What’s New in SAP Integrated Business Planning

1808

SAP Product & Solution Management
August 16, 2018
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Agenda

❖ Solution Updates - SAP Integrated Business Planning 1808 (Released)
❖ SAP Best Practices for SAP IBP – 1808 Update
❖ Documentation Updates
❖ Customer Availability Center & Customer Influence Center
❖ Information on Upgrades
❖ Q&A*

* Q&A chat is open for questions throughout the session with experts online to answer
SAP Integrated Business Planning

- **Supply Chain Control Tower**
  End-to-End Visibility, Exception Handling and Collaboration

- **IBP for Sales & Operations**
  Strategic and Tactical Decision Processes

- **IBP for Demand**
  Demand Sensing & Statistical Forecasting

- **IBP for Inventory**
  Multi-Stage Inventory Optimization

- **IBP for Response & Supply**
  Allocations Planning & Order Rescheduling

Unconstrained & Constrained Supply Planning

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Demand Planning
Poorya Farahani
Demand Planning
Time Series Analysis
Time Series Analysis – Configuration 1

A new Fiori app is introduced, called Manage Forecast Automation Profiles as part of the Demand Planner tile group.

- **Forecast Automation** is a feature set planned for IBP for Demand customers that combines advanced techniques for full automation of the forecasting process with the more classical/traditional approaches like creating forecast models and assigning forecast models to planning objects.
- The first feature set delivered on Forecast Automation is **Time Series Analysis**.
Time Series Analysis – Configuration 2

The application starts by showing a list of existing profiles on the first screen.

<table>
<thead>
<tr>
<th>ID</th>
<th>Planning Area</th>
<th>Input</th>
<th>Last Run</th>
<th>Calculation Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBP44CUST - Sales History 1527075531805</td>
<td>IBP44CUST (Real Customer Data)</td>
<td>Sales History</td>
<td>May 23, 2018</td>
<td>Customer ID - Location ID - Product ID Product ID</td>
</tr>
<tr>
<td>IBP44CUST - Sales History LocPRod 1527755930885</td>
<td>IBP44CUST (Real Customer Data)</td>
<td>Sales History</td>
<td>July 10, 2018</td>
<td>Location ID - Product ID Product ID</td>
</tr>
<tr>
<td>IBP44CUST - Sales History v2 1524738991079</td>
<td>IBP44CUST (Real Customer Data)</td>
<td>Sales History</td>
<td>July 10, 2018</td>
<td>Customer ID - Product ID - Location ID Product ID</td>
</tr>
<tr>
<td>Product + Monthly Level 1528803940432</td>
<td>IBP44CUST (Real Customer Data)</td>
<td>Sales History</td>
<td>June 13, 2018</td>
<td>Product ID</td>
</tr>
<tr>
<td>Product Level test 2 1529410787463</td>
<td>IBP44CUST (Real Customer Data)</td>
<td>Sales History</td>
<td>June 19, 2018</td>
<td>Product ID</td>
</tr>
</tbody>
</table>
## Time Series Analysis – Configuration 3

### Calculation Levels

<table>
<thead>
<tr>
<th>Calculation Levels</th>
<th>Periodicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer ID ⬤ Location ID ⬤ Product ID ⬤</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

### Additional Calculation Levels for Analysis

<table>
<thead>
<tr>
<th>Calculation Levels</th>
<th>Periodicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer ID ⬤ Product ID ⬤</td>
<td>Monthly</td>
</tr>
<tr>
<td>Customer Country ⬤ Product Group ⬤</td>
<td>Monthly</td>
</tr>
<tr>
<td>Location ID ⬤ Product ID ⬤</td>
<td>Monthly</td>
</tr>
<tr>
<td>Location ID ⬤ Product ID ⬤</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

### Input for Analysis

- **Planning Area:** ATMDBUDNEW (SAP6 Demand)
- **Input for Analysis:** Delivered Qty Adjusted (ADJDELIVQTY)
- **Currency To ID:**
- **UOM To ID:**
- **Description:** forecast automation profile
Time Series Analysis – Configuration 4

**Time Series Analysis**

*Frequency of Reanalysis:*

Separate:

*Sensitivity for Seasonality Test:*

Separate Categories per Type of Seasonality:

Separate Categories per Length of Seasonal Cycle:

Trend:

*Significance of Trend Test:*

Separate Categories per Trend Direction:

Intermittency and Volatility:

*Probability for White Noise Test:*

Intermittency Detection Method:

Average Demand Interval

Separate Category for Lumpy Demand:

Threshold for Lumpy Demand (CV Squared):

**Outputs for Calculation Levels**

<table>
<thead>
<tr>
<th>Calculation Levels</th>
<th>Attribute for Time Series Properties</th>
<th>Key Figure for Seasonality Pattern</th>
<th>Key Figure for Average Demand Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer ID - Location ID - Product ID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer ID - Product ID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Country - Product Group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location ID - Product ID</td>
<td>Time series analysis (ATDTS)</td>
<td>LPM1 (LPM1)</td>
<td></td>
</tr>
<tr>
<td>Location ID - Product ID</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Create an Application Job to execute the Forecast Automation run.

Here you can …

- Use a filter if you would like to limit the execution to only for some planning objects of the listed calculation levels.
- Select which tasks from the forecast automation run will be executed. Currently only time series analysis is available.
Application Log for a Forecast Automation Run

- Each Forecast Automation run creates an Application Log with processing information on:
  - processed calculation levels
  - master data updates
  - updated key figures.
- IF there were output attributes where the results of the time series analysis are written, or there were key figures to be updated (for seasonality indices and ADI) those can be viewed also in Excel.

<table>
<thead>
<tr>
<th>Date and Time</th>
<th>Severity</th>
<th>Message</th>
<th>Area</th>
<th>Sub Area</th>
<th>External Identifier</th>
<th>Attachment</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/11/2018 09:28:28.367</td>
<td>Information</td>
<td>Job Forecast Automation started</td>
<td>IBP Foundation</td>
<td>Job Scheduling</td>
<td>1527755910065</td>
<td>Attachment.net, 152 lines</td>
</tr>
<tr>
<td>07/11/2018 09:28:28.557</td>
<td>Information</td>
<td>Forecast automation started for planning area IBP4DCUST</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:28.570</td>
<td>Information</td>
<td>Forecast automation profile 1527755910065 (IBP4DCUST - Sales History LogPR) is executed.</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:28.570</td>
<td>Information</td>
<td>Forecast automation executed using the baseline planning version.</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:43.432</td>
<td>Information</td>
<td>Time series analyses started on - Location ID - Product ID calculation level.</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:36.692</td>
<td>Information</td>
<td>Data integration for batch C48410D00C032E47140908D421B5A4ABBE started.</td>
<td>IBP Integration</td>
<td>Data Integration Plus</td>
<td>5418</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:43.338</td>
<td>Information</td>
<td>Data integration for batch C48410D00C032E47140908D421B5A4ABBE ended.</td>
<td>IBP Integration</td>
<td>Data Integration Plus</td>
<td>5418</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:49.489</td>
<td>Information</td>
<td>Time series analysis successfully executed on - Location ID - Product ID calculation level.</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:46.054</td>
<td>Information</td>
<td>Time series analyses started on - Product ID calculation level.</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
<tr>
<td>07/11/2018 09:28:48.567</td>
<td>Information</td>
<td>Time series analysis successfully executed on - Product ID calculation level.</td>
<td>IBP Demand</td>
<td>FCST_AUT</td>
<td>1527755910065</td>
<td></td>
</tr>
</tbody>
</table>
Demand Planning
Data-Realignment
Manage Realignment Rules App

There is a variety of business changes such as:

- Change of organizational structures
- Changes in plant or distribution center locations for some products
- New customer and product names, etc.

where some planning data, such as planning objects and key figure values need to be adjusted according to some rules and criteria.

These processes are supported via realignment application.
Data Realignment in IBP – Terminology

Realignment Project
Contains a set of realignment steps which are executed in a defined sequence. Each realignment project is executed only once.

Realignment Step
Processing step of a realignment project containing rules and control parameters to adjust planning data.

Realignment Run
Execution of a realignment project. A realignment run is executed using the application job template ‘Realign Planning Data’ in the Application Jobs app.
Manage Realignment Rules App – Project List Screen

On this UI you can…

- Search for Projects
- Create Projects
- Change Projects
- Delete Projects
- Copy Projects
Manage Realignment Rules App – Project Overview Screen

On this UI you can…

- Define a Project Name
- Assign a Planning Area
- Create & Delete Steps
- Move Steps Up/ Down
- Change the Project Status
- See Administrative Information about
  - Project Creation
  - Project Change
  - Project Approval
  - Project Execution
**Manage Realignment Rules App – Realignment Step**

**Sections:** General - Attribute Mapping – Processing Options

**General Sections**
- Add a Step Name with up to 30 characters.

**Attribute Mapping Section**
- Details see next slides

**Processing Options Section**
- Details see next slides
Manage Realignment Rules App – Realignment Step
Selection Section

- You can use the following Selection Options to define filters:
  - Equals
  - Contains
  - Starts With
  - Ends With
  - Is Empty

- When adjusting key figure values, specified filters are considered only for planning levels in which they are contained.
### Manage Realignment Rules App – Realignment

#### Key Figures Section

<table>
<thead>
<tr>
<th>Attribute Mapping</th>
<th>Processing Options</th>
<th>Selection</th>
<th>Key Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR: DEMO 01 / UC2: CHANGE DISTR. CENTER</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Figures**

- **Process all Key Figures**
  - Use the checkbox to select all applicable key figures.

- **Process selected Key Figures**
  - Use the checkbox to select specific key figures.

**Processing Options**

- **Action**: Sum up source values and overwrite target
- **Source value adjustment (in percent)**: 100
- **Time Horizon From**: 01/01/2011
- **Time Horizon To**: 12/31/2021

- Attribute mapping is a prerequisite for key figure selection.
- Either all key figures or a list of key figures can be selected.
- Only key figures from the planning levels derived from the target mapping can be selected.
Create an Application Job to execute the Realignment Run for a Realignment Project. On this UI you can …

– Use the Simulation Mode to assess the impact of a realignment run (e.g. number of planning objects created…)

– Simulate one step, a sequence of steps or all steps of a project.

– Restart processing a Realignment Project if there were issues during a previous execution using the ‘Start after last Successful Step’ flag

Note

• A Realignment Run can only be executed for projects with status ‘Approved’. This is not required for Simulation.

• In Simulation Mode every Step is evaluated independently. Potential changes by previous steps are not considered.
Application Log for Realignment Changing Master Data

- Each Realignment Run (also in simulation mode) creates an Application Log with detailed processing information, such as:
  - Processed planning versions and scenarios
  - Affected master data
  - Affected planning levels
  - Affected key Figures
  - Affected planning objects

- Object lists are provided as .csv attachments

- The Search field can be used, for example, to display only messages of a specific step or to find information of a certain planning level.
Demand Planning

XYZ Segmentation Changes
### Calculate Variation – Example with time series analysis

**Thresholds:**
- X: 0.3
- Y: 0.7

<table>
<thead>
<tr>
<th>Prod 1</th>
<th>Prod 2</th>
<th>Prod 3</th>
<th>Prod 4</th>
<th>Prod 5</th>
<th>Prod 6</th>
<th>Prod 7</th>
<th>Prod 8</th>
<th>Prod 9</th>
<th>Prod 10</th>
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<tr>
<td>300</td>
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<td>10</td>
<td>667</td>
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<td>891</td>
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<td>635</td>
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<td>8000</td>
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<tr>
<td>400</td>
<td>150</td>
<td>15</td>
<td>252</td>
<td>278</td>
<td>121</td>
<td>294</td>
<td>795</td>
<td>485</td>
<td>9000</td>
</tr>
<tr>
<td>500</td>
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<td>25</td>
<td>548</td>
<td>354</td>
<td>726</td>
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<td>157</td>
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<td>7000</td>
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<tr>
<td>600</td>
<td>100</td>
<td>27</td>
<td>547</td>
<td>370</td>
<td>886</td>
<td>958</td>
<td>818</td>
<td>411</td>
<td>8500</td>
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<tr>
<td>700</td>
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<td>655</td>
<td>754</td>
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<td>500</td>
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<td>359</td>
<td>465</td>
<td>7800</td>
</tr>
<tr>
<td>1200</td>
<td>200</td>
<td>85</td>
<td>522</td>
<td>77</td>
<td>721</td>
<td>205</td>
<td>461</td>
<td>492</td>
<td>5600</td>
</tr>
</tbody>
</table>

**Classification by CV:**
- Prod 1: 0.383, Y
- Prod 2: 0.682, Y
- Prod 3: 0.566, Y
- Prod 4: 0.543, Y
- Prod 5: 0.666, Y
- Prod 6: 0.545, Y
- Prod 7: 0.816, Y
- Prod 8: 0.522, Y
- Prod 9: 0.466, Y
- Prod 10: 0.123, X

**Classification by cleansed CV:**
- Prod 1: 0.001, X
- Prod 2: 0.020, X
- Prod 3: 0.030, X
- Prod 4: 0.543, Y
- Prod 5: 0.666, Y
- Prod 6: 0.545, Y
- Prod 7: 0.816, Y
- Prod 8: 0.522, Y
- Prod 9: 0.466, Y
- Prod 10: 0.123, X

**Classification by CV of cleansed TS:**
- Prod 1: 0.001, X
Demand Sensing
Poorya Farahani
**Configuration Changes**  

Create a New Forecast Model for Demand Sensing (Full) - Forecasting Steps

Ordered Quantity is set to be the same as the main input

Bias Horizon can now be hidden via a ‘Demand Sensing Administration’ Restriction

Future Order Quantity and Historical Ordered Quantity are now merged into one Ordered Quantity Field

---

**General Parameters**

- **Main Input for Forecasting Steps**: Requested Qty.
- **Target Key Figure for Forecast**: Sensed Demand Qty

**Algorithms**

**Demand Sensing (Full)**

- **Consensus Forecast**: Consensus Demand w/o Promotion
- **Signal Horizon**: Future
- **Snapshot Key Figure**: NEWSNAPSHOT_Cost
- **Maximum Forecast Increase**: 50
- **Maximum Forecast Decrease**: 50
- **Ordered Quantity**: Requested Qty.

**Future Order Quantity**

- **Signal Horizon**: Historical
- **Point of Sales**: Select a Key Figure
- **Number of Data Points**: 19

**Baseline WAPE threshold (%)**: 37.5
Analytics and Exception Management
Kenton Harman
IBP Analytics

Improvements to geographic charts
Improvements to geographic charts

There are enhancements to geographic charts to improve their usability. These features include:

- Chart title displays on the map
- Collapsible legend with up to 6 segments
- The sequential color palette can be selected on the chart
- Location label can be displayed or suppressed
- Transparency for overlapping objects
- Tooltip with object information
- Navigation controls

Note: All improvements are implemented for the chart types choropleth and geo bubble in 1808. The remaining improvement for the geo pie will be available with 1811.
Geo chart improvements in the Analytic app

- Chart title displays on the map
- Collapsible legend with up to 6 segments
Geo chart improvements in the Analytic app

- The sequential color palette can be selected on the chart
- Location label can be displayed or suppressed
Geo chart improvements in the Dashboard app
IBP Analytics

Top or bottom n value filter
Top / bottom n value filter

The values displayed on a chart can now be limited to show only those that are the top or bottom values for a key figure.
Chart showing all values
Selecting a filter

Use the “Filter for Key Figure Value” value help

Select Top N or Bottom N option
Selecting a filter

Enter the limit for the filter values
Top 5 value filter applied
IBP Analytics

Descriptive attributes on charts
Attribute display options on charts

Charts can now be configured to show either the:

- Attribute ID
- Attribute Description
- Attribute ID – Attribute Description
- Attribute Description – Attribute ID

In order to display the attribute description, a descriptive attribute must be assigned to the attribute.
Selection of Attribute Display Options

The value displayed on the chart can be selected from the “Attribute Display Options” area for each group-by on the chart.
IBP Analytics
External API for reading master data by MDT
Purpose

• Extract master data from the IBP system that can be used by an external reporting tool

• The extraction uses the existing IAM communication scenario as security layer.

• In the request, you provide the attributes for the data you would like to extract. The service returns the requested data in JSON format.

• Depending on what kind of data you want to extract, you can use the following endpoints of the service:
  • /IBP/EXTRACT_SRV/extract_kf for extracting key figure data
  • /IBP/EXTRACT_SRV/extract_md for extracting master data
  • /IBP/EXTRACT_SRV/extract_mdt for extracting master data by MDT
Custom Alerts

Custom Alerts Overview
Current pain points

- I cannot see a summary of all the alerts on the dashboard
- I cannot see the alerts organized by the products that are impacted
- The alert overview only shows me the alerts by subscription name, or by priority
- I would like the flexibility to configure overviews based on different planning areas, subscriptions, or filters
Alert Overviews
Custom Alerts

Machine learning in alert rules
Currently IBP Custom Alerts are based on **static rules**. This works fine if the threshold for the exception condition is known and the data is generally consistent.

If the data is variable and changes to the pattern occur, the static rules may lead to **too many or too few alerts** which either keeps planners busy or leaves them clueless.
Algorithms

Two different ML algorithms for clustering are available (using PAL):

- **DBSCAN**
  DBSCAN (Density-Based Spatial Clustering of Applications with Noise) finds a number of clusters starting from the estimated density distribution of corresponding nodes, which means that the assignment of points to a cluster is based on their distance. Outliers are considered as “noise”

- **K-Means**
  The k-means algorithm partitions n observations or records into k clusters in which each observation belongs to the cluster with the nearest center. That means the number of clusters need to be determined. The “centroids” of the clusters are being re-calculated for convergence until none of the cluster assignments change.
Machine Learning Rules in the Define Custom Alerts app

- Machine Learning adjusts with changing data patterns
- You can either use Machine Learning rules as standalone or combined with standard alert rules.
Machine Learning Rules in the Define Custom Alerts app

- **DBSCAN** requires a key figure on which the algorithm will be applied. Optionally you can enter the attributes on which the key figure is clustered. These attributes are the ones that come from the calculation level of the alert.

- **K-Means** requires only a key figure and do not consider the attributes.
Example

➢ In this example, we created an alert overview that shows two subscriptions of two different alert definitions.

➢ One definition is using machine learning algorithm to find outliers. It finds 25 alerts.

➢ The second alert definition is using standard rules without ML. It returns 128 alerts.
Benefits

- Planners can set up alerts without a need to know the **exact thresholds** in advance.

- The amount of alerts can be either reduced or increased to have **meaningful insights**

- **Changing data** will change the alert detection without a need for the planner to adjust the alert definition
IBP Excel Add-In 1808.2.0
Anna Linden
Planning Notes in SAP Integrated Business Planning
Business Reason and Process Example

Capture additional information from users (e.g. about events) not only as numbers but also track additional information as part of a note. Planning notes can provide additional business information to the data by capturing assumptions, reasons for changes, and so on, that can be shared with other planners to collaborate.

**Demand Planner**
- Customer orders additional 20k pieces.
- Demand planner updates data on customer level (product, customer)

**Demand Planner**
- Adds a planning note in Excel to the changed cell to make it transparent that the high increase of the new demand comes from the new customer order

**Global Planner**
- Reviews plan on global Level
- Wants to know why the increase of customer demand happened

**Global Planner**
- Reviews planning notes
- Now knows why there was an increase of the demand

Manual data update
Add new planning note
Review data
Review planning note

Capture additional information from users (e.g. about events) not only as numbers but also track additional information as part of a note. Planning notes can provide additional business information to the data by capturing assumptions, reasons for changes, and so on, that can be shared with other planners to collaborate.
Planning Notes in SAP Integrated Business Planning
Change History vs Planning Notes

**Change History**

- Comments and reason codes can be tracked when a user saves data.
- Change history (incl. the comments) is tracked for a collection of changes and therefore also the comments can be valid for multiple changes in the planning view.
- The comments and reason codes can be analyzed using change history views in the IBP Excel add-in.
- To track the change history and comments, the key figure needs to be enabled for change history in configuration.

**Planning Notes**

- Planning notes can be used in the IBP Excel add-in to track additional information per cell in the planning view.
- The new functionality simplifies the exchange of information between users.
- The planning notes are immediately visible in the planning view itself and are stored in SAP Integrated Business Planning.
- To track the notes, the key figure needs to be enabled for planning notes in configuration.
Planning Notes in SAP Integrated Business Planning

- Planning notes can be used in the IBP Excel add-in to track additional information per cell in the planning view.
- The new functionality simplifies the exchange of information between users.
- The planning notes are immediately visible in the planning view itself and are stored in SAP Integrated Business Planning.
- To track the notes, the key figure needs to be enabled for planning notes in configuration.
Planning Notes in SAP Integrated Business Planning

Create a new planning note

Planning notes cannot be directly created for a master data attribute (area marked in red) such as Customer Region without the time dimension.

Planning notes are time-dependent. They can only be created in attribute/time dimension combination cells (marked in green).
Planning Notes in SAP Integrated Business Planning
Model Configuration – Key Figures

- Planning notes can only be enabled for **stored key figures**
- Planning notes can only be enabled for **20 key figures per planning area**
The Global Configuration Parameter LEANQUERY in Parameter Group PLAN_VIEW has to be set to „YES“ in order to visualize the planning notes in the IBP Excel Add-In.
### Planning Notes in SAP Integrated Business Planning

Create a new planning note

1. **Select a cell**
2. **Right-click with the mouse to open the context menu**
3. **Click Add Planning Note** (this entry only shows when the key figure is planning note enabled)
4. **Enter note text** (Max 1000 characters)
5. **Click OK**
6. **Planning note is visible in the planning view as Draft**
7. **Click Save Data** to save the note on the database and make it available for other users

---

**Prerequisite:** The user has the necessary read and write authorizations for planning notes and the planning view settings are set to show planning notes.
Planning Notes in SAP Integrated Business Planning
Create a new planning note - time totals and grand totals

It is not possible to create planning notes for cells containing time totals:

It is not possible to create planning notes for cells containing grand totals. It works for sub-totals.
Planning Notes in SAP Integrated Business Planning
Planning notes vs Microsoft Excel comments

Planning notes use the Microsoft Excel Comments functionality to visualize the planning notes in the planning view

- Editing and deleting planning notes using Microsoft Excel comments functionality (via context menu or review tab) is not supported and results in a warning message when saving the data in the planning view. These changes are not saved on the IBP database and will be lost after a refreshing the planning view.
- Creating a Microsoft Excel native comment in an IBP planning view also leads to a warning message. These comments are also not saved on the IBP database and will be lost after a refresh of the planning view.
- Further Microsoft Excel comments features from the Review tab, such as Previous, Next, Show/Hide Comments, Show All Comments can be used.

Context menu:

Review tab:

IBP Warning Message:
Planning Notes in SAP Integrated Business Planning

Disaggregation of planning notes

Planning notes that are created on an aggregated level are - during saving - disaggregated to the base planning level of the respective key figure.

Please note: This can result in massive amounts of data on the database. Certain restrictions apply:

- Planning notes cannot be saved when the disaggregation of the planning note to the base planning level of the key figure would result in more than 20 million attribute / period level combinations on the database. This results in an error message.

Key figure base planning level, e.g. Product-Location-Customer

Error Message:

Please maintain your planning notes on a more granular level.

Report error ID 275F01405A454A441600902453871183 to the system administrator

OK
Planning Notes in SAP Integrated Business Planning

Read planning notes in the planning view

Prerequisites for seeing a planning note:
- At least one key figure needs to be planning notes enabled
- At least one planning note already exists, and
- the display settings criteria (next slide) are met.

1. The planning note is visualized as a Microsoft Excel native comment in the IBP planning view
2. The user can use the mouse over to read the header text of the planning note (e.g. Changed At and Created By)
3. The notes box automatically auto-sizes so that all of the text is visible when the users clicks into the cell.
Planning Notes in SAP Integrated Business Planning

Read planning notes in the planning view

In order to view the planning notes in the planning view, the user needs to set the display options accordingly:

- **Edit Planning View → Key Figures → Display Planning Notes**

  - **Don’t Show** - Planning notes are not shown on the Planning View
  - **Show from this Planning Level Only** – Planning notes that were created on the same aggregation level as the planning view is defined
  - **Show from All Levels** – All planning notes from all levels of aggregation and disaggregation are shown.

**Please be cautious:** This setting can have quite a performance impact while loading the data in case many planning notes exist in the system!
Planning Notes in SAP Integrated Business Planning
Planning note details / Multiple planning notes in a cell

If multiple planning notes exist for one cell, only the last planning note (from a timestamp perspective) will be shown plus an info:

X further planning notes exist for that cell.

To display the additional planning notes, and to edit or delete a note, right click on the cell to open the context menu, then click Show Planning Notes.

In the details view, further information about the planning notes can be seen and the planning notes can be edited or deleted.
Planning Notes in SAP Integrated Business Planning
Planning note details view / edit / delete / filters

<table>
<thead>
<tr>
<th>Status of the planning note</th>
<th>Planning note text</th>
<th>Planning level and attribute values for which the planning notes were created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>Draft</td>
<td>Draft</td>
</tr>
<tr>
<td>Saved</td>
<td>Saved</td>
<td>Saved</td>
</tr>
<tr>
<td>Edited</td>
<td>Edited</td>
<td>Edited</td>
</tr>
<tr>
<td>Deleted</td>
<td>Deleted</td>
<td>Deleted</td>
</tr>
</tbody>
</table>

**Status of the planning note**

**Draft**

**Saved**

**Edited**

**Deleted**

**Planning note text**

**Date and Time of last change**

**User who last changed the planning note**

**Click to edit the planning note**

**Click to delete the planning note**

**Filter settings of the planning view at which the planning note was created** (planning view filter & read permission of the user)

**Note:** You still need to save your changes (edit/delete) afterwards!
Planning Notes in SAP Integrated Business Planning
Planning notes vs Microsoft Excel comments

Planning notes use the Microsoft Excel Comments functionality to visualize the planning notes in the planning view

- Editing and deleting planning notes using Microsoft Excel comments functionality (via context menu or review tab) is not supported and results in a warning message when saving the data in the planning view. These changes are not saved on the IBP database and will be lost after a refreshing the planning view.
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- Further Microsoft Excel comments features from the Review tab, such as Previous, Next, Show/Hide Comments, Show All Comments can be used.

Context menu:

Review tab:

IBP Warning Message:
Planning Notes in SAP Integrated Business Planning

Copy cells with Planning Notes

Example: A user copies one / several cells that contains planning notes and pastes it to another cell. In that case, the planning note would also show in the target cell. However, that behavior is based on the Microsoft Excel behavior that Microsoft Excel comments can be copied this way. The copied comment is however not recognized as an IBP Planning Note and subsequently not saved on the database.

Copy Cell:

Microsoft Excel comment on target cell not recognized as IBP Planning Note:
Planning Notes in SAP Integrated Business Planning
Mass deletion service (Application Job)

• Old/Obsolete planning notes that are no longer needed can be removed via an application job.
• New Job Template: *Delete Planning Notes*
• This application job can be planned as a recurring job
• Possible application job parameters:
  • Planning Area
  • Version
  • Key figure
  • User
  • Attribute of Planning Level
  • Notes Created Before
  • Periods Ending Before
  • Rolling
Planning Notes in SAP Integrated Business Planning
Copy cells with Planning Notes

Example: A user copies one / several cells that contains planning notes and pastes it to another cell. In that case, the planning note would also show in the target cell. However, that behavior is based on the Microsoft Excel behavior that Microsoft Excel comments can be copied this way. The copied comment is however not recognized as an IBP Planning Note and subsequently not saved on the database.

Copy Cell:

Microsoft Excel comment on target cell not recognized as IBP Planning Note:
Planning Notes in SAP Integrated Business Planning

Authorizations

For planning notes, the same authorizations as for the planning view apply
+ visibility setting (read restrictions) for planning notes
+ editability settings (write restrictions) for planning notes

- If the user does not have sufficient read authorizations, he will not be able to see any planning notes on the planning view
- If the user does not have sufficient write authorizations, he will not have the option to create, edit or delete planning notes
Planning Notes in SAP Integrated Business Planning
Authorizations - Read restrictions

The administrative read functions *Notes (NOTES)* and *Administrative Planning Notes (ADM_NOTES)* regulate the read permissions of the planning notes.

Value NOTES – User can read his own planning notes and also the planning notes of all other users

Value ADM_NOTES – Does not play a role in the read restrictions for planning notes
Planning Notes in SAP Integrated Business Planning

Authorizations – Write restrictions

The administrative write functions Notes (NOTES) and Administrative Planning Notes (ADM_NOTES) regulate the write permissions of the planning notes.

Value NOTES – User can edit and delete his own planning notes

Value ADM_NOTES – User can edit and delete all planning notes from all users
Planning Notes in SAP Integrated Business Planning

Authorizations – Finetune write restrictions

The *Planning Note Editability* settings provide further capabilities to finetune the planning note editability rights of the users, e.g. by planning area or key figure.

**Planning Note Editing Scope:**

Last = Only last planning note is editable
All= All planning notes are editable

Please Note: *The Administrate Planning Notes (ADM_NOTES) write function over-rules the Planning Note Editing Scope.* If the user has ADM_NOTES assigned, he can still change ALL planning notes from ALL users.
Planning Notes in SAP Integrated Business Planning
Restrictions

- Create, Read, Update, Delete planning notes for a single cell of a planning view on any aggregated level are supported.
- Planning notes can only be enabled for stored key figures.
- Planning notes can only be enabled for a maximum of 20 keyfigures per Planning Area.
- Planning notes text length is restricted to 1000 characters.
- Planning notes cannot be entered if the planning objects for that cell is missing.
- Version Copy, Copy, and Copy & Disaggregation operators don’t copy planning notes from a source to a target version, key figure or planning area.
- Microsoft Excel native comments functionality (create, edit, delete) is not supported.
- Planning notes that are created on an aggregated level are - during saving - disaggregated to the base planning level of the respective key figure. That can result in massive amounts of data on the database.
  - Planning notes cannot be saved when the disaggregation of the planning note to the base level of the key figure would result in more than 20 million attribute / period combinations on the database. This results in an error message.
  - The maximum amount of attribute / period ID / planning note combinations on the IBP database is limited to 2 billion entries per planning area / version / keyfigure combination.
Sales & Operations Planning
Raghav Jandhyala
Process Management Enhancements

Process Feeds for Process Monitoring

- Chronological list of the events in the process
- Records most relevant events like process automations, tasks completions, orchestration of application jobs associated with process and manual interventions
- Quickly identify exceptions/errors in the process.
- Navigation to Application Logs
Process Management Enhancements

Detailed **Application Logs** for Process

- Start, closure, and deletion of processes
- Updates of processes
- Start and completion of process steps
- Creation and assignment of tasks in SAP Jam
- Completion of Tasks (from Excel or Tasks App)
- Creation of ad hoc tasks in the **Tasks** app
- Orchestration of application jobs
- Assignment and removal of permission filters
Usability Enhancements

• In the Gantt chart of the view for the details of the process, non-workdays are now highlighted
• Icons to represent process and tasks
• The status of start jobs and end jobs is shown in the header of process step details
• Navigation to Job details in the Application Jobs
• Improved Buffering for Process Charts in Dashboards
Enhancements to Forecast Consumption

- You can now assign key figures with the following as storage root attributes for input forecast and input sales orders:
  - Product-location mandatory (PRDID + LOCID)
  - Any additional root attributes optional, for example, Customer (CUSTID). For e.g, PERPRODLOCCUST

- The forecast consumption level is flexible and attributes available for Forecast Consumption level are the Intersection of the Attributes of Input Forecast and Sales Order
Example

Input Forecast: storage level roots PRDID/LOCID/CUSTID + PRDFAMILY
Sales Order: storage level roots PRDID/LOCID/CUSTID + PRDFAMILY
Open/Unconsumed Forecast: storage level roots PRDID/LOCID/CUSTID + PRDFAMILY
Total Demand: PRDID/LOCID/CUSTID + PRDFAMILY
Consumption Level: PRDFAMILY / LOCID

Consumption Mode:

- Master Data with key PRDFAMILY | LOCID + FCSTCONSMODE (Attribute)
- PRDFAMILY + FCSTCONSMODE
- LOCID + FCSTCONSMODE

The attributes available for Forecast Consumption level are the Intersection of the Attributes of Input Forecast and Sales Order.
Enhancements to Forecast Consumption

Time Boundary Levels and Boundaries

• You can now specify the **time boundary-level** (time-period granularity) in which you want the forecast to be consumed.

• You define the time boundary level in the **Forecast Consumption Profiles** app, and it can be different from the time profile level you specified in the S&OP operator profile.

• For example you can specify a time boundary level of a month in your forecast consumption profile, whereas in your S&OP operator profile you might have a time profile level of a calendar week.
Enhancements to Forecast Consumption

Time Boundary Levels and Boundaries

- The **boundary** defines on which side you want the forecast to be consumed, such as left or right. In effect, you're defining the boundary limit.

- For example, a time boundary level of monthly and a boundary of left and right means that you want forecasts to be consumed within one month.

- You specify the boundary in the **BOUNDARYID** attribute of the S4FORECASTCONSUMPTIONMODE master data type.

- Following values for boundary id’s are supported:
  0: No Boundary (Off)
  1: Left and Right Boundary
  2: Left Boundary
  3: Right Boundary
Enhancements to Forecast Consumption

New Forecast Consumption Modes

- Two new consumption modes supported specified via the \texttt{DIRECTIONID} attribute in \texttt{S4FORECASTCONSUMPTIONMODE} master data
  - 4: Forward from boundary start
  - 5: Backward from boundary end

New S&OP Forecast Consumption Application Job Template

- Enables to directly run the forecast consumption algorithm, rather than choosing this algorithm type when running the S&OP Operator application job template.
- Allows to specify a planning filter from this new application job template
## Enhancements to Forecast Consumption

### Table: FcstCons Mode

<table>
<thead>
<tr>
<th>FcstCons Mode</th>
<th>DIRECTION ID</th>
<th>Direction</th>
<th>Boundary</th>
<th>Forward Periods</th>
<th>Backward Periods</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>0</td>
<td>First Forward then Backward</td>
<td>0 - Off</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Planning Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

Time-Boundary Level = **Calendar Month** *(from the forecast consumption profile assigned to the S&OP operator profile)*

### Calendar Weeks (Storage Level)

<table>
<thead>
<tr>
<th></th>
<th>CW1</th>
<th>CW2</th>
<th>CW3</th>
<th>CW4</th>
<th>CW5</th>
<th>CW6</th>
<th>CW7</th>
<th>CW8</th>
<th>CW9</th>
<th>CW10</th>
<th>CW11</th>
<th>CW1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Weeks</td>
<td>TW1</td>
<td>TW2</td>
<td>TW3</td>
<td>TW4</td>
<td>TW5a</td>
<td>TW5b</td>
<td>TW6</td>
<td>TW7</td>
<td>TW8</td>
<td>TW9</td>
<td>TW10</td>
<td>TW11</td>
</tr>
<tr>
<td>Forecast</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Sales Orders</td>
<td></td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>Open Forecast</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Demand</td>
<td>10</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

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### Enhancements to Forecast Consumption

<table>
<thead>
<tr>
<th>FcstCons Mode</th>
<th>DIRECTION ID</th>
<th>Direction</th>
<th>Boundary</th>
<th>Forward Periods</th>
<th>Backward Periods</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>202</td>
<td>0</td>
<td>First Forward then Backward</td>
<td>1 – Left &amp; Right</td>
<td>3</td>
<td>3</td>
<td>The month start and end acts as Left and Right boundary</td>
</tr>
</tbody>
</table>

Planning Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

Time-Boundary Level = **Calendar Month** *(from the forecast consumption profile assigned to the S&OP operator profile)*

### Month 1
- **Technical Weeks (Storage Level)**
  - TW1
  - TW2
  - TW3
  - TW4
  - TW5a
  - TW5b
  - TW6
  - TW7
  - TW8
  - TW9
- **Forecast**
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
- **Sales Orders**
  - 50
- **Open Forecast**
  - 0
  - 0
  - 0
  - 0
  - 10
- **Total Demand**
  - 50

### Month 2
- **Technical Weeks (Storage Level)**
  - CW1
  - CW2
  - CW3
  - CW4
  - CW5
  - CW6
  - CW7
  - CW8
  - CW9
  - CW10
  - CW11
- **Forecast**
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
- **Sales Orders**
  - 40
- **Open Forecast**
  - 0
  - 0
  - 0
  - 0
  - 0
- **Total Demand**
  - 10
  - 40

### Month 3
- **Technical Weeks (Storage Level)**
  - CW1
  - CW2
  - CW3
  - CW4
  - CW5
  - CW6
  - CW7
  - CW8
  - CW9
  - CW10
  - CW11
- **Forecast**
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
  - 10
- **Sales Orders**
  - 20
- **Open Forecast**
  - 0
  - 0
  - 0
  - 0
  - 0
- **Total Demand**
  - 20
  - 0
Enhancements to Forecast Consumption

<table>
<thead>
<tr>
<th>FcstCons Mode</th>
<th>DIRECTION ID</th>
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<th>Forward Periods</th>
<th>Backward Periods</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>205</td>
<td>1</td>
<td>First Backward then Forward</td>
<td>2 – Left</td>
<td>3</td>
<td>3</td>
<td>Only the start of month acts as boundary</td>
</tr>
</tbody>
</table>

Planning Time-Profile Level Specified in S&OP Operator Profile = Calendar week

Time-Boundary Level = Calendar Month (from the forecast consumption profile assigned to the S&OP operator profile)

<table>
<thead>
<tr>
<th></th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Weeks (Storage Level)</td>
<td>CW1</td>
<td>CW2</td>
<td>CW3</td>
</tr>
<tr>
<td>TW1</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW2</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW3</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW4</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW5a</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW5b</td>
<td>10</td>
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</tr>
<tr>
<td>TW6</td>
<td>10</td>
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<tr>
<td>TW7</td>
<td>10</td>
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<td>TW8</td>
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<td>TW9</td>
<td>10</td>
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<tr>
<td>TW10</td>
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<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW11</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Forecast

<table>
<thead>
<tr>
<th></th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Orders</td>
<td>50</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Open Forecast</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Demand</td>
<td>50</td>
<td>40</td>
<td>10</td>
</tr>
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<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>206</td>
<td>1</td>
<td>First Backward then Forward</td>
<td>3 – Right</td>
<td>3</td>
<td>3</td>
<td>Only the end of month acts as boundary</td>
</tr>
</tbody>
</table>

**Planning Time-Profile Level Specified in S&OP Operator Profile = Calendar week**

**Time-Boundary Level = Calendar Month** *(from the forecast consumption profile assigned to the S&OP operator profile)*

<table>
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</tr>
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<td>0</td>
<td>0</td>
</tr>
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<th>Backward Periods</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>207</td>
<td>2</td>
<td>Forward</td>
<td>1- Left &amp; Right</td>
<td>3</td>
<td>-</td>
<td>Left has no effect. End of month as right boundary</td>
</tr>
</tbody>
</table>

Planning Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

Time-Boundary Level = **Calendar Month** *(from the forecast consumption profile assigned to the S&OP operator profile)*

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Planning Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

Time-Boundary Level = **Calendar Month** *(from the forecast consumption profile assigned to the S&OP operator profile)*

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**Technical Weeks (Storage Level)**

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Consumption Boundary Time-Level Specified in Forecast Consumption Profile = **Month**

Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

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### Consumption Boundary Time-Level Specified in Forecast Consumption Profile

- **Mode:** Month

### Time-Profile Level Specified in S&OP Operator Profile

- **Mode:** Calendar week

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#### Technical Weeks (Storage Level)

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## Consumption Boundary Time-Level Specified in Forecast Consumption Profile

- **Month**

## Time-Profile Level Specified in S&OP Operator Profile

- **Calendar week**

### Table: Technical Weeks (Storage Level)

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### Table: Forecast Summary

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### Consumption Boundary Time-Level Specified in Forecast Consumption Profile

**Month**

### Time-Profile Level Specified in S&OP Operator Profile

**Calendar week**

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Consumption Boundary Time-Level Specified in Forecast Consumption Profile = **Month**

Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

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<tr>
<td>TW11</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

- **Forecast**
  - Month 1: 10
  - Month 2: 10
  - Month 3: 10

- **Sales Orders**
  - Month 1: 50
  - Month 2: 40
  - Month 3: 40

- **Open Forecast**
  - Month 1: 0
  - Month 2: 0
  - Month 3: 0

- **Total Demand**
  - Month 1: 50
  - Month 2: 40
  - Month 3: 40
<table>
<thead>
<tr>
<th>FcestCons Mode</th>
<th>DIRECTION ID</th>
<th>Direction</th>
<th>Boundary</th>
<th>Forward Periods</th>
<th>Backward Periods</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>114</td>
<td>5</td>
<td>Backward from Boundary Start</td>
<td>2 – Left</td>
<td>-</td>
<td>-</td>
<td>Consume forecast from planning horizon end and stop at month start</td>
</tr>
</tbody>
</table>

Consumption Boundary Time-Level Specified in Forecast Consumption Profile = **Month**

Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

<table>
<thead>
<tr>
<th></th>
<th>Month 1</th>
<th></th>
<th>Month 2</th>
<th></th>
<th>Month 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CW1</td>
<td>CW2</td>
<td>CW3</td>
<td>CW4</td>
<td>CW5</td>
<td>CW6</td>
</tr>
<tr>
<td>Technical Weeks (Storage Level)</td>
<td>TW1</td>
<td>TW2</td>
<td>TW3</td>
<td>TW4</td>
<td>TW5a</td>
<td>TW5b</td>
</tr>
<tr>
<td>Forecast</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Sales Orders</td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Open Forecast</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Demand</td>
<td>10</td>
<td>50</td>
<td></td>
<td>40</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>FcstCons Mode</td>
<td>DIRECTION ID</td>
<td>Direction</td>
<td>Boundary</td>
<td>Forward Periods</td>
<td>Backward Periods</td>
<td>Comment</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>----------------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>115</td>
<td>5</td>
<td>Backward from Boundary Start</td>
<td>3 – Right</td>
<td>-</td>
<td>-</td>
<td>Consume forecast from end of month and stop at planning horizon start</td>
</tr>
</tbody>
</table>

Consumption Boundary Time-Level Specified in Forecast Consumption Profile = **Month**

Time-Profile Level Specified in S&OP Operator Profile = **Calendar week**

<table>
<thead>
<tr>
<th></th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technical Weeks (Storage Level)</strong></td>
<td>CW1</td>
<td>CW2</td>
<td>CW3</td>
</tr>
<tr>
<td>TW1</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>TW2</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td><strong>Forecast</strong></td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Sales Orders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open Forecast</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Demand</td>
<td></td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>
Quota Arrangements for Optimizer

- Time-series-based supply planning optimizer now supports Quota arrangements. Previously, they were only available for the heuristics.

- To use this function, you have to enable it in the optimizer profile, where you can also define violation costs that occur if the optimizer does not respect the defined quotas.

- If no violation costs are specified the optimizer uses pseudo-hard violation costs. The violation costs are for all quota arrangements.
Quota Arrangements for Optimizer

- Eight new key figures are introduced to set a minimum and a maximum for customer sourcing quotas, location sourcing quotas, or external receipt quotas, respectively.

<table>
<thead>
<tr>
<th>Source</th>
<th>Minimum Quota Key Figure</th>
<th>Maximum Quota Key Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Source</td>
<td>MINPRODUCTIONQUOTA</td>
<td>MAXPRODUCTIONQUOTA</td>
</tr>
<tr>
<td>Location Source</td>
<td>MINLOCATIONQUOTA</td>
<td>MAXLOCATIONQUOTA</td>
</tr>
<tr>
<td>Customer Source</td>
<td>MincustomerQUOTA</td>
<td>MAXCUSTOMERQUOTA</td>
</tr>
<tr>
<td>External Source</td>
<td>MINRECEIPTQUOTA</td>
<td>MAXRECEIPTQUOTA</td>
</tr>
</tbody>
</table>

- In addition, two new key figures to define the number of periods covered by the quota arrangements

<table>
<thead>
<tr>
<th>Level</th>
<th>Key Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location-Product</td>
<td>LPQUOTACOVERAGE</td>
</tr>
<tr>
<td>Customer-Product</td>
<td>CPQUOTACOVERAGE</td>
</tr>
</tbody>
</table>
Quota Arrangements for Optimizer

Example 1: All sources of Supply should consider exact quota

Example 2: Minimum quota on one source

Example 3: Minimum and Maximum quota on one source

Example 4: Multiple Quotas
Example 5: Contractual agreement that component A is supplied by 2 vendors 1 and 2 and each vendor supplies 50% of supplies on average in a quarter.

<table>
<thead>
<tr>
<th>Component X</th>
<th>Location A</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Vendor 1</td>
</tr>
<tr>
<td>50%</td>
<td>Vendor 2</td>
</tr>
</tbody>
</table>
Other Enhancements and Changes

Changed Data Type for Attributes Enabling Subnetwork-Specific Segmentation

• As of 1808, only the NVARCHAR data type is supported for the attributes to enable Subnetwork-Specific Segmentation of Planning Objects.

• If you have only used attributes of type INTEGER for subnetwork-specific segmentation so far, you must add the NVARCHAR attributes PLUNITID1 and PLUNITID2 manually after the upgrade. SAP4 sample planning area is updated with the new attributes.

Activate/Deactivate Time Aggregation Profiles

• You can now make your time aggregation profiles active and inactive.

• If you want to update an existing active profile, edit it and then save it. This creates an inactive version, when it’s ready, make it active. It then overwrites the currently active version. Essentially this allows you to edit active profiles in a safe manner.

• You can mark active profiles for deletion and then delete them. If you mark a profile for deletion and subsequently change your mind, you can restore it.
Business Network Collaboration
Rajwinder Singh
SAP Ariba to SAP Integrated Business Planning
Improved Extensibility

Supply-side collaboration

IBP Consumer Data Sharing Plan >> Mapping
• Additional key figures for SAP Ariba Supply Chain Collaboration for Buyers
  • Ariba Key Figure 01 Quantity
  • Ariba Key Figure 02 Quantity
  • Ariba Key Figure 03 Quantity
  • …
  • Ariba Key Figure 10 Quantity

Improves extensibility to current IBP-Ariba integration capabilities to enable supplier forecast collaboration and manufacturing visibility processes
Shared Data Tracking

- Shared data tracking ✓
- Change-history-based calculations ✓
- Changed On ✓

Enables
- Supplier Forecast Waterfall
- Proactive or reactive excess and obsolescence analysis
New scenario functionality for SAP Fiori app “DDMRP Buffer Analysis”

- Users empowered to:
  - Create new scenarios
  - Edit decoupling-point decisions for existing scenarios
  - Save new and existing edited scenarios
  - Run scenarios using the “calculate DDMRP buffer levels” operator in batch mode
- Selections of name and planning area plus a version of data required for creating a new scenario
- Creation of new scenarios or editing of existing scenarios accomplished by changing a toggle button to make decoupling decisions
- Support for planning-unit filtering via scenario runs
- Visibility in the SAP Fiori app of scenarios created in the Microsoft Excel user interface (UI) and vice versa
Increased functionality of the demand-driven material requirements planning (DDMRP) model via the “manage forecast error calculation” app

- Updates to the DDMRP sample model for key-figure average daily usage to consume input data for past, future, and past-and-future time horizons
- Standard configuration in the DDMRP sample model that enables average historical demand to serve as an input to average daily usage
- User ability to create key-performance indicator (KPI) profiles to calculate the output key figures "average historical demand" and "historical demand coefficient of variation" based on blended sales (DDMRP), forecasted sales (DDMRP), or actual sales key figures

- Outputs calculated from the key figure selected in the "sales history key figure" field in the planning profile
- Application that requires a selection in the "forecast key figure" field, which is used to calculate other forecast error metrics but does not impact ADU outputs
Key figure and attribute additions to manage forecast-error calculations

- **Outlier period** – display of which past horizon periods contain outliers, based on the forecast error between sales and historical forecast via the output key figure, OUTLIERPERIOD:
  - Outlier period – a period with an output of “1”
  - “Outlier multiplier” and “minimum number of periods with sales and forecasts” – calculations influenced by the inputs provided in the calculation settings related to input data settings
  - Outlier period (OUTLIERPERIOD) written only for the defined base period in cases where the user selects “trend curve” in “application jobs”

- **Sales frequency indicator** – output attribute (SALESFREQUENCY) that displays whether a historical demand is classified as:
  - Intermittent
  - Frequent
  - Insufficient data
  - Attribute only updates for baseline scenarios and not for other user scenarios
Modeling version-specific master data in SAP Fiori Supply Chain Network Application

- SAP Fiori app that can render networks based on version-specific master data in a planning area
- Users rendering different networks empowered to consume supply chain planning results for different networks
# Inventory Optimization Algorithm Enhancements

<table>
<thead>
<tr>
<th>Algorithm Enhancement</th>
<th>Driver</th>
<th>Intuitive Impact to Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Operator: Calculate Target Inventory Components</td>
<td>For a relationship: Stocking Node A -&gt; Non-Stocking Node B -&gt; Stocking Node C</td>
<td>All else held constant: • The higher Lot Size Quantity @ Stocking Node B, the higher Cycle Stock @ Stocking Node C.</td>
</tr>
<tr>
<td>Inventory Components Operator accounts for impact of lot size at upstream flow-through nodes</td>
<td>Cycle Stock @ Stocking Node C did not consider Lot Size Quantity at Stocking Node B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Note: Stocking Node A could be internal or external (vendor) node.</td>
<td></td>
</tr>
</tbody>
</table>
## Inventory Optimization Algorithm Enhancements

<table>
<thead>
<tr>
<th>Algorithm Enhancement</th>
<th>Driver</th>
<th>Intuitive Impact to Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning Operator: Global (Multi-Stage) Inventory Optimization</td>
<td>For a relationship: Stocking Node A -&gt; Non-Stocking Node B -&gt; Stocking Node C</td>
<td>All else held constant if inputs exist for Lead Time and Lead Time Variability between Stocking Node A and Non-Stocking Node B,</td>
</tr>
</tbody>
</table>
| Non-stocking nodes enhanced with lead time and lead time variability | Lead time and lead time variability between Stocking Node A and Non-Stocking Node B is pushed to Stocking Node C as an option to better support push logic. | For Parameter Value YES, :  
• The higher the lead time and/or lead time variability, the higher Recommended Safety Stock @ Stocking Node C.  
• The Recommended Safety Stock at Stocking Node C aligned with Pure Push logic (cumulative lead time considered). |
| Global Configuration Parameter Group: INVENTORY Parameter Name: NON_STOCKING_PUSH Parameter Value: YES, NO or any other value. | Note: Stocking Node A could be internal or external (vendor) node. It supports BOM in non-stocking components. | For Parameter Value NO:  
• The higher the lead time and lead time variability, the higher Recommended Safety Stock @ Stocking Node C.  
• The Recommended Safety Stock at Stocking Node C aligned with up-stream backlog safety stock (Service Variability Safety Stock). |

If setting not configured, or any other value provided, the application will default to Parameter Value YES.

If the non-stocking node is multi-sourced or multiple components in a Bill of Material, then the lead time is not pushed.
Order-based Planning
Andrew Boyle and Michael Mack
IBP1808 – Order-based planning

- **Version-specific master data**: Andrew
- Planning in multiple planning area: Andrew
- Component lead-time offset: Michael
  - Detailed information
- Pegging Strategy “Prefer stable supply”
- Deletion of order-based master data in IBP

Adjust master data from excel

In IBP1808 it is possible to edit external master data types via EXCEL when the version of the planning area is defined to have version-specific master data in order-based planning.

It is possible to change a certain list of attributes of the different master data types enabled for change. Create and delete of master data type is yet not in scope.
Set up a version with version-specific master data for order-based planning

A version in a planning area can be defined to have version-specific master data. With this what-if scenarios with alternative master data can be executed and planned.

If the planning area is used in order-based planning, such a version can be defined in the settings for order-based planning to have a planning version with

- either version-specific master data (what-if)
- or use the operative master data (no versioning for external MDTs)
Copy master data and generate planning objects

If the planning version is defined to have version-specific master data, the master data can initially be copied from a source planning version using the application job ‘Order-Based Planning: Copy Version Data’. This job is able to copy order and master data if required.

Regeneration of planning objects is required for versions with version-specific master data. This enables visibility of external key figures for the planning area version in Excel.
IBP1808 – Order-based planning

- Version-specific master data:: Andrew

- **Planning in multiple planning area:: Andrew**

- Component lead-time offset:: Michael
  - Detailed information

- Pegging Strategy “Prefer stable supply”

- Deletion of order-based master data in IBP

Find out more:
Planning in multiple planning areas

Beginning with Release 1808, customers can plan in more than one planning area for IBP order-based planning.

- Customers can now configure more than one planning area (PA) in the Settings for Order-Based Planning App, and designate one PA as the “Operative Planning Area”
- The Operative Planning Area is the only PA that can be integrated with data sources from ERP (i.e. SDI integration - in either direction); a customer can copy the data from this PA to non-operative PAs
- Customers can then test the configuration of non-operative Planning Areas using this copied data

Planning in multiple planning areas is also foundational functionality for later expanded enablement of integrated ERP data sources via SDI for IBP order-based planning. Related functionality is planned for future releases.
Integration - Time-series/Order-based planning

For integration of time-series based planning applications + order based planning SAP recommends:

Usage of two planning areas – **SAPIBP1** (Unified Planning Area for time-series based planning) + **SAP7** (template planning area for order-based planning)

- Usage of disaggregation/copy operator for integration between two planning areas (Example: copy of “Forecast” (result of demand plan) to order-based planning,...)
- Best practice content will be updated to reflect the recommendation towards SAP7.

Long-term strategy:
Make the order-based integration model extensible to consolidate to common master data integration model for IBP (time-series, order-based)
Leverage common master data for a unified planning area supporting order and time-series based planning

Mid-term step/option: Use IBP AddOn in ERP/S4HANA for both time-series based planning (through CPI-DS) and order-based planning (through SDI)
IBP1808 – Order-based planning

- Version-specific master data: *Andrew*
- Planning in multiple planning area: *Andrew*
- **Component lead-time offset**: *Michael*
  - Detailed information
- Pegging Strategy “Prefer stable supply”
- Deletion of order-based master data in IBP

When planned orders have long lead times, companies have the need to schedule component requirements different from the planned order start date. Otherwise it can result in components being procured much earlier than they are actually needed in the production process.

To avoid this situation planners want to be able to maintain component lead-time offset for the components in relation to the start date for production of the superior material.

With IBP1808 you are able to model component lead-time offset. Activities are the means to model component lead-time offset for the IBP planning runs.
Demo – Component Lead-Time Offset
Demo – Component Lead-Time Offset
Master Data: Production Data Structure (PDS)

Integrate the activities with their durations and with the component assignments into IBP using the OpenAPI inbound version 1808.0.0_FULL (and higher).

App “View Production Data Structures”:

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Version Activities (4)</td>
</tr>
<tr>
<td>Activity ID</td>
</tr>
<tr>
<td>0010000000072</td>
</tr>
<tr>
<td>0010000000072</td>
</tr>
<tr>
<td>0010000000072</td>
</tr>
<tr>
<td>0010000000072</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Version Components (4)</td>
</tr>
<tr>
<td>Material</td>
</tr>
<tr>
<td>ACHM_ECPU_A</td>
</tr>
<tr>
<td>ACHM_BOARD_A</td>
</tr>
<tr>
<td>ACHM_CASE_A</td>
</tr>
<tr>
<td>ACHM_MEMORY</td>
</tr>
</tbody>
</table>

With (multiple) activities, the production lead time is summed up from the activity durations that are linked to a PDS.

With IBP1808 you are able to define different PDS with different lead times for the same location material.
IBP1808 – Order-based planning

- Version-specific master data:: Andrew
- Planning in multiple planning area:: Andrew
- Component lead-time offset:: Michael
  ➢ Detailed information
- Pegging Strategy “Prefer stable supply”
- Deletion of order-based master data in IBP

Further Enhancements in Foundation
Anna Linden
IBP Backend Configuration
Aggregation and Disaggregation - CUSTOM Mode

Important change with **IBP 1802**

Before 1802, many key figures in the sample planning areas used aggregation mode CUSTOM due to conversions. However, as of 1802, it is no longer necessary to use aggregation mode CUSTOM just because of using a conversion in a key figure for unit of measure or currency conversions.

Replacing the aggregation mode CUSTOM can result in a significant performance improvement in disaggregation.

Therefore, we recommend that you only use this aggregation mode in the following special circumstances:

- When a key figure has a complex calculation at request level, for example, Unit Price, which has inputs at request level.
- When the planning level used in the request level calculation is different from both the base planning level of the key figure and from the planning level that is used in unit of measure or currency conversions.
System Monitoring - New Statistics

• You use the **Session Statistics** for IBP Excel Add-In card in the System Monitoring app to view information about the number of IBP Excel sessions and the version of the IBP Excel add-in in use.

• This card allows you to use visual filters to help you analyze the usage of the IBP Excel add-in and take necessary action when required.

• You use the **Planning Objects Statistics** card in the System Monitoring app to help you track the growth of the planning object data in the IBP system.
Model Configuration

The **Planning Areas app** has been enhanced:

- Delete a planning area
- Restore the active instance of a planning area
- Add attributes to the planning area
- Change the settings of the attribute assignment
- Remove attributes from the planning area

**New Planning Area Activation Checks:**
The system now also checks two additional cases of invalid calculation definitions of key figures. Previously, these cases resulted in SQL errors or runtime errors later in the activation process.

Note: You do not need to reactivate your planning area because of these newly introduced checks
The Transport Model Entities app has been enhanced.

- Time aggregation profiles
- Forecast consumption profiles
- Lag-based snapshots
Application Jobs & Application Job Template Enhancements

- The **Purge Key Figure Data** application job template has been enhanced to allow the deletion of key figure data for which no key figure values exist. Using this parameter, administrators can optimize the database storage.

- A new application job template for the **copy operator** is available that allows administrators to run this operator for certain **time periods**.

- There are plans to **discontinue the group operator as of 1902**. As a replacement, you can use a job chain to run the operators that were formerly included in a group operator. We recommend that you start converting the group operators you’re using into jobs chains before the upgrade to 1902.
Documentation Updates
Anna Linden
What’s New
Application Help
SAP Best Practices
Model Configuration Guide
Migration Guide
Data Integration Scenarios
SAP Cloud Platform Integration
JAM Integration Guide
Security Information
Roadmap
Support Portal
SAP Community
Customer Influence
…
Application Help – Translated to German

Roadmap

https://help.sap.com/ibp → Roadmap

SAP Integrated Business Planning Road Map

Strategic Roadmap Webinar Recording (June 27, 2018): http://sapnaevent.adobeconnect.com/pziy47uccq8v/
SAP Best Practices for SAP IBP – 1808 Update

Ina Glaes
New scope and changes in V12.1808

- Technical upgrade to SAP Integrated Business Planning 1808
- New IBP for demand – time-series analysis scope item detects and records patterns in time series which help the customer to select the optimal forecasting algorithms
- New IBP for response and supply – deployment planning scope item creates a reliable short-term distribution plan considering also unforeseeable events in the supply chain to satisfy the demands with the existing supply elements
- Adjusted key figures for demand sensing – simplification of demand sensing forecast profile
- Planning view for supply plan optimizer with new key figures
- Sample data adjustments representing different types of demand
IBP for demand – time-series analysis
Process flow
**IBP for demand – time-series analysis**

**Description**

Detect and record patterns in time series which help the customer to select the optimal forecasting algorithms, for example using white noise test, seasonality test, trend test, or intermittency test. These patterns can be saved as an attribute and can be made available to demand planners. Other results, seasonal indices, or average demand interval can also be stored in key figures. You can further analyze the results together with those from ABC segmentation and demand forecast accuracy to understand the structure of the underlying data.

### Scope

**Use Case**
- Analyze time series and record time series properties

**Benefits**
- Provide domain and business knowledge to forecast automation
- Insight into behavior and characteristics of time series

**Frequency**
- 3-Monthly

**Participants**
- Demand planning process expert

### Technical details

**Input**
- Time Series
- ABC Segmentation
- Demand Forecast Accuracy

**Output**
- Time Series Properties

**Planning Level**
- Customer / Location / Product / Week

**Planning Operator**
- Forecast Automation

### User interaction

**Planning Views**
- No predefined Excel template

**Alerts**
- No predefined alert

**Analytics**
- 1 predefined ‘Time-series analysis’ dashboard with 3 charts

**Collaboration**
- No predefined process management, no SAP Jam integration
IBP for response and supply – deployment planning

Process flow

Response Planning
Supply Plan

Sales Order Processing
Supply Plan

Check Alerts for Projected Stock
Negative Projected Stock

Run and Check Deployment Run
Distribution Plan

Analyze and Adjust Results of Deployment Run
Adjusted Transport Receipts

Execution on Orders
Stock Transfer Requisitions

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145
**IBP for response and supply – deployment planning**

**Description**

Deployment planning allows to create a reliable short-term distribution plan considering also unforeseeable events in supply chain. Alerts, e.g. for each location product when the value of the projected stock is negative, draw attention to a potential issue. The deployment run takes all customer demands (sales orders), all confirmed component demands, all forecasted customer demands as well as safety stock into account. The run then tries to satisfy the demands with the existing supply elements. The stock transfer requisitions that are pegged to supply elements that are considered available to deploy become deployment stock transfer requisitions. This represents the short-term deployment plan.

**Scope**

- **Use Case**
  - Plan the distribution of available supply to demand
  - Respond to unforeseeable events in supply chain

- **Benefits**
  - Allow flexibility to respond in the short term considering unforeseeable events in supply chain
  - Provide detailed, End-to-End visibility
  - Maximize service level using available supply from central to downstream locations

- **Frequency**
  - Daily

- **Participants**
  - Distribution planner

**Technical details**

- **Input**
  - Sales Orders
  - Forecast
  - Safety stock targets

- **Output**
  - Deployment Stock Transfer Requisitions
  - Stock Transfer Requisitions
  - Sales Order Confirmations

- **Planning Level**
  - Day / Product / Location / Customer

- **Planning Operator**
  - Order-based planning: Deployment Run

**User interaction**

- **Planning Views**
  - Deployment Planning, 1 worksheet

- **Alerts**
  - Negative projected Stock

- **Analytics**
  - No predefined Analytics

- **Collaboration**
  - No predefined process management, no SAP Jam integration
Download the following assets:

- Test scripts
- Process flow diagrams
- Scope item recordings
- Configuration guides
- Excel planning view templates
- Sample data CSV files
Upcoming Webinars on SAP IBP Best Practices

Session #1 - SAP Integrated Business Planning Overview
• SAP Best Practice for SAP Integrated Business Planning
• SAP Integrated Business Planning integration to SAP S/4HANA
• How to sell and authorization

Session #2 - SAP Best Practices for SAP Integrated Business Planning - Introduction
• Best Practices Content
  1. Unified planning process flow
  2. Scope items
  3. Assets
• How to use SAP Best Practices

Session #3 - SAP Best Practices for SAP Integrated Business Planning - Deep Dive
• How to use best practices in projects
• Demo of selected processes
• Outlook for best practices for SAP Integrated Business Planning 1811

Registrations and Recordings in PartnerEdge

7th Aug 2018

28th Aug 2018

4th Sep 2018
Support Incident Component Update
John Lopus
*NEW* Components Available for SAP Cloud Operations Requests

- **SCM-IBP-OPS-INC** – IBP Incidents
  - Report downtime
  - Transport issues
  - Performance issues

- **SCM-IBP-OPS-SRV** – IBP Service Requests
  - Upgrades/Hot Fix
  - System refresh
  - Ad hoc backups
Customer Influence Program Update
John Lopus
Customer Influence – Our Tool for Product Enhancement Ideas
Powered by SAP Innovation Management

Global co-operation of customers in the projects via the collaboration site

**Customer Influence:**

- **Search** and **Vote** for improvement requests
- **Submit** your own improvement request
- Comment on improvement requests
- Follow improvement requests (get notified)
- Choose your areas of interest to get notification on any projects that might interest you in the future.
- Collaboration language is English

How it works for customers

Integrated Business Planning continuous influence session is now ALWAYS open for your improvement request submission!

→ Logon to https://influence.sap.com/IBP

Follow the continuous session you want to Influence
Submit your improvement request
Vote on other good ideas

Votes(s)

Once idea reaches voting threshold, it is ready for review*
Product development reviews ideas
Product team informs about results of review
Suitable improvement requests are built into an upcoming release

Specific for IBP:

minimum of 5 company votes is decided
review cycle will be twice per year

▪ Next review in April 2018

*minimum # of votes can be different in Continuous Sessions (Product Owner’s decision)
2018 Spring Review Summary

- **215** Improvement ideas submitted prior to review

- **52** of your new ideas were included
  - 4 are already offered
  - 3 were accepted for development or already in progress
  - 1 was merged as duplicate
  - 13 are Planned for Portfolio
  - 8 have moved into Review for Portfolio
  - 7 are not planned
  - 16 will be included again in the next Review

- Next Review cycle will begin in October

- System is continuously open for your ideas and to vote to support ideas from other customers
Information on Upgrades
John Lopus
Primary Upgrade Window: Default Upgrade timeframe during which systems will be scheduled for upgrade.

Reschedule requests can be communicated to engage-ibp@sap.com or via customer support incident.

Next Release: SAP IBP 1811
- Applied to Customer Systems November 9 to November 30, 2018
- Planned Release to Hosting November 6, 2018
Upgrade Communications
Where to find information?

Help.sap.com/ibp

Release Notes

SCN Link to IBP Upgrade Communication Process PPT: IBP Upgrade Planning

For patch releases of the software, SAP produces Release notes and Upgrade Notification email to communicate the updates and impact.
Thank you.

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