

Implementing Perfect Order Fulfillment (POF) Scenario in SCPM



Applies to:

SAP BusinessObjects Perfect Order Fulfillment Scenario of SCPM 1.0 and 2.0. For more information, visit the [Enterprise Performance Management homepage](#).

Summary

This article focuses on successful implementation of Perfect Order Fulfillment (POF). It gives detailed information about activating the BI content related to POF and also about loading the data in the model.

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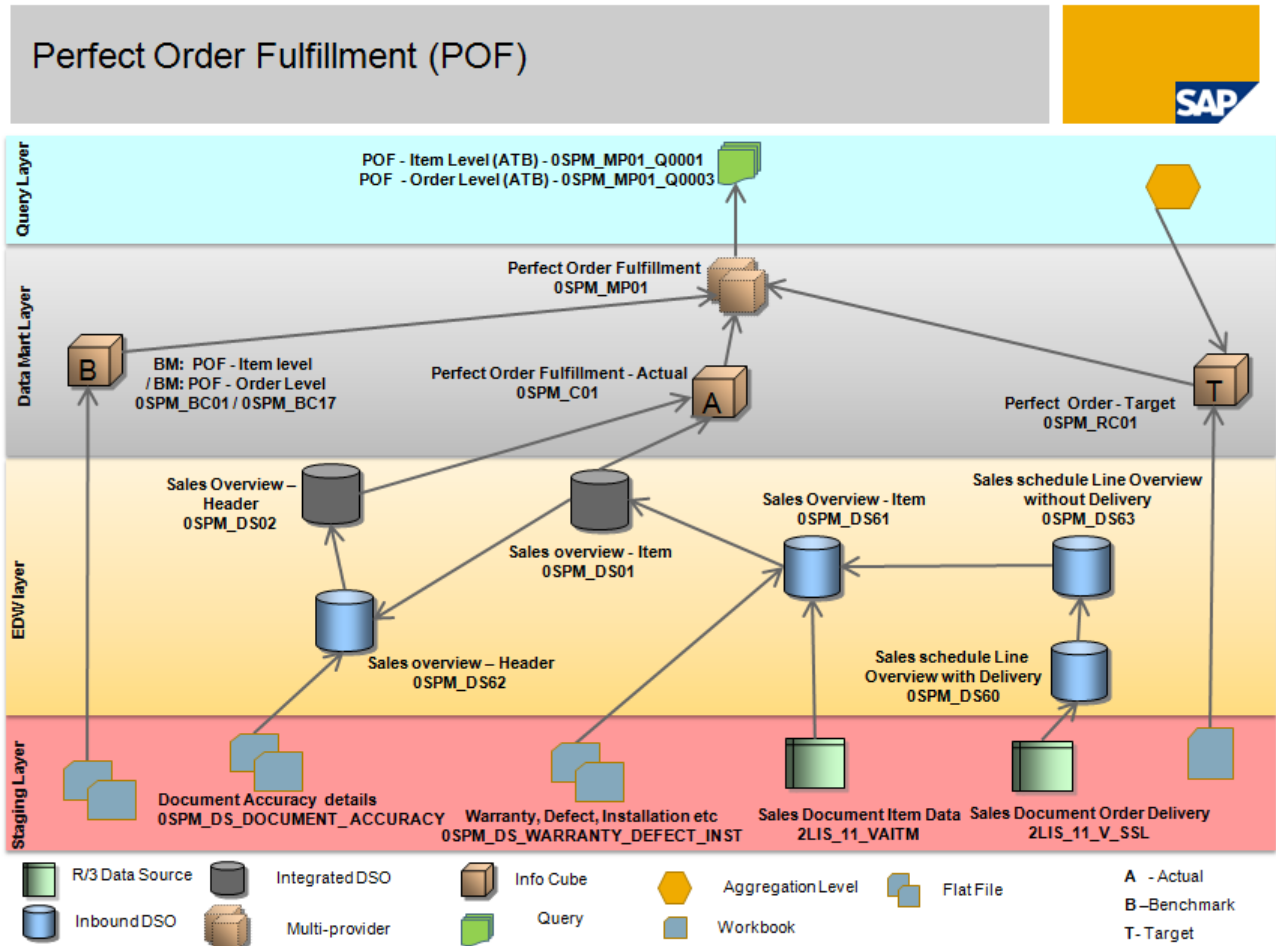
Scenario Overview

Perfect Order Fulfillment measures the percentage of orders delivered to the customer in full and on time. It also keeps in account the quality of the orders delivered and the documentation related to various orders delivered.

It helps in keeping the check on delivery performance of the company.

POF implementation provided takes data from the R/3 data sources provided by SAP.

Data Model Diagram



Implementation

POF implementation provided by SAP can take data from the R/3 data sources. R/3 data sources used in SCPM are the standard data sources provided by SAP.

Given below is the step by step mechanism for the implementation of POF.

- **Activate the data sources** → Before starting the implementation process, please make sure that the data sources mentioned below are replicated and activated in the system. These are the standard data sources provided by SAP. In case any other data source is being used by the customer to fetch the data then the required mapping has to be done by the customer.
 - Sales Document Item Data (2LIS_11_VAITEM)
 - Sales Document Order Delivery (2LIS_11_V_SSL)
- **Activate the data model** → *More detailed information about activating the SCPM BI content can be obtained from the SCPM note [1540655](#).*

Before starting the activation of the POF data model, please make sure that the appropriate R/3 source system is selected. Follow the steps mentioned below for the same.

- Go to transaction RSORBCT.
- Click the 'Source System' icon. List of all the source systems connected are displayed. (A RFC connection needs to be created to connect the source system to the BI system). Select the appropriate source system.

Since unit conversion is used in POF, hence we need to activate the following data objects first

- DSO → Reporting UOM (0SPM_DS32)
- Process Chain → DM: Reporting UOM (0SPM_REP_UOM)

Given below are the two steps through which the POF data model can be activated:

Step 1 → Go to transaction SE38 and execute the program RSO_BC_INSTALL_ALL with the following inputs:

- In the 'Installing the object types' menu, select 'All InfoProviders'.
- In the package restriction, provide the SCPM package name, that is RSC_BCT_SCPM_BI.
- Select the 'With Data Flow in Front' checkbox.
- Choose the 'Expert Mode' button. In the 'Further Settings' part, select 'Activate New Objects Only' if SCPM is installed for the first time. If further versions are being installed, select 'Activate Changed Objects'. You can reactivate all objects, but this only leads to too much of time consumption.
- In the name restriction, enter the name of the MultiProvider - 0SPM_MP01. This will fetch all the dependent objects.
- Using the OBJFUNC option, you can select the option to activate all the objects in the delivered version or compare them with the current active version and then install them.
- Once done with the settings in the expert mode, choose 'Execute' to return to the main window.
- Choose 'Execute' again to start the installation.

Step 2 → In case you face any difficulty in activating the data objects through Step 1, same can be activated manually through the transaction RSORBCT.

- Go to transaction RSORBCT.
- Select the object type from the left hand menu
- Select the required object and select 'before and after grouping' and click 'Install'.

POF Data Objects

Given below are the data objects to be installed for implementing Perfect Order Fulfillment.

Object Type	Name	Technical Name
Multiprovider	POF – MultiProvider	0SPM_MP01
Info Cubes	Perfect Order Fulfillment – Actuals	0SPM_C01
	Perfect Order Fulfillment – Targets	0SPM_RC01
	BM: POF - Item level	0SPM_BC01
	BM: POF - Order Level	0SPM_BC17
Aggregation Levels	Aggregation Level 1 For POF- Order Level	0SPM_A59
	Aggregation Level 2 For POF - Order Level	0SPM_A60
	Aggregation Level 4 For POF - Order Level	0SPM_A63
	Aggregation level 3 For POF - Order level	0SPM_A61
	Aggregation Level 2 For POF - Item Level	0SPM_A26
	Aggregation Level 3 For POF - Item level	0SPM_A27
	Aggregation Level 4 For POF - Item Level	0SPM_A62
	Aggregation level 1 for POF - Item Level	0SPM_A25
Queries	POF - Item Level (ATB)	0SPM_MP01_Q0001
	POF Item Level (Actual)	0SPM_DS01_Q001
	POF - Order Level (ATB)	0SPM_MP01_Q0003
	POF Order Level (Actual)	0SPM_DS02_Q0001
	Target Query 1 for POF - Order Level	0SPM_A59_Q0002
	Target Query 2 For POF - Order Level	0SPM_A60_Q0001
	Target Query 3 For POF - Item Level	0SPM_A27_Q0001
	POF Planning Query 4 - Order Level	0SPM_A63_Q0001
	Target Query 2 For POF - Item Level	0SPM_A26_Q0001
	Target Query 1 for POF - Item level	0SPM_A25_Q0001
	Target Query 3 for POF - Order level	0SPM_A61_Q0001
	POF Planning Query 4 - Item level	0SPM_A62_Q0001
Workbooks	POF Item Level (Calendar Month, Company Code)	
	POF Item Level (Calendar Month, Division)	
	POF Item Level (Calendar Month, Plant)	
	POF Item Level (Calendar Month, Plant, Division)	
	POF Order Level (Calendar Month, Company Code)	
	POF Order Level (Calendar Month, Division)	

	POF Order Level (Calendar Month, Plant)	
	POF Order Level (Calendar Month, Plant, Division)	
Process Chains	Extractor - Perfect Order Fulfillment	0SPM_POF_EXTRACT_CHAIN
	DM: BM for Perfect Order Fulfillment – Item Level	0SPM_POF_LOAD_FULL_DM02

R/3 Data Sources Used

- 2LIS_11_VAITEM
- 2LIS_11_V_SSL

Customization using BADIs

- Enhancement Spot --> 0SPM_BADI_CUSTOM_EXTRACTION
Method --> CAL_POF_DTP
This BADI must be enhanced if specific record type that must be ignored (SCPM assumes standard types).
- Enhancement Spot → 0SPM_GEN_BADI_ENH_SPT
Method → CAL_POF_L3_IND
This BADI is used to provide the custom calculations used in determining POF. Customer needs to provide implementation for these calculations.

Details on the BADI can be found here on the [help portal](#).

Data Load

- Fill the setup tables in the source system through the transaction RSA3.
- Execute the process chain → Extractor - Perfect Order Fulfillment (0SPM_POF_EXTRACT_CHAIN)

Note: In the first run of the process chain the Info Packages are initialized. For subsequent runs update mode needs to be changed to delta manually.

KPIs mapped through R/3

For detailed information about the KPI mapped and the formula used in the calculation of the KPI please refer to the [KPI mapping document](#) available in SMP.

KPI Name	KPI Description	External Data Required	Formula /Comments
POF LT C	Perfect Order Fulfillment Line Item Binary wrt Confirmed	Perfect condition-3.csv -- > Perfect condition accuracy indicators	<p>Perfect order fulfillment = SUM(Perfect order fulfillment indicator) / Total no of line items * 100</p> <p>Perfect order fulfillment indicator (Binary): For every line item check IF Orders delivered in full indicator = 1 AND Orders delivered on time indicator = 1 AND Perfect condition indicator = 1 THEN Perfect order Fulfillment indicator = 1 Else 0.</p> <p>Alternative formulae Perfect Order Fulfillment = (Orders delivered in full + Orders delivered on Time+ Perfect Condition)/3</p> <p>-----</p> <p>Perfect Condition mapping are not available.</p>
POF Ord C	Perfect Order Fulfillment Order Binary wrt Confirmed	Perfect condition-3.csv -- > Perfect condition accuracy indicators Doc condition-4.csv --> Document Accuracy Indicators	<p>Perfect order fulfillment = SUM(Perfect order fulfillment indicator)/ Total no of Order * 100</p> <p>Perfect order fulfillment indicator (Binary): For every Order check IF Orders delivered in full indicator = 1 AND Orders delivered on time indicator = 1 AND Perfect condition indicator = 1 AND Documentation Accuracy Indicator = 1 THEN Perfect order Fulfillment indicator = 1 Else 0.</p> <p>Alternative formulae Perfect Order Fulfillment = (Orders delivered in full + Orders delivered on Time + Perfect Condition + Documentation Accuracy) / 4</p> <p>-----</p> <p>Perfect Condition and Document Accuracy Indicators Mappings are not available.</p>
POF LT R	Perfect Order Fulfillment Line Item Binary wrt Request	Perfect condition-3.csv -- > Perfect condition accuracy indicators	<p>Perfect order fulfillment = SUM(Perfect order fulfillment indicator)/ Total no of line items * 100</p> <p>Perfect order fulfillment indicator (Binary): For every line item check IF Orders delivered in full indicator = 1 AND Orders delivered on time indicator = 1 AND Perfect condition indicator = 1 THEN Perfect order Fulfillment indicator = 1 Else 0.</p> <p>Alternative formulae Perfect Order Fulfillment = (Orders delivered in full + Orders delivered on Time + Perfect Condition) / 3</p> <p>-----</p> <p>Perfect Condition mapping are not available.</p>
POF	Perfect Order Fulfillment Order	Perfect condition-3.csv --	<p>Perfect order fulfillment = SUM(Perfect order fulfillment indicator)/</p>

Ord R	Binary wrt Request	<p>> Perfect condition accuracy indicators</p> <p>Doc condition-4.csv --> Document Accuracy Indicators</p>	<p>Total no of Order * 100</p> <p>Perfect order fulfillment indicator (Binary): For every Order check IF Orders delivered in full indicator = 1 AND Orders delivered on time indicator = 1 AND Perfect condition indicator = 1 AND Documentation Accuracy Indicator = 1 THEN Perfect order Fulfillment indicator = 1 Else 0.</p> <p>Alternative formulae Perfect Order Fulfillment = (Orders delivered in full + Orders delivered on Time + Perfect Condition + Documentation Accuracy) / 4</p> <hr/> <p>Perfect Condition and Document Accuracy Indicators Mappings are not available.</p>
Ord Del in Full LT C	Orders Delivered in Full Line Item Binary wrt Confirmed		<p>Orders delivered in full = SUM (Orders delivered in full indicators)/ Total no of Order line items * 100.</p> <p>Order delivered in full indicators (Binary) = For every line item check IF Delivery item accuracy AND Delivery qty Accuracy = 1 THEN Orders delivered in full indicator = 1 ELSE 0.</p> <p>Alternative formulae Orders delivered in full = Deliver Item accuracy + Delivery qty accuracy/2</p>
Ord Del on Tm LT C	Orders Delivered on Time Line Item Binary wrt Confirmed		<p>Orders delivered on time = SUM (Orders delivered on time indicator)/Total no of order line items * 100.</p> <p>Orders Delivered on Time Indicator (Binary): For every Line item check IF (Delivery date accuracy indicator = 1 AND Delivery location accuracy indicator = 1 THEN Orders delivered on time indicator = 1 ELSE 0.</p> <p>Alternative Formulae for Orders delivered on Time= (Delivery date accuracy + Delivery location accuracy)/2</p> <hr/> <p>Delivery Location Accuracy indicators are not available and hence delivery location accuracy will be 100% for all schedule lines</p>
Ord Del in FullOrd C	Orders Delivered in Full Order Binary wrt Confirmed		<p>Orders delivered in full (Binary) = SUM (Orders delivered in full indicators)/ Total no of Order * 100.</p> <p>Order delivered in full indicators (Binary) = For every order check IF Delivery item accuracy AND Delivery qty Accuracy = 1 THEN Orders delivered in full indicator = 1 ELSE 0.</p> <p>Alternative formulae Orders delivered in full = (Deliver Item accuracy + Delivery qty accuracy) / 2</p>
Ord Del on Tm	Orders Delivered on Time Order Binary wrt		<p>Orders delivered on time = SUM (Orders delivered on time indicator) / Total no of Order * 100.</p> <p>Orders Delivered on Time Indicator (Binary): For every Order</p>

Ord C C	Confirmed		<p>check IF (Delivery date accuracy indicator = 1 AND Delivery location accuracy indicator THEN Orders delivered on time indicator = 1 ELSE 0.</p> <p>Alternative Formulae for Orders delivered on Time = (Delivery date accuracy + Delivery location accuracy) / 2</p> <p>-----</p> <p>Delivery Location Accuracy indicators are not available and hence delivery location accuracy will be 100% for all schedule lines</p>
Ord Del in Full LT R	Orders Delivered in Full Line Item Binary wrt Request		<p>Orders delivered in full = SUM (Orders delivered in full indicators)/ Total no of Order line items * 100.</p> <p>Order delivered in full indicators (Binary) = For every line item check IF Delivery item accuracy = 1 AND Delivery qty Accuracy = 1 THEN Orders delivered in full indicator = 1 ELSE 0.</p> <p>Alternative formulae Orders delivered in full = Deliver Item accuracy + Delivery qty accuracy/2</p>
Ord Del on Tm LT R	Orders Delivered on time Line Item wrt Request		<p>Orders delivered on time = SUM (Orders delivered on time indicator)/Total no of order line items * 100.</p> <p>Orders Delivered on Time Indicator (Binary): For every Line item check IF (Delivery date accuracy indicator = 1 AND Delivery location accuracy indicator = 1) THEN Orders delivered on time indicator = 1 ELSE 0.</p> <p>Alternative Formulae for Orders delivered on Time= (Delivery date accuracy+ Delivery location accuracy) / 2</p> <p>-----</p> <p>Delivery Location Accuracy indicators are not available and hence delivery location accuracy will be 100% for all schedule lines</p>
Ord Del in Full Ord R	Orders Delivered in Full Order Binary wrt Request		<p>Orders delivered in full (Binary) = SUM (Orders delivered in full indicators) / Total no of Order * 100.</p> <p>Order delivered in full indicators (Binary) = For every order check IF Delivery item accuracy AND Delivery qty Accuracy = 1 THEN Orders delivered in full indicator = 1 ELSE 0.</p> <p>Alternative formulae Orders delivered in full = (Deliver Item accuracy + Delivery qty accuracy) / 2</p>
Ord Del on TmOrd R	Orders Delivered on Time Order Binary wrt Request		<p>Orders delivered on time = SUM (Orders delivered on time indicator) / Total no of Order * 100.</p> <p>Orders Delivered on Time Indicator (Binary): For every Order check IF (Delivery date accuracy indicator = 1 AND Delivery location accuracy indicator THEN Orders delivered on time indicator = 1 ELSE 0.</p> <p>Alternative Formulae for Orders delivered on Time = (Delivery</p>

			<p>date accuracy + Delivery location accuracy) / 2</p> <p>-----</p> <p>Delivery Location Accuracy indicators are not available and hence delivery location accuracy will be 100% for all schedule lines</p>
Del Item Accry LT C	Delivery Item Accuracy Line Item wrt Confirmed		<p>Delivery item accuracy = SUM (delivery item accuracy indicators)/ total no of order line items * 100.</p> <p>Delivery item accuracy indicators (Binary): For every line item check whether cumulative confirmed quantity > 0 and delivery quantity > 0 THEN Delivery item accuracy indicator = 1 ELSE 0.</p>
Del Qty Accry LT C	Delivery Quantity Accuracy Line Item wrt Confirmed		<p>Delivery Quantity Accuracy = SUM(Delivery Quantity accuracy indicator) / Total no of order line items * 100.</p> <p>Delivery Quantity accuracy indicators (Binary): For every line item check whether the delivery quantity lies within the tolerance limits. IF delivery qty <= cumulative confirmed qty * (1 + Tolerance Limit for Over del AND (delivery qty >= (cumulative confirmed qty * 1 - Tolerance Limit for Under Del. THEN Del Qty accuracy indicator= 1 ELSE 0.</p>
Del Dt Accry LT C	Delivery Date Accuracy Line Item wrt Confirmed		<p>Delivery Date Accuracy: SUM (Delivery date accuracy indicators)/ Total no of Order Line items * 100.</p> <p>Delivery Date accuracy indicator: For every schedule line check IF act goods issue date! = Null Then IF act goods issue date <= Planned goods issue date THEN Delivery date Accuracy indicator = 1 Else 0.</p> <p>Delivery date Accuracy indicator (Rollup to line item) = For the line item if delivery date accuracy indicator = 1 for all schedule line then = 1 else 0</p>
Del Loc Accry LT	Delivery Location Accuracy Line Item		<p>Delivery Location accuracy = SUM (Delivery location accuracy indicator)/ Total no of order line items * 100.</p> <p>Delivery Location accuracy indicator: For every Line item IF Actual delivery location = Customer requested location Then Delivery Location accuracy indicator= 1 Else 0.</p>
Del Item Accry Ord C	Delivery Item Accuracy Order wrt Confirmed		<p>Delivery item accuracy (Binary) = SUM (delivery item accuracy indicators)/ Total no of Order * 100.</p> <p>Delivery item accuracy indicators (Binary): For every Order check whether all the line items have Delivery item accuracy indicators = 1 then Delivery item accuracy indicator = 1 ELSE 0.</p>
Del Qty Accry Ord C	Delivery Quantity Accuracy Order wrt Confirmed		<p>Delivery Quantity Accuracy (Binary) = SUM (Delivery Quantity accuracy indicator) / Total no of Order * 100.</p> <p>Delivery Quantity accuracy indicators (Binary): For every Order check whether all the line items have Delivery quantity accuracy indicators = 1 then Delivery quantity accuracy indicator = 1 ELSE</p>

			0.
Del Dt Accry Ord C	Delivery Date Accuracy Order wrt Confirmed		<p>Delivery Date Accuracy: $SUM(\text{Delivery date accuracy indicators}) / \text{Total no of Order} * 100.$</p> <p>Delivery Date accuracy indicator: (For every order check whether all the line items have Delivery date accuracy indicators = 1 then Delivery date accuracy indicator = 1 ELSE 0.</p>
Del Item Accry LT R	Delivery Item Accuracy Line Item wrt Request		<p>Delivery item accuracy = $SUM(\text{delivery item accuracy indicators}) / \text{total no of order line items} * 100.$</p> <p>Delivery item accuracy indicators (Binary): For every line item check whether Ordered quantity > 0 and delivery quantity > 0 THEN Delivery item accuracy indicator = 1 ELSE 0.</p>
Del Qty Accry LT R	Delivery quantity Accuracy(Request date)		<p>Delivery Quantity Accuracy = $SUM(\text{Delivery Quantity accuracy indicator}) / \text{Total no of order line items} * 100.$</p> <p>Delivery Quantity accuracy indicators (Binary): For every line item check whether the delivery quantity lies within the tolerance limits. IF delivery qty <= Ordered qty * (1 + (Tol. Limit for Over del) AND (delivery qty >= (Ordered qty * (1 - (Tol. Limit for Under Del.) THEN Del Qty accuracy indicator = 1 ELSE 0.</p>
Del Dt Accry LT R	Delivery Date Accuracy Line Item wrt Request		<p>Delivery Date Accuracy: $SUM(\text{Delivery date accuracy indicators}) / \text{Total no of Order Line items} * 100.$</p> <p>Delivery Date accuracy indicator: (For every schedule line check IF act goods issue date! = Null Then for the Line item check IF MAX (act goods issue date of schedule line) <= Planned goods issue date THEN Delivery date Accuracy indicator = 1 Else 0.</p>
Del Item Accry Ord R	Delivery Item Accuracy Order wrt Request		<p>Delivery item accuracy = $SUM(\text{delivery item accuracy indicators}) / \text{total no of order} * 100.$</p> <p>Delivery item accuracy indicators (Binary) = 1 For an order check if all the line item have delivery Item Accuracy indicator = 1 else 0</p>
Del Qty Accry Ord R	Delivery Quantity Accuracy Order wrt Request		<p>Delivery Quantity Accuracy = $SUM(\text{Delivery Quantity accuracy indicator}) / \text{Total no of order line items} * 100.$</p> <p>Delivery Quantity accuracy indicators (Binary) = 1 For an Order check if all the line items have delivery quantity accuracy indicator = 1 ELSE 0.</p>
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Related Content

[Documentation on SCPM](#)

[All SCPM related resources on SDN](#)

[SCPM on BPx Site](#)

Data format of the external data (Flat File Structure) is available on help.sap.com > Administration > Data Collection > List of Transaction Data (Scenario based)

For more information, visit the [Enterprise Performance Management homepage](#).

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