68fa1e86fe6f41d98421d1ce13a08a9f/a37c66e3e4de42d891ea922a2e65d4c6.html.
21. How to Perform CIF Post Processing. SAP HELP https://help.sap.com/docs/SAP_INTEGRATED_BUSINESS_PLANNING/68fa1e86fe6f41d98421d1ce13a08a9f/a37c66e3e4de42d891ea922a2e65d4c6.html.
22. Luke Krogh (2022) How To Choose A Forecasting Model in SAP S/4HANA. SAP Blogs https://blogs.sap.com/2022/04/08/how-to-choose-a-forecasting-model-in-sap-s-4hana/.
23. Girish MP (2021) Sales Forecasting & Planning using SAP Analytics Cloud. SAP Blogs https://blogs.sap.com/2021/09/21/demand-forecasting-planning-using-sap-analytics-cloud/.
24. Oleksandr Golubet (2021) Planning and Forecasting with SAP Profitability and Performance Management Solution – A modern approach, SAP Blogs https://blogs.sap.com/2021/01/27/planning-and-forecasting-with-sap-profitability-and-performance-management-solution-a-modern-approach/.
25. Hardik Shah (2023) SAP success metrics and cloud deployment options. SAP Blogs https://blogs.sap.com/2023/11/02/sap-success-metrics-and-cloud-deployment-options/.