

# What Are Embedded Analytics for Finance and How Does It Fit into SAP S/4HANA?

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SAPinsider  
Las Vegas

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**SAP**insider

## **In This Session**

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**Understand the concept of embedded analytics and its relevance for the finance function**

**Learn how embedded analytics fits into the SAP S/4HANA analytics landscape.**

**Learn some of the use cases for embedded analytics**

**Learn best practices**

# **What We'll Cover**

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**What is embedded analytics**

**Use cases for business users and analytics specialist**

**Best Practices for Getting Started with Embedded Analytics**

**Wrap-up**

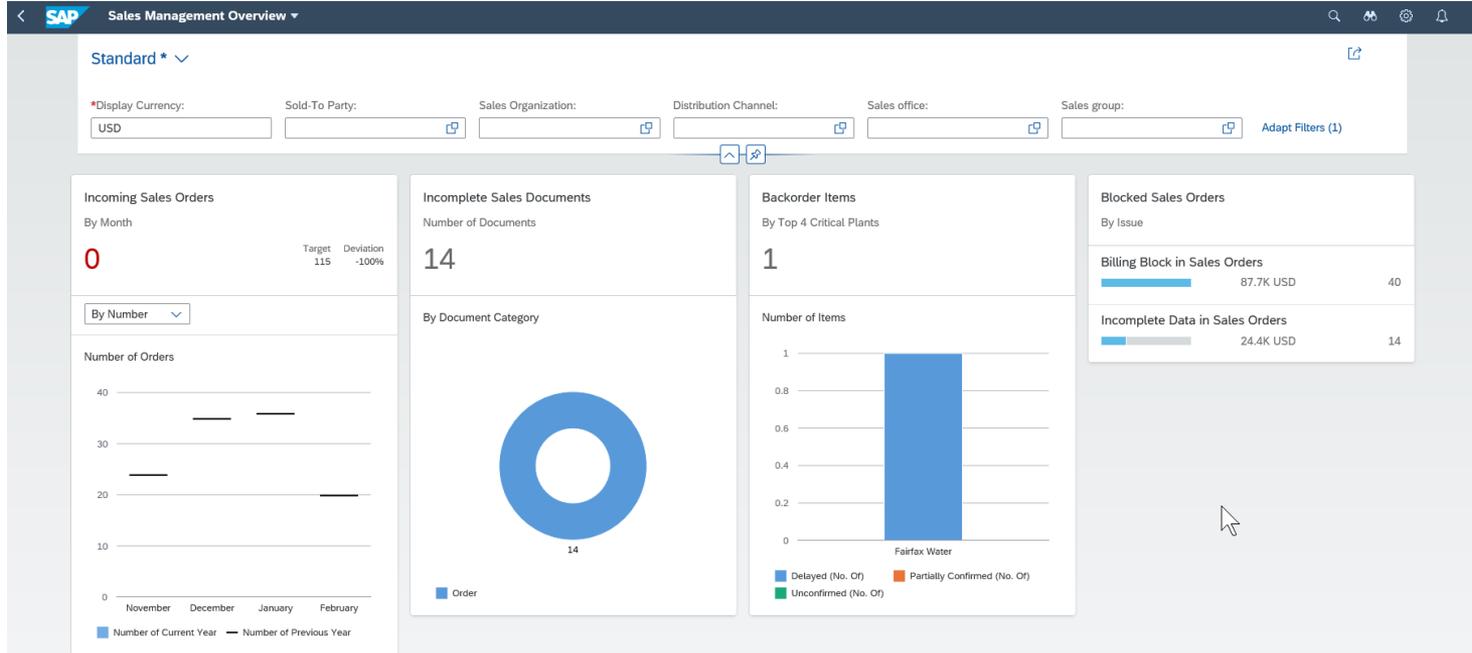


## What Is Embedded Analytics?

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# What Is SAP S/4HANA Embedded Analytics?

Analytics embedded in SAP ERP (embedding analytical views inside Fiori Applications using ABAP CDS View models)



# Embedded Analytics in S/4HANA

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On the same technical stack, using the same user interface

It is included in the business process

Less redundant data

Less tables



# **Core Data Services: Strategic Modeling Approach**

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**No latency**

**No data duplication or replication**

**Ready to use content**

**Full ABAP lifecycle integration**

**Supports SAP ERP authorizations and hierarchies**

**Supporting more business cases**

# Potential User Experience Selection

Use Case	Recommended Frontend	Alternatives	Characteristics
Interactive Drilldown	Analytical Grid	Analysis Office, SAP Analytics Cloud, BEx	Flexible analysis on any level
Plan Entry Data	Analytical Grid	Analysis Office, SAP Analytics Cloud for Planning	Integrated plan and actuals
KPI Reporting	Smart Business	SAP Analytics Designer	High level of visualization of KPI's with basic
Explorative Ad Hoc Reporting	SAP Analytics Cloud	Analysis Path Framework	Easy to build and share graphical visualization of individual reports
Formatted Reporting	Crystal Reports	Web Intelligence	Reports with high requirements on exact formatting

# Scenario Diagram

## End2End Scenario Diagram

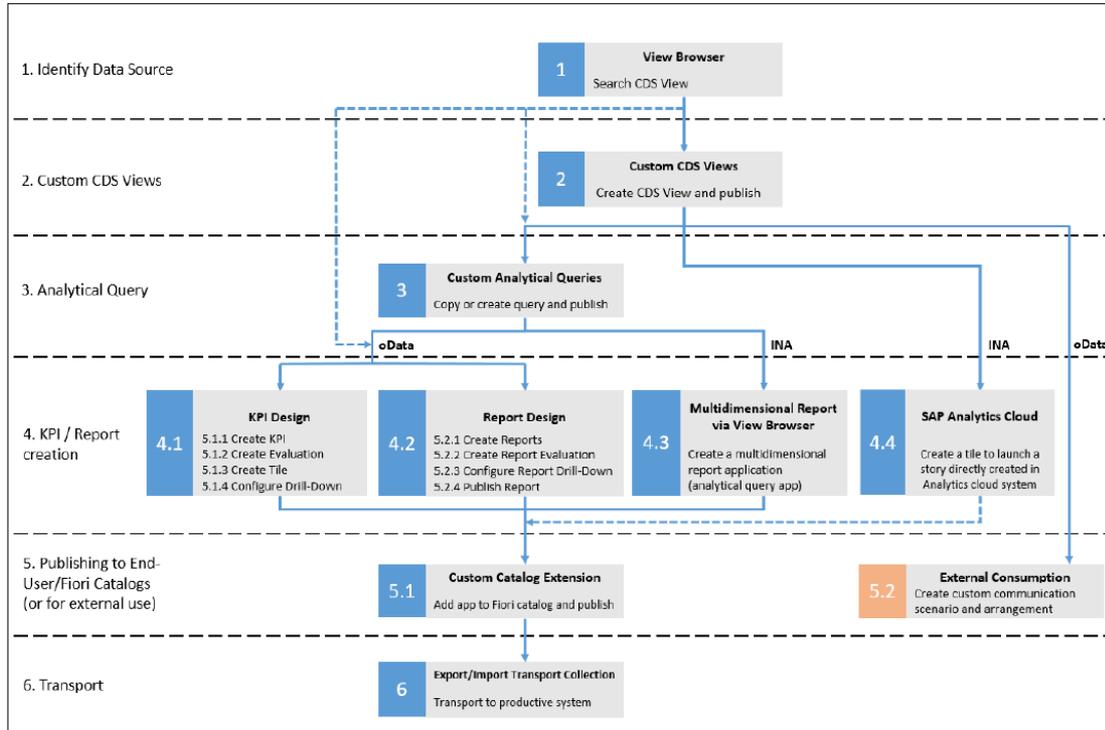
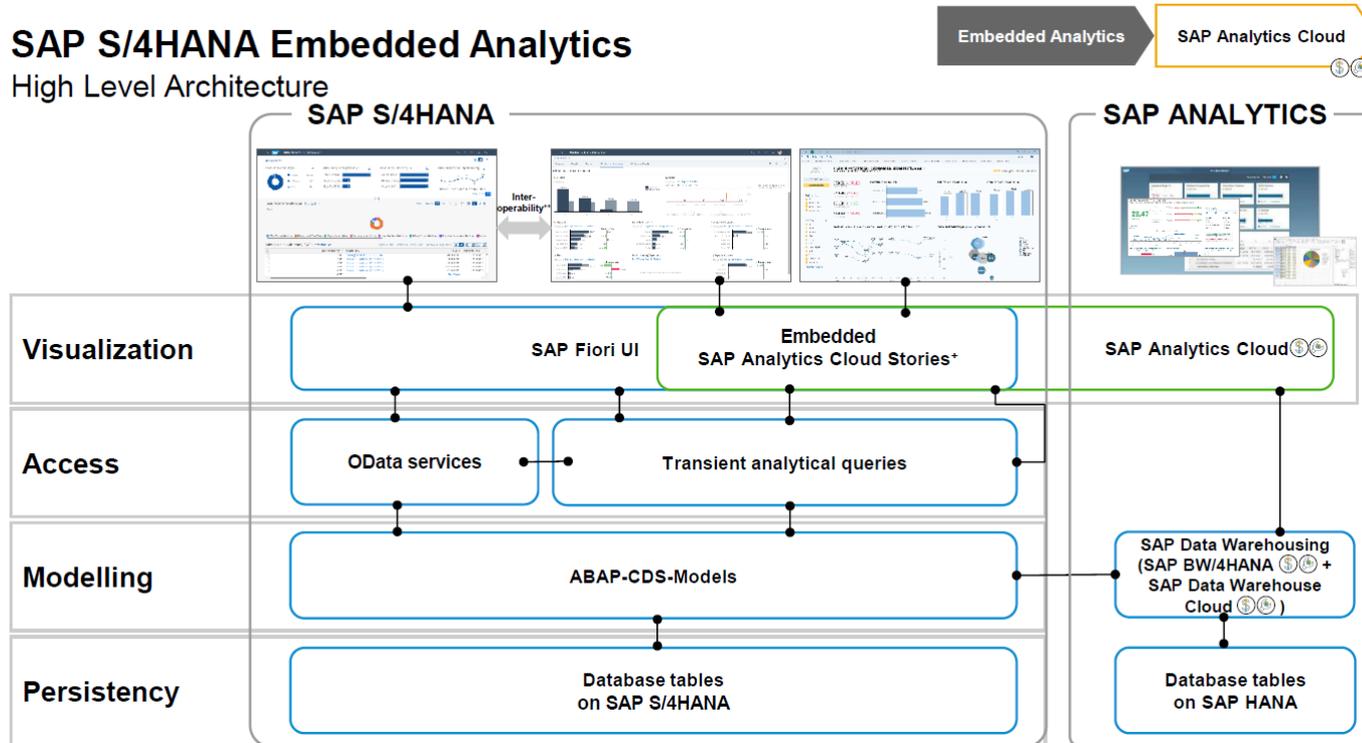


Image source: SAP

# Integration Options of SAP Analytics Cloud

## SAP S/4HANA Embedded Analytics

High Level Architecture



License the full-use SAP Analytics Cloud tenant

Deep embedding of SAP Analytics Cloud stories is possible (from release 2020 onwards)

No predefined Fiori apps with embedded dashboards will be shipped with SAP S/4HANA

# Analytics between S/4HANA and SAP Analytics Cloud

You can select multiple scope items to filter the required building blocks for your scope and display this selection on the Building Blocks tab page.

**Solution Scope** **Building Blocks ( 7 )** **General**

**Filter Scope** Deselect all

Line of Business

Technology Knowledge

Filter Scope	Scope Items	
<input checked="" type="checkbox"/>	2P6 Embedded Analytics in SAP S/4HANA Cloud	<a href="#">Scope-item fact sheet</a>
<input checked="" type="checkbox"/>	39A Predictive Analytics in SAP Analytics Cloud with SAP S/4HANA Cloud	<a href="#">Scope-item fact sheet</a>
<input checked="" type="checkbox"/>	4VW Analytics between S/4HANA Cloud and SAP Analytics Cloud	<a href="#">Scope-item fact sheet</a>
<input checked="" type="checkbox"/>	4VX Analytics between S/4HANA and SAP Analytics Cloud	<a href="#">Scope-item fact sheet</a>
<input checked="" type="checkbox"/>	55Z Embedded Machine Learning in S/4HANA	<a href="#">Scope-item fact sheet</a>
<input checked="" type="checkbox"/>	BGB Integration between SAP S/4HANA and SAP BW	<a href="#">Scope-item fact sheet</a>
<input checked="" type="checkbox"/>	BGH Embedded Analytics with SAP S/4HANA	<a href="#">Scope-item fact sheet</a>

# Use Cases for Finance Business User and Analytics Specialist

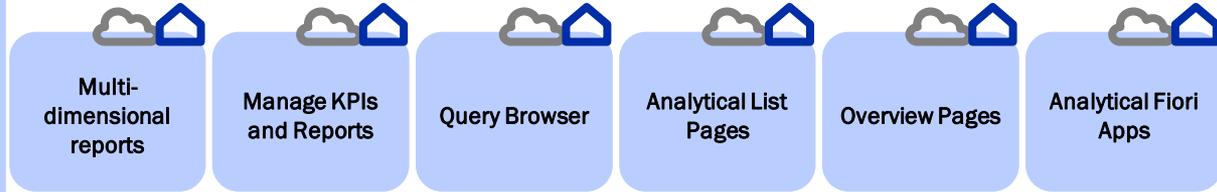
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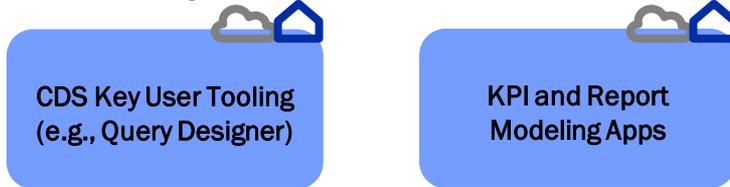
# SAP S/4HANA Embedded Analytics

## – per Type of User

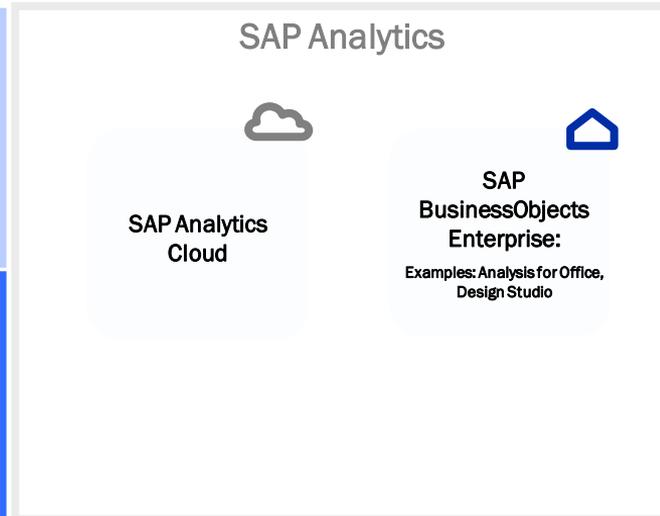
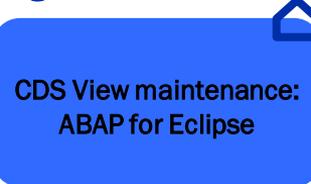
### End-User: Analyze the Data and act according to Insights



### Key-User: Enable the End-User



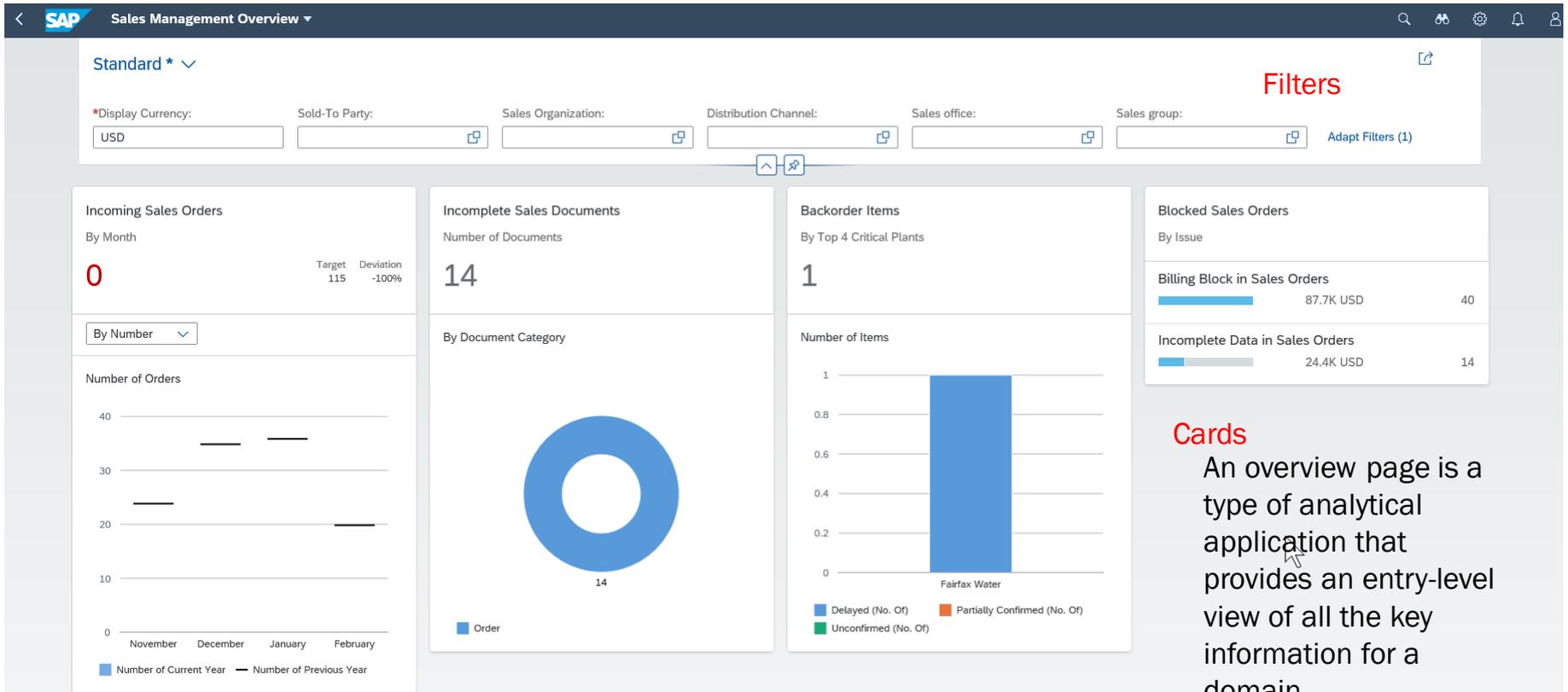
### IT-User: Provide the single source of truth in one semantic layer



Embedded analytics are part of the core SAP S/4HANA license

# For the Business User

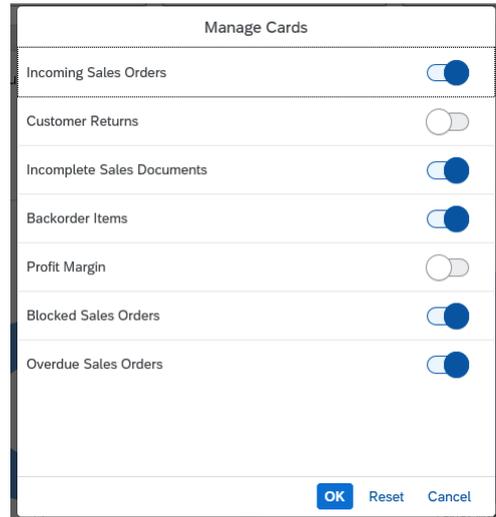
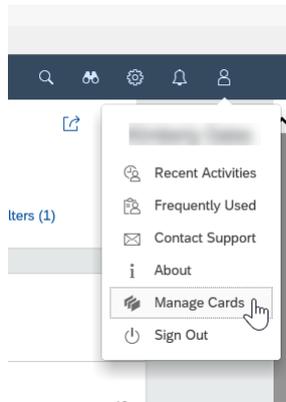
## – Overview Page



### Cards

An overview page is a type of analytical application that provides an entry-level view of all the key information for a domain

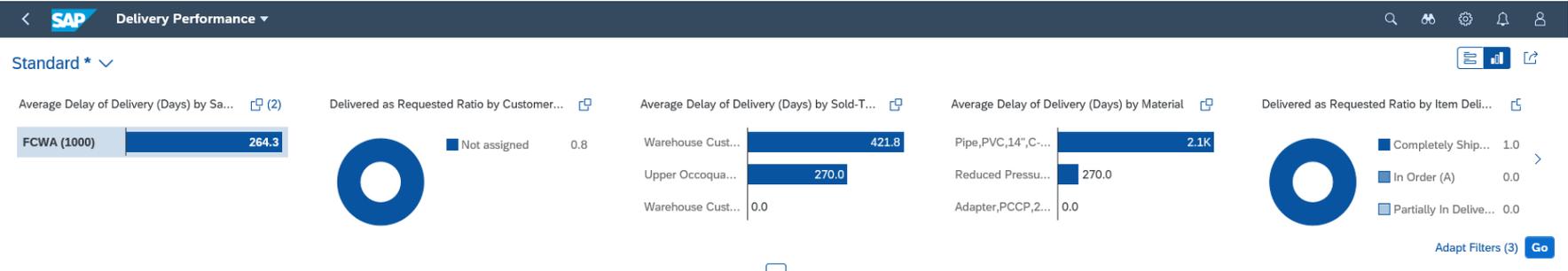
# Manage Cards



When the overview page is launched, the default cards appear. If you want to hide some of the cards, use the option Manage Cards.

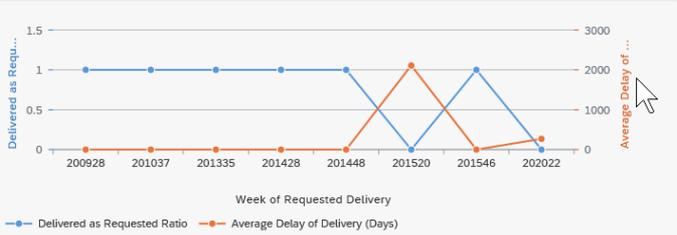
Overview pages are developed by application developers who have the skills and the detailed knowledge of SAP Fiori development.

# Analytical List Page



Sales Order Item Delivery Performance | Standard | Details | View By | Week of Requested Delivery

ALP is a type of Fiori application that brings together all the information that a business user requires to process a worklist. The ALP provides a combination of analytical and transactional information on one screen to focus on the most critical issues.

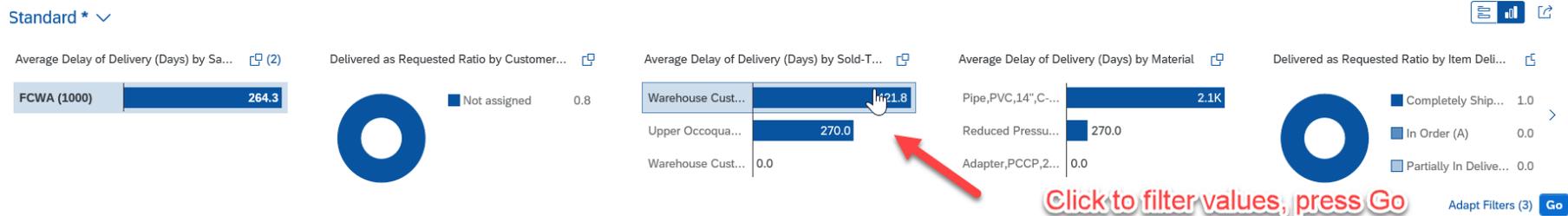


Sales Order Item Delivery Performance (9) | Standard

Sales Order	Item	Sold-To Party	Customer classific.	Material	Rei
1304	10	Warehouse Customer Non Taxable (1466917)	Not assigned	Adapter,PCCP,24",Bell xMJ Bell,for L-301 (135)	
7	10	Warehouse Customer Taxable (1466921)	Not assigned	No Longer in use. (416)	
1631	10	Warehouse Customer Non Taxable (1466917)	Not assigned	Pipe,Ductile Iron,18",CL 52,GFL (1141)	
203	20	Warehouse Customer Taxable (1466921)	Not assigned	Pipe,Ductile Iron,8",CL 52,Shrt Length (1160)	

A chart, filter, and table are the three typical components of an Analytical List Page.

# Filter to Focus on Relevant Data



SAP-supplied Analytical List Pages do not usually contain filters.

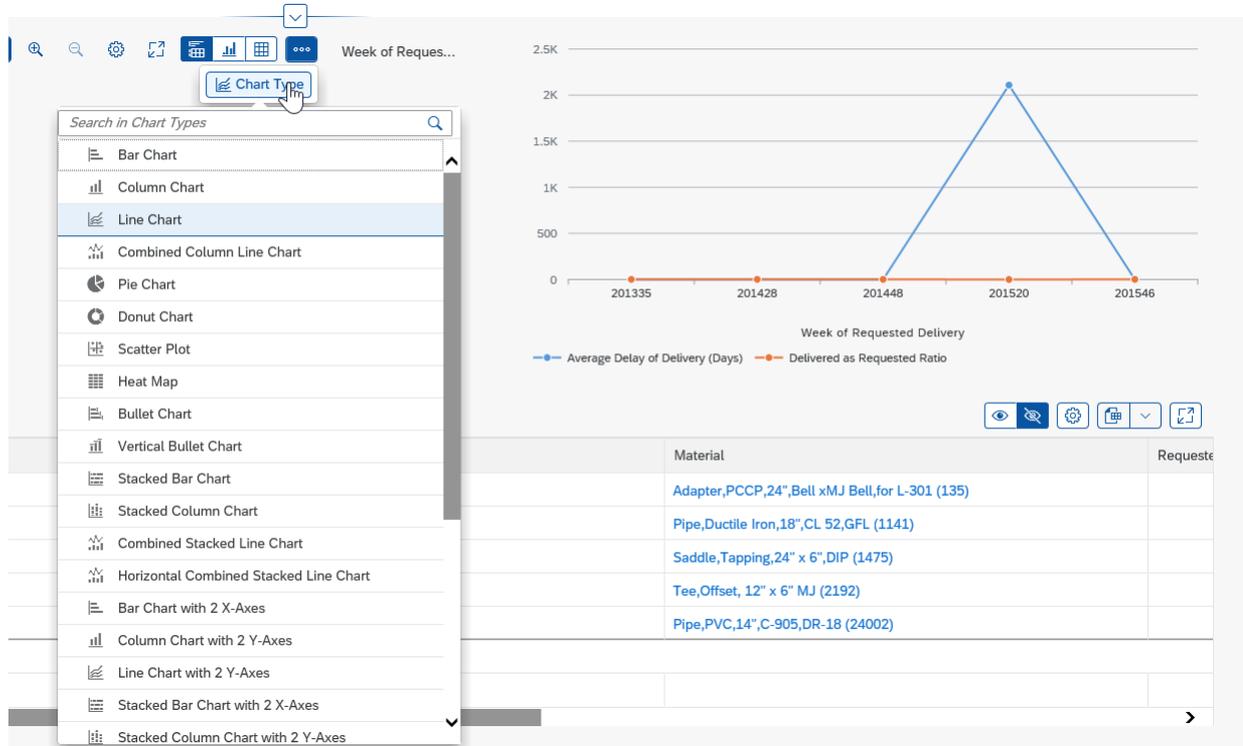
The Delivery Performance Analytical List Page has only a filter for status of order = D (delivered).

The age contains every orders for all document types, for all departments, for all time.

Initially the pages will display too much information to be useful to a business user, plus performance could be an issue.

Business users should immediately set filters and save them as defaults, so each time they launch the page it will be more responsive, plus it will contain only useful data.

# Visualize Data to Identify Issues



The *Content* section includes charts, focusing on the analytical aspects.

Change chart type, displayed attributes and measures, chart size, etc.

The chart is clickable; click either the labels on the axis or the actual bars or lines or pie segments, select those values and the table

# Immediate Action to Access Transactions

Change columns to display

Using the *Settings* option, you can remove or add new columns

Sales Order Item Delivery Performance (7) | Standard ▾

Sales Order	Item	Sold-To Party	Customer classific.	Material	Requ
1304	10	Warehouse Customer Non Taxable (1466917)	Not assigned	Adapter,PCCP,24",Bell xMJ Bell,for L-301 (135)	
7	10	Warehouse Customer Taxable (1466921)	Not assigned	No Longer in use. (416)	
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203	20	Warehouse Customer Taxable (1466921)	Not assigned	Pipe,Ductile Iron,8",CL 52,Shrt Lngth (1160)	
1179			ssigned	Saddle,Tapping,24" x 6",DIP (1475)	

**Take Action**

- Change Sales Order - VA02
- Display Document Flow
- Display Sales Order - VA03
- Incoming Sales Orders - Flexible Analysis
- 1304 List Duplicate Sales Orders Warehouse Customer Non Taxable (1466917)
- 7 List Incomplete Sales Documents - V.01 Warehouse Customer Taxable (1466921)
- 1631 List Sales Documents - By Object Status Warehouse Customer Non Taxable (1466917)
- 203 List Sales Orders Warehouse Customer Taxable (1466921)
- 1179 Sales Order Items - Backorders Warehouse Customer Non Taxable (1466917)

More Links

## **When Not to Use Analytical List Pages**

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**Should not be used as a search tool where document retrieval is important**

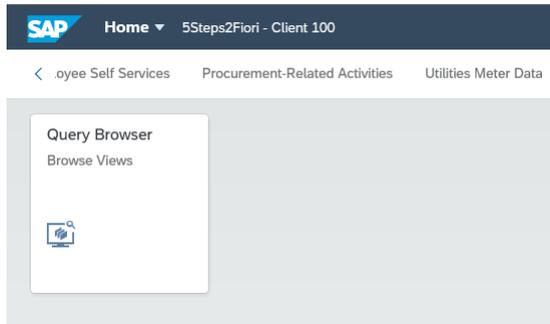
**Not suitable when you need to compare sets of documents, such as open or closed documents on the same screen**

**Not useful when a drill-down analysis is not needed**

# Query Browser

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To use the Query Browser, the user must be assigned to role SAP\_BR\_EMPLOYEE



The Query Browser is an SAP Fiori application allowing you to quickly and easily search for and launch *analytical queries*.

Analytical queries are CDS views of the type consumption (C\_) that are marked for use by analytical tools (annotation @ANALYTICS.QUERY = true) and contain rich metadata, including default rows and column layouts and default filters.

# Query Browser Search, Select Favorite, Tag Analytical Queries

Search using view names, tables, columns, annotations, tags

Sort the list

The screenshot displays the SAP Analytical Queries browser interface. At the top, it shows 'Analytical Queries' and '786 Views'. Below this is a search bar with a magnifying glass icon and a 'Show All' dropdown menu. A table lists various analytical queries with columns for selection, favorite status, view name, view description, and application component. A red box highlights the search bar, and another red box highlights the selection checkbox for the first query, 'C\_ABSLTNETBALSHTEXPSRQ'.

<input type="checkbox"/>	<input type="checkbox"/> Favorite	Tags	View Name	View Description	Application Component
<input checked="" type="checkbox"/>			C_ABSLTNETBALSHTEXPSRQ	Balance Sheet FX Risk	FIN-FSCM-TRM
<input type="checkbox"/>			C_ACMTRDGCNTRQUANTITIESQUERY	Consumption Query for Trdg Contr Qty	LO-AGR-CC
<input type="checkbox"/>			C_ACTUALCASHFLOWANALYTICS	Actual Cash Flow in 90 days	FIN-FSCM-CLM
<input type="checkbox"/>			C_ACTUALUTILSBILLINGDOCUMENTQ	Actual Billing Document Query	IS-U-BI
<input type="checkbox"/>			C_APCASHDISCOUNTFORECAST	Cash discount forecast	FI-AP-IS
<input type="checkbox"/>			C_APCSHDISCUTILIZATION	Account Payable Cash Discount Utilization	FI-AP-IS
<input type="checkbox"/>			C_APDAYSPAYOUTST	Days Payable Outstanding Smart Business App	FI-AP-IS
<input type="checkbox"/>			C_APDAYSPYBLOUTSTDGDIRCT	Overview page DPO Dir	CA-GTF-FXU-FI-AP
<input type="checkbox"/>			C_APDAYSPYBLOUTSTDGINDRCT	Overview Page: DPO Ind	CA-GTF-FXU-FI-AP
<input type="checkbox"/>			C_APPFLEXIBLEAGING	Aging Analysis Smart Business App	FI-AP-IS
<input type="checkbox"/>			C_APFUTUREACCOUNTSPAYABLE	Future Accounts Payables Smart Business App	FI-AP-IS
<input type="checkbox"/>			C_APIVOICEPROCESSINGTIME	Accounts Payable. Invoice Processing Time	FI-AP-IS
<input type="checkbox"/>			C_APIVOICEPROCESSINGANALYSIS	Invoice Processing Analysis	FI-AP-IS

# What Is Multidimensional Reporting?

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## Scenarios for Fiori multidimensional reporting:

- Multidimensional analysis (drill-down reporting) and list reporting
- Multidimensional planning

## Advantages

- Multiple hierarchies are supported; hierarchies in columns or rows
- Cell merging
- Amounts and currencies in one cell

## Full Fiori integration

- All reports accessible via SAP Fiori Launchpad
- Insight to action – each report has option to jump to others
- Context is passed to new application

Multidimensional Reports are used for slice-and-dice exploration across any combination of dimensions

# Launch Report from Fiori LaunchPad, Set Variables

The screenshot shows the SAP Fiori LaunchPad dashboard with the following navigation tabs: < | Ledger, Master Data for General Ledger, Journal Entries, Periodic Activities for General Ledger, Tax Processing, Analytics for General Ledger, Reporting for General Ledger, My. The dashboard contains several report tiles:

- Sales Volume Check Open Sales:** Shows data for 06/2020 (44.66K USD), 05/2020 (1.25K USD), and 02/2020 (666.08K USD).
- Sales Volume Profit Margin:** Shows a 100% profit margin.
- Sales Volume Credit Memo:** Shows Sales Volume (80.61M USD), Credit Memos (2.01M), and Cancellations (3.68M USD).
- Sales Contract Fulfillment Rates:** Shows Currently Valid at 0%.
- Quotation Conversion Rates:** Shows Valid/Not Completed.
- Sales Quotations Flexible Analysis:** Shows a document icon.
- Incoming Sales Orders Flexible Analysis:** This tile is highlighted with a red box.

The screenshot shows the configuration screen for the 'Standard' report. It includes the following elements:

- Standard \*** (with a refresh icon)
- \* Exchange Rate Type:** M (Standard translation at... x)
- \* Display Currency:** USD (US Dollar x)
- Data Analysis** (selected), Graphical Display, Query Information
- <Standard Query View>** (with a refresh icon)
- Filter** (dropdown), **Sort** (dropdown), **Hierarchy** (dropdown), **Drilldown** (dropdown), **Display** (dropdown), **Measures** (dropdown), **Totals** (dropdown)
- No data available** (with a refresh icon)

To launch report from SAP Fiori and set variables, select the *Standard* tab.

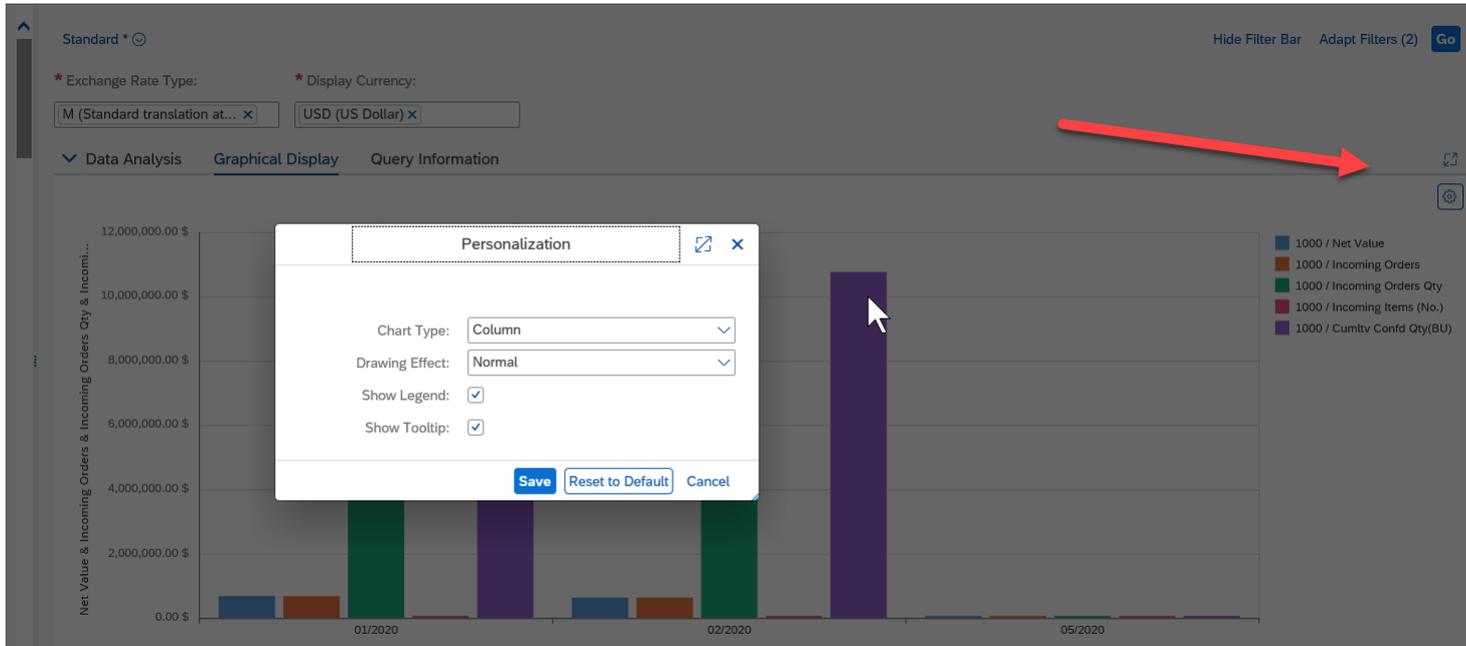
# Switch Layout to Graphical Display

The screenshot shows the SAP report interface. At the top, there are tabs for 'Data Analysis', 'Graphical Display' (which is highlighted with a red box), and 'Query Information'. Below the tabs, there are several interactive buttons: '<Standard Query View>', 'Filter', 'Sort', 'Hierarchy', 'Drilldown', 'Display', 'Measures', 'Totals', 'Jump to', and a download icon. The main content area is a table with the following structure:

Key Figures		Net Value			Incoming Orders			Incoming Orders Qty	
Yr/Mo. of Creation		01/2020	02/2020	05/2020	01/2020	02/2020	05/2020	01/2020	02/2020
Sales Organization									
1000	FCWA	712,640.93 USD	666,081.32 USD	66,139.79 USD	712,640.93 USD	666,081.32 USD	66,139.79 USD	102,896 EA	
Overall Result		712,640.93 USD	666,081.32 USD	66,139.79 USD	712,640.93 USD	666,081.32 USD	66,139.79 USD	102,896 EA	

To Switch the report layout from table to graphical display, choose the *Graphical Display* tab.

# Personalize Graphical Display



To personalize the graphical display, choose the *Personalization* (settings) icon in the top right corner. You can change the chart type, drawing finish, and add a legend, tool tips, and animations.

# Save Selections

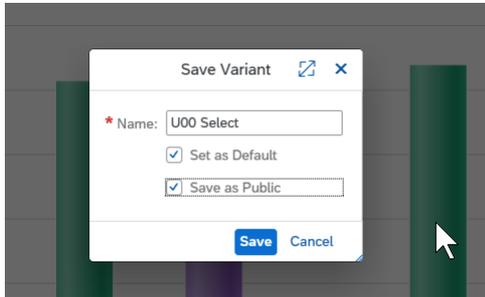


Standard \* 

\* Exchange Rate Type: M (Standard translation at...  

\* Display Currency: USD (US Dollar)  

▼ Data Analysis   **Graphical Display**   Query Information



Save Variant  

\* Name: U00 Select

Set as Default

Save as Public

**Save**   Cancel

## To Save a Selection in Multidimensional Reports

Choose the **Select and Manage Variants** button.

In the Variants pop-up window, select **Save As**.

Enter a name in the *Name* field and press **OK**.

To select a saved variant, choose the **Select and Manage Variants** button and in the drop-down menu select your saved variant. Select **GO** to execute the report with the previous saved entries.

# Personalize the Report Layout

Navigation icons: Search, Home, Settings, Notifications, Profile

Settings menu: Change Page Layout, Enable Column Resizing, Reset to Default

Display Currency: USD (US Dollar)

Exchange Rate Type: M (Standard translation at...)

Layout of Section 1: One Column

Column 1: Stackable

Layout of Section 2: Two Columns

Column 1: Stackable

Stackable items:

- Title
- Selection
- Stack
- 1 Data Analysis
- Query Information

Report Title: Standard

Exchange Rate Type: M (Standard translation at...)

Display Currency: USD (US Dollar)

Section: Data Analysis

View: <Standard Query View>

Actions: Filter, Sort, Hierarchy, Drilldown, Display, Measures, Totals, Jump to

	Key Figures	Net Value			Incoming Orders	
		Yr/Mo. of Creation	01/2020	02/2020	05/2020	01/2020
Sales Organization						
1000	FCWA	712,640.93 USD	666,081.32 USD	66,139.79 USD	712,640.93 USD	666,081.32 USD
Overall Result		712,640.93 USD	666,081.32 USD	66,139.79 USD	712,640.93 USD	666,081.32 USD

Graphical Display

Yr/Mo. of Creation

Legend:

- 1000 / Net ...
- 1000 / Inco...
- 1000 / Inco...
- 1000 / Inco...
- 1000 / Cu...

# On Selection Keep Filter Value

The screenshot shows the SAP Fiori 'Standard' report interface. At the top, there are fields for 'Exchange Rate Type' (set to 'M') and 'Display Currency' (set to 'USD (US Dollar)'). Below these are tabs for 'Data Analysis', 'Graphical Display', and 'Query Information'. The 'Data Analysis' tab is active, and a dropdown menu is open over the 'Filter' button. The menu options are: 'Keep Filter Value' (highlighted), 'Keep Filter Value and Remove from Drilldown', 'Select Filter Value', 'Delete Filter', 'Filter by Measure (Conditions)', and 'Remove Filter by Measure (Conditions)'. The main table below shows data for 'Year of Creation (1)' with a filter set to '2020'. The table has columns for 'Yr/Mo. of Creation' (01/2020, 02/2020, 05/2020) and 'Sales Organization' (1000, FCWA). The 'Overall Result' row shows values of 712,640.93 USD and 666,081.32 USD.

## To Reset the Filter

Select the filtered column.

Choose *Filter*.

From the drop-down menu, choose *Delete Filter*.

## To Filter the Report

Select the column that you want to focus on.

Choose *Filter*.

From the drop-down menu, choose *Keep Filter*.

The screenshot shows the same SAP Fiori 'Standard' report interface, but now the report is filtered by 'Yr/Mo. of Creation (1)' to '01/2020'. The 'Filter' dropdown menu is still open, and 'Keep Filter Value' is selected. The main table below shows data for 'Year of Creation (1)' with a filter set to '2020'. The table has columns for 'Yr/Mo. of Creation (1)' (01/2020) and 'Sales Organization' (1000, FCWA). The 'Overall Result' row shows values of 712,640.93 USD and 666,081.32 USD. A second table below shows a detailed view of the data, including columns for 'Key Figures', 'Net Value', 'Incoming Orders', 'Incoming Orders Qty', 'Incoming Items (No.)', and 'Cumltv Confd Qty(B...)'. The 'Overall Result' row shows values of 712,640.93 USD, 712,640.93 USD, 102,896 EA, 128, and 102,896 EA.

# Define a Filter Value

Year of Creation (1)  
2020

Filter

- Keep Filter Value
- Keep Filter Value and Remove from Drilldown
- Select Filter Value
- Delete Filter
- Filter by Measure (Conditions)
- Remove Filter by Measure (Conditions)

Yr/Mo. of Creation	01/2020	02/2020	05/2020
Sales Organization			
1000	FCWA	712,640.93 USD	666,081.32 USD
Overall Result		712,640.93 USD	666,081.32 USD

## To Define a Filter Value

To define a filter value on the Sales Organization, select the specific row.

Choose *Filter*.

Search for the Sales Organization.

Choose *OK* to activate the filter

Sales Organization (1)

Year of Creation (1)

1000

2020

Key Figures	Net Value			Incoming Orders		
Yr/Mo. of Creation	01/2020	02/2020	05/2020	01/2020	02/2020	05/2020
Sales Organization						
1000	FCWA	712,640.93 USD	666,081.32 USD	66,139.79 USD	712,640.93 USD	666,081.32 USD
Overall Result		712,640.93 USD	666,081.32 USD	66,139.79 USD	712,640.93 USD	666,081.32 USD

Define Filter Values - Sales Organization

Sales Organization is FCWA ( 1000 )

Clear Entries

OK Cancel

# Add / Remove Fields

Key Figures		Net Value	
Yr/Mo. of Creation		01/2020	02/2020
Sales Organization			
1000	FCWA	712,640.93 USD	666,081.32 USD
Overall Result		712,640.93 USD	666,081.32 USD

Navigation Panel

Dimensions

Search Dimensions

Remove Field

Rows

Sales Organization

Available Fields

Sales Order

Item

Add Fields

## To Add and Remove Fields from the Axis

Select the row or column icon in front of the field name to add it to the report.

If a field is already selected, then de-select the icon to remove the field from the report.

Key Figures		Net Value
Yr/Mo. of Creation		01/2020
Sales Order	Item	
3214	10	3,638.25 USD
3215	10	851.22 USD
3216	10	3,115.93 USD
3217	10	2,718.28 USD
3218	10	7,151.36 USD
3219	10	4,031.75 USD
3220	10	2,318.55 USD
3221	10	3,506.94 USD

# Jump to

Jump to

- Billing Document
- Customer
- Delivery Performance
- Display Billing Documents
- Display Document Flow
- Display Document Flow
- Incoming Sales Orders - Flexible Analysis
- List Duplicate Sales Orders
- List Incomplete Sales Documents - V.01
- List Sales Documents - By Object Status
- List Sales Orders
- Manage Product Master Data
- Product
- Sales Order

Standard Order 3214

Sold-To Party: C Overall Status: Completed Ovr Delivery Status: Not Relev for Deliv Approval Status: Not Relevant Net Value: 3,638.25 USD  
Rejection Status: Nothing Rejected Credit Status: Not Performed

General Information Items Business Partners Process Flow

Sales Area: FCWA, FCWA, Non-Water Sales Customer Reference: Document Date: 01/02/2020 Delivery Block:   
Employee Responsible: Customer Ref. Date: Billing Block:   
Items

Item	Material	Requested Quantity	Item category	Delivery Date	Overall Status	Rejection Status	Net Value
10	Antenna Lease (84)	1.000	EA Service (TAD)	01/02/2020	Completed	Nothing Rejected	3,638.25 USD

## To Display the Details of a Sales Order in the ABAP System

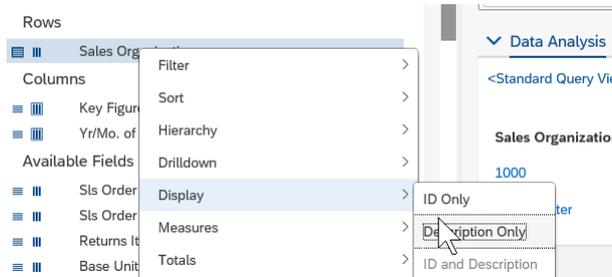
Select the sales order you want to see.

From the *Jump to* drop-down menu, choose *Display Sales Order*.

To revisit a saved bookmark, choose the bookmark from the drop-down menu from the *Bookmark* field.

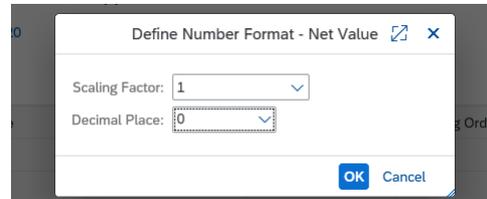
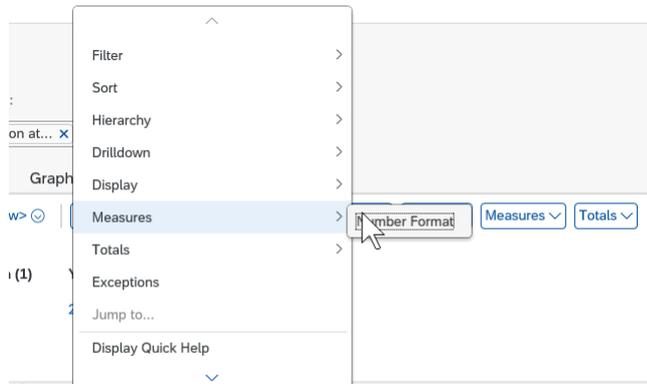
An additional browser tab will open that displays the details of the chosen sales order in the ABAP backend system.

# Field Context Menu Options



Using the context menu, the display of the Sales Organization is changed to Description Only

Yr/Mo. of Creation	FCWA	Overall Result
Sales Organization		
FCWA	712,640.93 USD	
Overall Result	712,640.93 USD	



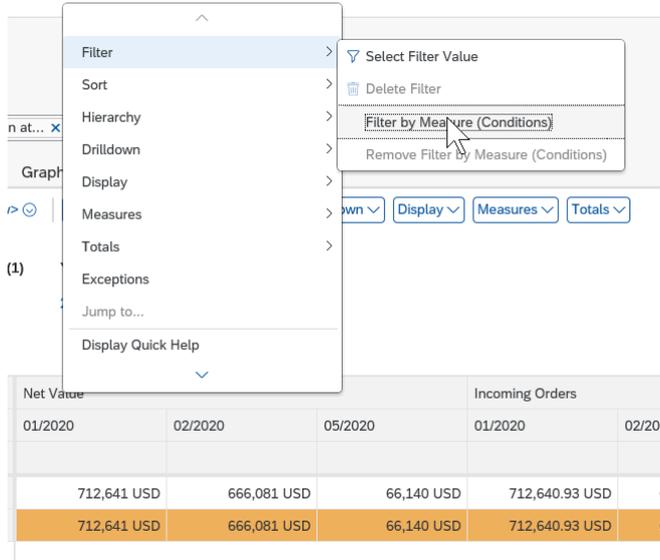
Key Figures	Net Value	
Yr/Mo. of Creation	01/2020	02/2020
Sales Organization		
FCWA	712,641 USD	666,081 USD
Overall Result	712,641 USD	666,081 USD

There are several locations where you can open a field context menu.

Using the context menu for Net Amount, the Number format is changed

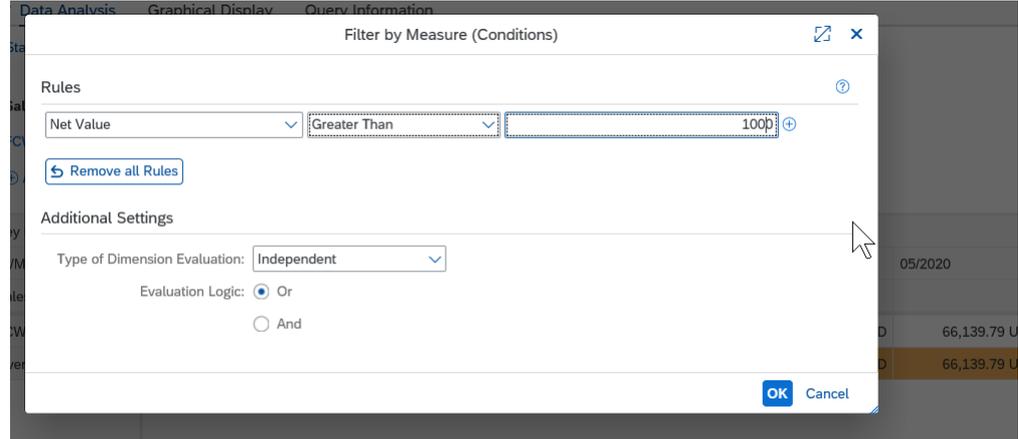
Net Value	Incoming Orders		
	01/2020	02/2020	05/2020
	712,640.93 USD	666,081.32 USD	66,139.79 USD
	712,640.93 USD	666,081.32 USD	712,640.93 USD

# Filter by Measure



A screenshot of the SAP interface showing a context menu for the 'Net Value' measure. The menu is open, and the 'Filter by Measure (Conditions)' option is highlighted. Below the menu, a table of data is visible, with the first two rows highlighted in orange.

Net Value			Incoming Orders	
01/2020	02/2020	05/2020	01/2020	02/2020
712,641 USD	666,081 USD	66,140 USD	712,640.93 USD	
712,641 USD	666,081 USD	66,140 USD	712,640.93 USD	



A screenshot of the 'Filter by Measure (Conditions)' dialog box. The 'Rules' section shows a rule for 'Net Value' with the condition 'Greater Than' and a value of '100'. The 'Additional Settings' section shows 'Type of Dimension Evaluation' set to 'Independent' and 'Evaluation Logic' set to 'Or'.

Rules

Net Value Greater Than 100

Remove all Rules

Additional Settings

Type of Dimension Evaluation: Independent

Evaluation Logic:  Or  And

OK Cancel

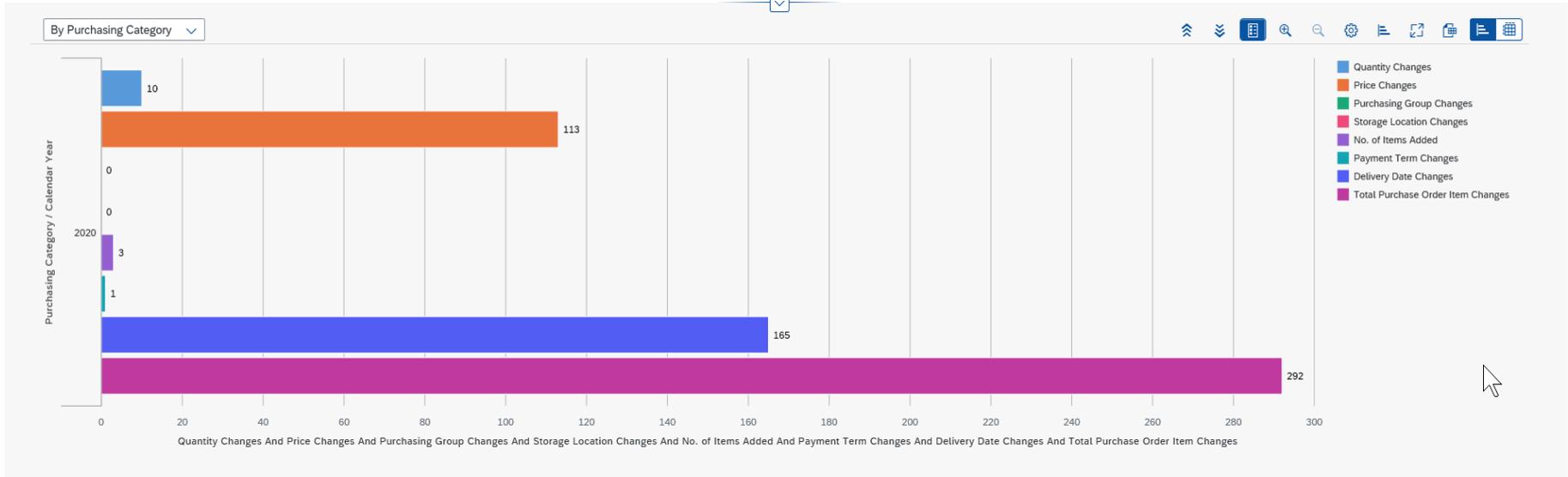
Opening the context menu of Net Amount allows you to set filters. In the example, the Filter by Measure is used to create a rule.



# SAP Smart Business KPIs

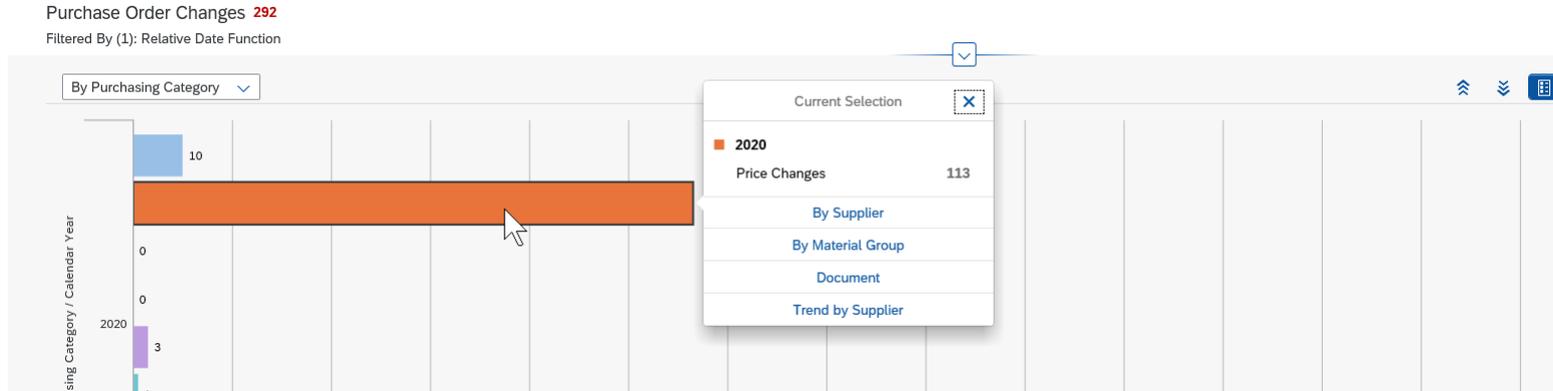
Purchase Order Changes **292**

Filtered By (1): Relative Date Function



Smart Business KPIs are Fiori tiles with surface content. They display real-time information that is essential in the monitoring of business performance. This is a KPI of purchase order changes

# List with Drilldown Options



After clicking on a KPI tile, you might also be taken to a transaction where you could act on the KPI.

# Purchase Order Changes

Purchase Order Changes 20

Filtered By (3): Relative Date Function, Calendar Year, Supplier

Document (19)											
Purchasing Document	Purchasing Doc. Item	Supplier	Material	Quantity Changes	Price Changes	Purchasing Group Changes	Storage Location Changes	No. of Items Added	Payment Term Changes	Delivery Date Changes	Total Purchase Order Item Changes
4500021635	00010		Coupling,CPVC,SC80 ,1" SOC x SOC,IPEX (17129)	0	0	0	0	0	0	1	1
4500021635	00020		Pipe,CPVC,SC80, 1" (17155)	1	0	0	0	0	0	1	2
4500021635	00030		Cement,PVC/CPVC,7 24,Gray,WELD- ON,16oz (18099)	0	0	0	0	0	0	1	1
4500021635	00040		Primer,PVC/CPVC,P- 70,Clear,WELD- ON,16oz (18100)	0	0	0	0	0	0	1	1
4500021635	00050		Connector End,Valve,CPVC,1",S OC (30641)	0	0	0	0	0	0	1	1
4500021683	00010		ELL,PVC,SC80,1/2", 90 DEG, SOC x SOC (17830)	0	0	0	0	0	0	1	1
4500021683	00020		Tee,PVC,SC80,1/2",S OC (20761)	0	0	0	0	0	0	1	1
4500021683	00030		Adapter,PVC,SC80,1/ 2",SOC x FPT (17587)	0	0	0	0	0	0	1	1
4500021683	00040		Adapter,PVC,SC80,1/ 2",SOC x MPT (17595)	0	0	0	0	0	0	1	1
			Coupling,PVC,SC80,								

now

Open In...

Figure shows purchase order changes where the changes occurred

# SAP Fiori Analytical Applications

---

**There are many analytical applications delivered, and they usually follow these principles:**

- They are based on a very specific user role and task, for example, material planner, resource assigner.
- They provide real-time insight into the operations of your business by collecting and displaying KPIs in useful places.
- They combine the transactional and analytical data in one application (insight to action).
- They provide real-time information on large volumes of data in a simplified front end.
- They monitor important key performance indicators (KPIs) in real time with SAP Smart Business KPIs, and they react immediately to changes in market conditions or operations

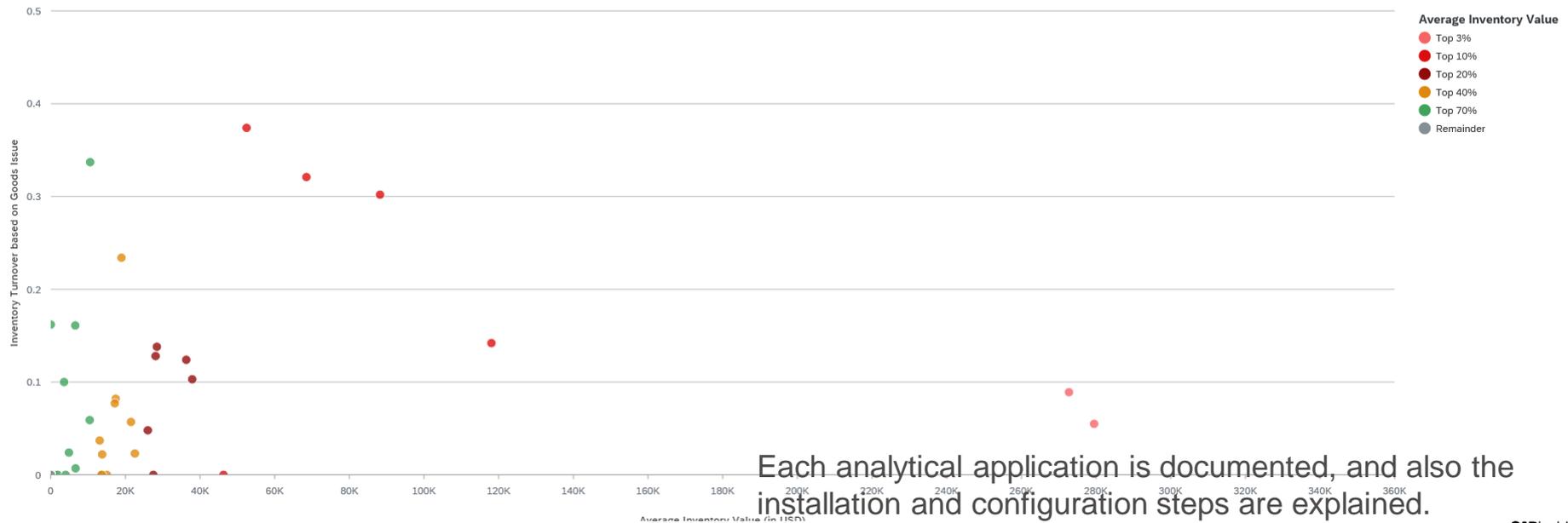
# Analytical Applications

Standard \*

Hide Filter Bar Filters (4) Go

\*Start Date: 01/01/2020 \*End Date: 02/21/2020 \*Plant: 1000 ABC Indicator: Material type: 1 Item Material Group:

Materials (61)



Each analytical application is documented, and also the installation and configuration steps are explained.

# What Is the View Browser?

---

**SAP supplies a very large number of ready-made Core Data Services (CDS) views. However, often SAP-supplied views do not contain all the required fields, especially if the customer has added new fields to the source tables. One of the key tasks of the analytics specialist is to determine if a suitable CDS view already exists or a new one is needed, and to be able to explore the complete virtual data model of embedded analytics.**

**To perform this task, a comprehensive exploration tool is needed. The Eclipse tool could be used, but for analytics specialists this is usually far too complex, and is typically only needed if access to the full CDS code is required. To view the essential information, a simpler yet comprehensive tool is needed. That tool is the View Browser.**

# View Browser

The screenshot shows the SAP navigation bar with the following menu items: Home, 5Steps2Fiori - Client 100, Supplier Evaluation, Employee Self Services, Procurement-Related Activities, Utilities Meter Data, ZFIO\_999, KPI Tools, Report Design, Analysis Path Framework Modeling, KPI Design, and Query Design. Below the navigation bar, there are three main dashboard tiles: 'View Browser' (Browse Views, S/4HANA), 'Custom Analytical Queries' (Define dynamic date...), and 'Manage Date Functions' (Define dynamic date...).

The View Browser is used to explore the CDS views

The screenshot shows the SAP View Browser header with the following elements: a back arrow, the SAP logo, a dropdown menu for 'View Browser', and the text '5Steps2Fiori - Client 100'.

44141 Views

- 15201 Basic
- 8043 Composite
- 10443 Consumption
- 282 Extension
- 10172 Undefined

Views (44,141) Standard

<input type="checkbox"/>	Favorite	Tags	Name	Description	Status	Application Component	Data Category
<input type="checkbox"/>			/1BS/CDS_EXP_SALESORDER	SalesOrder	Not Released	BC-ESI-ESF-BSA	
<input type="checkbox"/>			/1bs/sadl_cds_exp	Test View for CDS Exposure	Not Released	BC-ESI-ESF-BSA	
<input type="checkbox"/>			/1BS/SADL_CDS_Param	Test View for CDS Exposure	Not Released	BC-ESI-ESF-BSA	

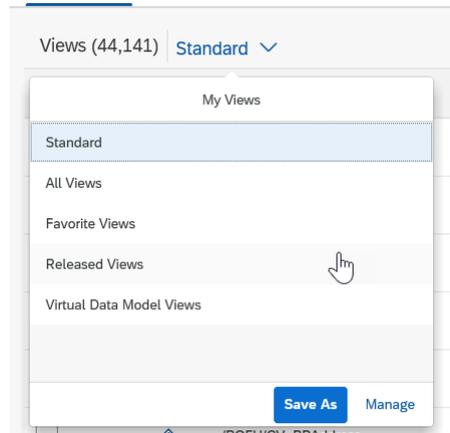
Useful for the analytics specialist

The Query Browser is limited to Analytical Queries and cannot be used to explore other types of CDS views, such as Cubes and Dimensions.

# View Browser Variants

---

Once you have refined the display to show only views you are interested in, you can save the selection as a variant so that you can easily recall the same selection.



# View Release Status

Views (41,284)		Standard * <span>∨</span>		Search <span>🔍</span>			
Filtered By: Status							
<input type="checkbox"/>	Favorite	Tags	Name	Description	Status	Application Component	Data C
<input type="checkbox"/>			/1BS/CDS_EXP_SALESORDER	SalesOrder	Not Released	BC-ESI-ESF-BSA	
<input type="checkbox"/>			/1bs/sadL_cds_exp	Test View for CDS Exposure	Not Released	BC-ESI-ESF-BSA	
<input type="checkbox"/>			/1BS/SADL_CDS_Param	Test View for CDS Exposure	Not Released	BC-ESI-ESF-BSA	
<input type="checkbox"/>			/aif/s4_odata_namespace	AIF Namespace for oData Service	Not Released	CA-GTF-AIF	
<input type="checkbox"/>			/BOBF/v_epm_product_name	BOPF EPM View for product value help	Not Released	BC-ESI-BOF	
<input type="checkbox"/>			/BOFU/CV_BPAddress	BOPF: /BOFU/BuPa Address	Not Released	CA-EPT-BRC	

Can use only the CDS views with status “Released”

Cannot create custom views or queries for SAP CDS views with status “Not Released,” as these may be changed or deleted in the next release.

# Explore the View

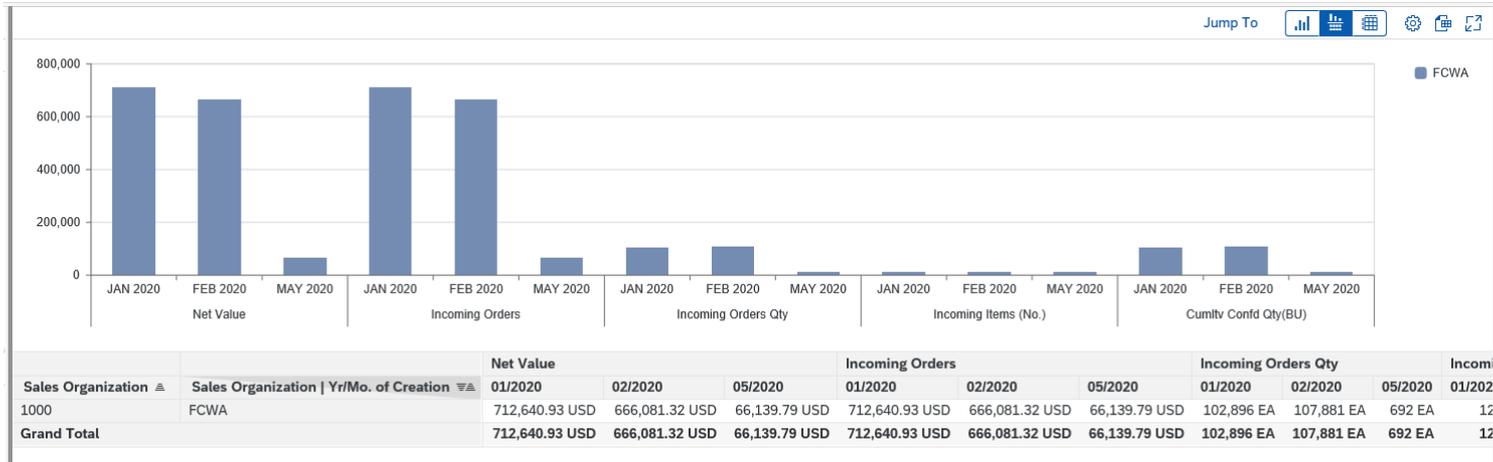
C\_SalesOrderItemQty Analytics - Incoming Sales Order

★
📄
Show Content

Application Component: SD-ANA  
 Description: Sales Analytics  
 Tags: [U01 SALES REPORT](#)

DEFINITION
ANNOTATION
CROSS REFERENCE

Column Name	Data Element	Description	Data Type	Length
SALESORDER	VDM_SALES_ORDER	Sales Order	CHAR	10



# Fiori App Recommendations

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Go to <https://fioriappslibrary.hana.ondemand.com/sap/fix/externalViewer/#>

Categories

- All apps >
- All apps for SAP S/4HANA >
- SAP Fiori apps for SAP S/4HANA >
- SAP Fiori apps for SAP Business Suite >
- SAP Fiori lighthouse apps >
- Available via SAP Fiori Cloud >

Sign in and get recommendations based on your system usage. [Learn more](#)

[Get SAP Fiori App Recommendations](#)

Welcome to

Explore, plan and in launchpad.

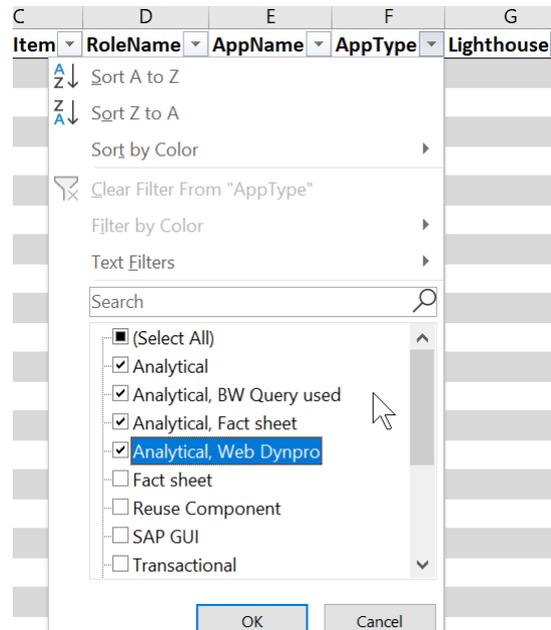
Find out how to ge out of SAP Fior Reference Libra help note

# Fiori App Recommendations

---

## Download Your Fiori App Recommendations

### Filter Analytical Apps



# Fiori App Recommendations

## Use the Fiori Rapid Activation Tasklist to activate relevant roles: Transaction STC01



Note

Technical setup is covered in 5 Steps to Fiori Bootcamp

Task Manager for Technical Configuration

Task List: SAP\_FIORI\_CONTENT\_ACTIVATION

Display Task List Run SAP\_FIORI\_CONTENT\_ACTIVATION\_20210220180356502

Task List: SAP\_FIORI\_CONTENT\_ACTIVATION | SAP Fiori - Content activation for SAP Business Roles

Task List Run: SAP\_FIORI\_CONTENT\_ACTIVATION\_20210220180356502

Ex...	Ch...	St...	Log Autom.	Phase	Comp.	Task Description	He...	Pa...	Parameter Description
<input type="checkbox"/>				Scope definition	FIORI	Enter list of SAP Business Roles to be activated (optional)			
<input checked="" type="checkbox"/>				Scope definition	FIORI	Select/Confirm SAP Business Roles for FLP content activation			Selected 1 of 451 roles
<input checked="" type="checkbox"/>				Prepare	CTS	Set transport options for to be activated OData Services			Prefix: Z / Package: \$TMP
<input checked="" type="checkbox"/>				Configuration	FIORI	Determine OData/ICF Services for Roles			
<input checked="" type="checkbox"/>				Configuration	FIORI	Activate OData Services (/IWFND/MAINT_SERVICE)			Process mode: Co-deployed only
<input checked="" type="checkbox"/>				Configuration	FIORI	Activate ICF Services (SICF)			
<input checked="" type="checkbox"/>				Configuration	FIORI	Generate new Business Roles with Prefix			Prefix: Z
<input type="checkbox"/>				Configuration	USER	Create Users with generated Business Roles (SU01)			
<input checked="" type="checkbox"/>				Postprocessing	CTS	Delete Requests for OData Services Activation (if newly created and empty)			

# Result

---

The screenshot displays the SAP Utilities Meter Data dashboard. At the top, the SAP logo is on the left, followed by a 'Home' dropdown menu and the text '5Steps2Fiori - Client 100'. Below this is a navigation bar with four items: 'Supplier Evaluation', 'Employee Self Services', 'Procurement-Related Activities', and 'Utilities Meter Data', which is currently selected and underlined. The main content area features two cards. The left card, titled 'Resolve Implausible Meter Readings', shows a large value of '10.65 K' and a smaller label 'Meter Readings' below it. The right card, titled 'Periodic Meter Reading Overview', is currently empty.

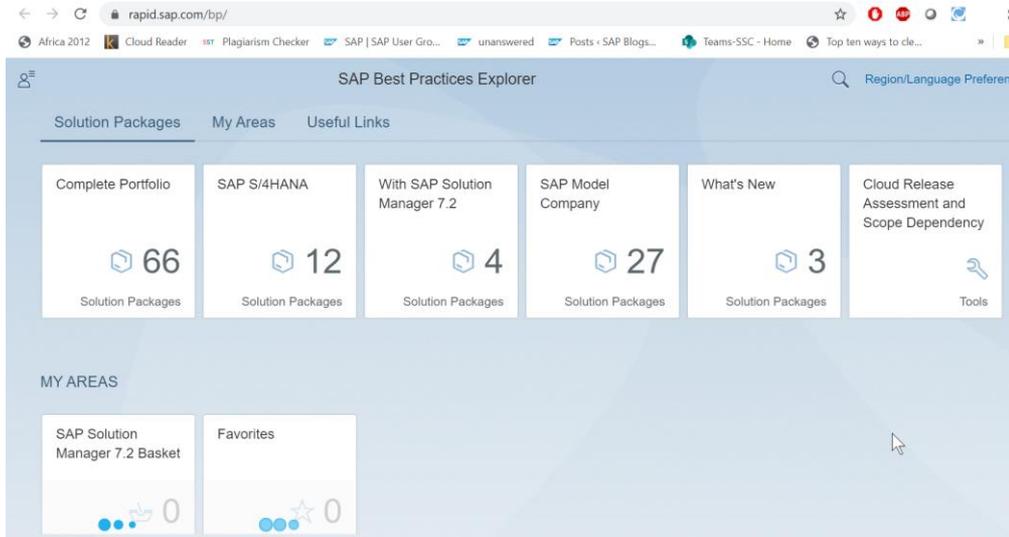


## Best Practices for Getting Started with Embedded Analytics

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# SAP Best Practices

SAP Best Practices are in a library and presented through a web-based exploration tool called **SAP Best Practices Explorer**. The SAP Best Practices Explorer is at: <https://rapid.sap.com/bp/>



SAP provide best practices related to analytics for enablement of real-time operational reporting and KPIs across all business areas



Best Practice

# Using Filters to Discover Best Practices

The screenshot shows the SAP Best Practices Explorer interface. The top navigation bar includes the SAP logo, the title 'SAP Best Practices Explorer', and search and preference icons. The main content area is divided into a left sidebar and a main list. The sidebar shows a filter for 'On-Premise' with 9 packages. The main list displays several solution packages, with the one for 'SAP S/4HANA (on premise)' highlighted by a red box and a mouse cursor.

Filter	Count	Package Name
A-Z Index	66	
▼ SAP S/4HANA	12	
On-Premise	9	SAP Best Practices for SAP S/4HANA (on premise)
Cloud	5	SAP Extended Warehouse Management integration with SAP S/4HANA rapid-deployment solution
Integration	1	SAP Extended Financial Planning rapid-deployment solution
Automation	1	SAP S/4HANA Chemicals trial with industry best practices
Industries	2	SAP Best Practices for SAP CPQ integration with SAP ERP
> Line of Business	30	

You can filter the packages according to many criteria including by type of S/4HANA deployment (cloud or on-premise, release, and so on).

# Explore the Contents of a Best Practices Package

The screenshot shows the SAP Best Practices Explorer interface. At the top, there is a navigation bar with a user icon, a home icon, the SAP logo, and the text 'SAP Best Practices Explorer'. On the right side of the navigation bar, there is a search icon and the text 'Region/Language'. Below the navigation bar, there is a breadcrumb trail: 'Browse Packages /'. To the right of the breadcrumb trail, there are 'Download' and 'star' icons. The main content area displays the package name 'SAP Best Practices for analytics with SAP S/4HANA' and the version 'SAP S/4HANA Cloud'. Below the package name, there are three tabs: 'Overview', 'Solution Scope', and 'Accelerators'. The 'Accelerators' tab is selected. The main content area is titled 'ACCELERATORS' and is divided into two columns. The left column is titled 'Delivery and Positioning' and contains two items: 'Scope presentation' and 'One page slides - service'. The right column is titled 'General Documents' and contains three items: 'SAP Best Practices content library', 'SAP Notes', and 'Software and delivery requirements'. A red arrow points to the 'Download' button in the top right corner of the page.

SAP Best Practices Explorer

Region/Language

Browse Packages /

SAP Best Practices for analytics with SAP S/4HANA SAP S/4HANA Cloud

Download ☆

Overview Solution Scope Accelerators

## ACCELERATORS

Delivery and Positioning

General Documents

[Scope presentation](#)  
An overview of the solution scope including one-pagers for the business processes covered.

[One page slides - service](#)  
An external slide that defines the solution and service. Can be used by service sales people to position the service with customers. Also provides a couple of slides that summarize scope options.

[SAP Best Practices content library](#)  
A page providing access to the accelerators of the package items

[SAP Notes](#)  
A compilation of additional information or corrections for the and documentation of the package.

[Software and delivery requirements](#)

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# Explore the Contents of a Best Practices Package

The screenshot displays the SAP Best Practices Explorer interface. At the top, there is a navigation bar with a user profile icon, a home icon, the SAP logo, and the text 'SAP Best Practices Explorer'. On the right side of the navigation bar, there is a search icon and the text 'Region/Language'. Below the navigation bar, the page title is 'SAP Best Practices for analytics with SAP S/4HANA' with 'SAP S/4HANA Cloud' as a subtitle. There are three tabs: 'Overview', 'Solution Scope', and 'Accelerators'. A red arrow points to the 'Download' button in the top right corner. The main content area is titled 'ACCELERATORS' and is divided into two columns. The left column is titled 'Delivery and Positioning' and contains two items: 'Scope presentation' and 'One page slides - service'. The right column is titled 'General Documents' and contains three items: 'SAP Best Practices content library', 'SAP Notes', and 'Software and delivery requirements'. A mouse cursor is visible over the 'Delivery and Positioning' header.

Best Practices are organized by Packages, and these contain all related steps to setup integration scenarios.

Download

Overview Solution Scope Accelerators

## ACCELERATORS

### Delivery and Positioning

- Scope presentation**  
An overview of the solution scope including one-pagers for the business processes covered.
- One page slides - service**  
An external slide that defines the solution and service. Can be used by service sales people to position the service with customers. Also provides a couple of slides that summarize scope options.

### General Documents

- SAP Best Practices content library**  
A page providing access to the accelerators of the package items
- SAP Notes**  
A compilation of additional information or corrections for the and documentation of the package.
- Software and delivery requirements**

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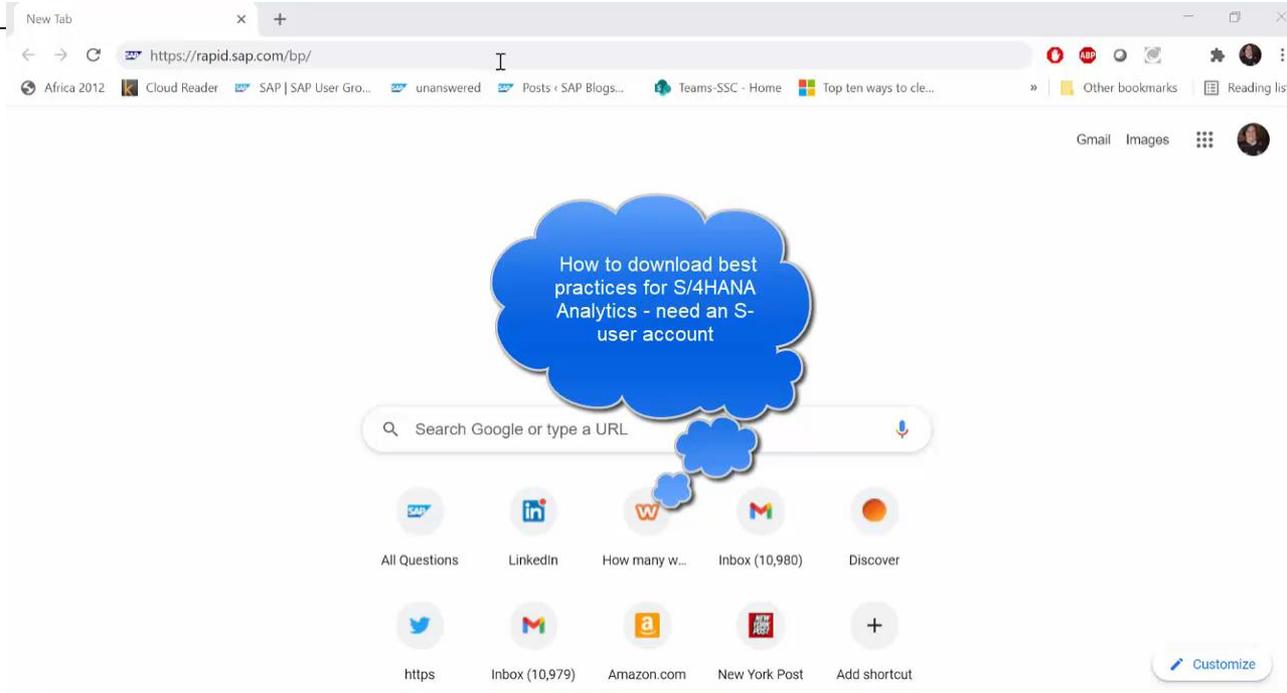
# Download Best Practices for S/4HANA Analytics

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.



# Download Best Practices for S/4HANA Analytics



# Wrap-Up

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# Where to find more information

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Intelligent ERP Update: SAP S/4HANA Cloud 1905 Release – Deep Dive for Analytics

<https://blogs.sap.com/2019/05/15/intelligent-erp-update-sap-s4hana-cloud-1905-release-deep-dive-for-analytics/>

Latest MTE Sessions: Learn about SAP S/4HANA embedded analytics and core data service views

<https://blogs.sap.com/2019/05/15/learn-about-sap-s4hana-embedded-analytics-and-core-data-service-views/>

What is SAP S/4HANA embedded analytics? How does it add value? <http://bit.ly/2cPkeqF>

How do I get started with embedded analytics? <https://blogs.sap.com/2016/05/27/getting-started-with-s4-hana-embedded-analytics/>

How does the SAP S/4HANA embedded analytics architecture look like?

<https://blogs.sap.com/2016/09/27/journey-of-datafrom-tables-to-tiles-a-sneak-peek-into-the-s4-hana-embedded-analytics-architecture/>

# Key Points to Take Home

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- Use your own S/4HANA sandbox or the SAP Cloud Appliance S/4HANA trial ([cal.sap.com](https://cal.sap.com)) to try S/4HANA analytics
- Review and analyze use cases for S/4HANA analytics
- Look at the predefined content for S/4HANA Analytics
- Use best practices for implementing S/4HANA Analytics
- Benefits of S/4HANA Analytics include no data duplication, combining online transactional processing with online analytical processing
- To get more familiar with Fiori, consider joining the 5 Steps SAP Fiori Bootcamp ([s4h\\_customer\\_care@sap.com](mailto:s4h_customer_care@sap.com))

## Thank You! Any Questions?

---

Tammy Powlas

[Twitter.com/tpowlas](https://twitter.com/tpowlas)

[Linkedin.com/in/tammy-powlas](https://linkedin.com/in/tammy-powlas)

Please remember to complete  
your session evaluation.



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comprises the largest  
and fastest growing  
SAP membership  
group worldwide,  
with  
more than 600,000  
members across  
**205 countries.**

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