

User Guide
Focused Insights for SAP Solution Manager
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OCC Dashboard 7.2 User Guide

ST-OST 7.2 SPS 8

Document History

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Contents

Overview.....	5
Usage 6	
.1 Direct Access URLs.....	6
.2 Zooming in on a Gadget.....	7
Dashboard.....	8
.1 Instance View.....	8
.2 Dashboard Layout	9
.3 TNT/ UOC Shell Header and URL parameters.....	10
.4 Left Utilities Pane	12
.5 The Footer.....	14
.6 The Content Area	14
.7 Gadgets.....	15
Configuration	18
.1 Creating a dashboard.....	18
.2 Editing a dashboard.....	18
.3 Deleting a dashboard.....	21
.4 Editing Gadget Settings.....	21
.5 Export Dashboard.....	35
.6 Import Dashboard	38
.7 Tackling Huge Data points.....	40
Data Provider	43
.1 Data Provider /STDF/DP_SYSMON	43
.1.1 System Monitoring Metrics at Instance or Host Level	47
.1.2 System Monitoring and Metric Variants.....	50
.1.3 System Monitoring and Custom Metrics	51
.1.4 Drilldown option.....	51
.2 Data Provider /STDF/DP_SYSMON_SNAPSHOT	54
.2.1 Overview View.....	54
.2.2 Detail View	56
.2.3 Copy & Paste Query	57
.3 Data Provider /STDF/DP_EEM	60
.4 Data provider /STDF/DP_EEM_BI	61
.5 Data Provider /STDF/DP_BPA_KPI.....	62
.6 Data Provider /STDF/DP_BEX_QUERIES.....	63
.7 Data Provider /STDF/DP_DF_TAC.....	64
.8 Data Provider /STDF/DP_DVM (Data Volume Management).....	65
.9 Data Provider /STDF/DP_MAI_ALERTING	67
.10 Data Provider /STDF/DP_DF_KPI.....	69
.11 Data Provider /STDF/DP_ITSM	70
.12 Data Provider /STDF/DP_CCM.....	72

.13	Data Provider /STDF/DP_CRM.....	73
.14	Data Provider /STDF/DP_CALCULATION	78
.15	Data Provider /STDF/DP_DCM	80
.16	Data provider /STF/DF/DP_ICM	82
.17	Data Provider /STDF/DP_EWA	83
.18	Data Provider /STDF/DP_BPO	84
.19	Data Provider /STDF/DP_SOLDLOC	86
.20	Data Provider /STDF/DP_BUILD.....	89
.21	Data Provider /STDF/DP_SECURITY	92
.22	Data Provider /STDF/DP_FRUN	93
.23	Data Provider /STDF/DP_BPA.....	95
.24	Data Provider /STDF/DP_TEST.....	96
.25	Data Provider /STDF/DP_SQLSCRIPTS.....	98
.26	Data Provider /STDF/DP_TRANSACTION.....	99
.27	Data Provider /STDF/BEX_VIEW	101
.28	Data Provider /STDF/DP_TABLE	102
.29	Data Provider /STDF/DP_JSM (Job Scheduling Monitoring)	107
.30	Data provider /STDF/DP_ATC.....	112
.31	Data provider /STDF/DP_GADGET_CALCULATION	116
.32	Data Provider /STDF/DP_SAM.....	118
.33	Data Provider /STDF/DP_ALERT_SEARCH	124
.34	Data Providers Status	130
Renderers		131
.1	Line Chart.....	131
.2	Bar Chart.....	131
.3	Column Chart	132
.4	Line Column	133
.5	Pie Chart	134
.6	Donut Chart	134
.7	Dual Bar Chart.....	135
.8	Dual Line	135
.9	Dual Line-column.....	136
.10	Alert Table.....	136
.11	Dynamic Table.....	136
.12	SLR table renderer	141
.13	SLR Renderer.....	141
.14	Stack Bar Chart	142
.15	Stack Column Chart	143
.16	Stack_Column_Chart_2Label	143
.17	Table History renderer.....	145
.18	Trend Table Renderer	145
.19	Waterfall Chart.....	146
.20	HTML renderer	146
.21	Renderers Usage	147
Limitations specific to internet explorer (IE)		150

Overview

This document details the usage, configuration and administration of OCC Dashboard. OCC Dashboard is one of the dashboard models delivered with Focused Insights for Solution Manager.

OCC Dashboard let you create in a convenient and simple way, appealing and powerful dashboards with direct access to most important metrics stored inside your Solution Manager. It is easy to create fully custom views which display and mix up those metrics in different time frames and different granularities.

You can build as many gadgets and dashboard instances as you want and publish those using dedicated URLs. Most common web browsers whether they run on a computer or on mobile devices can display OCC dashboards (for details, see also SAP note 1716423 - SAPUI5 Browser Support).

OCC Dashboard includes an auto refresh mechanism to be integrated easily in your operation control center.

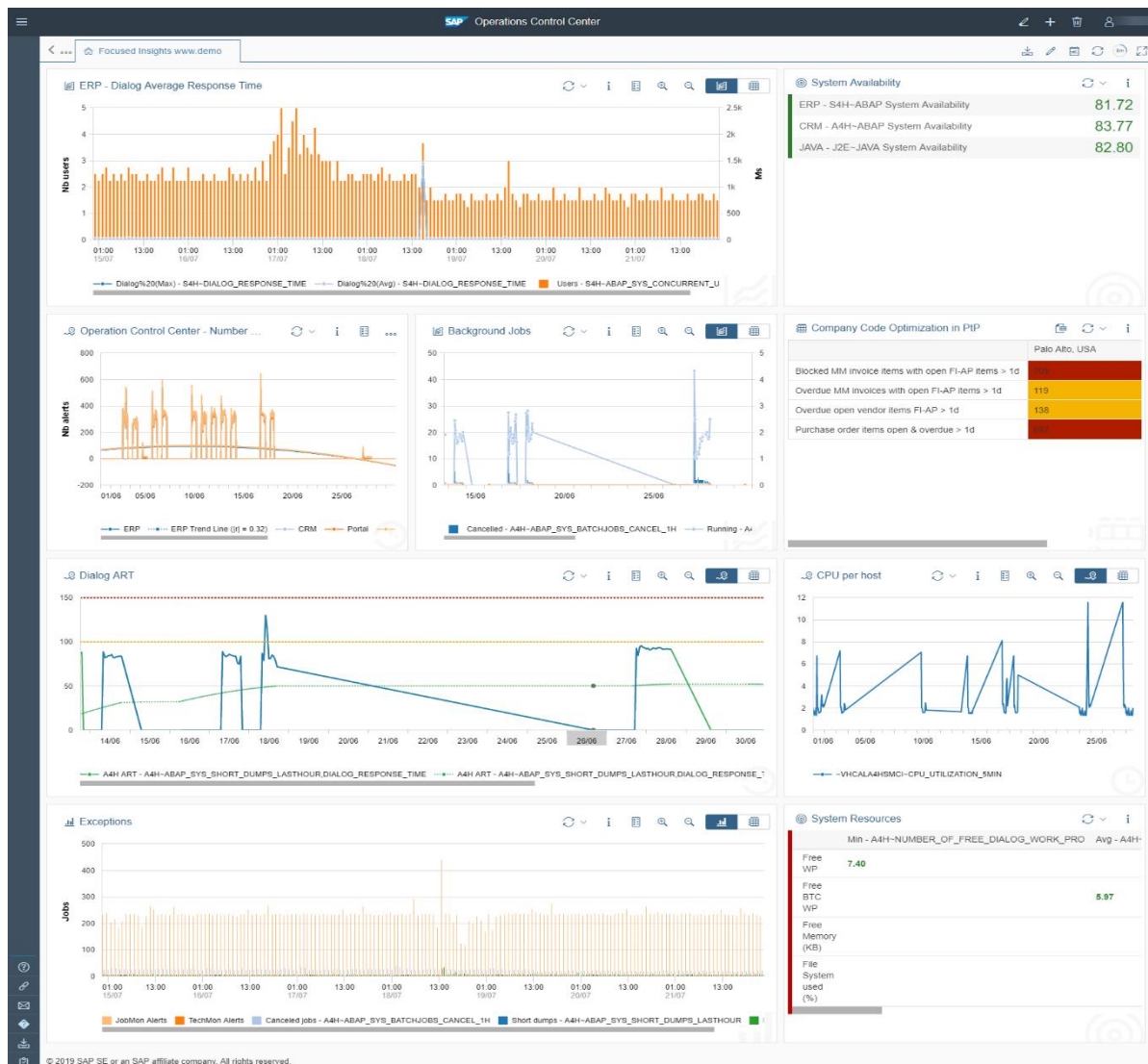


Figure 1. UI View

Usage

The OCC Dashboard relies on two main graphical components:

- Dashboard: A free-defined row-column layout combining different graphical charts named 'Gadgets'. You can create and distribute different dashboards via URLs and control the access to your dashboards via SAP authorization.
- Gadget: Charting capabilities that could be shared via multiple dashboards.

A Gadget supports multiple data providers and data renderers.

- The data providers correspond to the different reporting/monitoring use-cases in SAP Solution Manager such as System Monitoring, EEM, and BPA, BPMon...
- The data renderers are grouped into a library of graphical components used to visualize the different data sources. You can select different graphs as line-chart, bar-chart, ...

In addition, time frame selection could be applied to a single gadget or an entire dashboard.

.1 Direct Access URLs

To access directly a specific dashboard instance, use the following notation, where <ID> is the unique identifier of the dashboard instance.

Remark: This direct URL is built automatically in the address bar when you navigate to the dashboard instance.

https://<solman_host>:<solman_port>/sap/bc/ui5_ui5/stdf/occ_dash/index.html?configId=<ID>

To access directly a specific gadget, you can use the following notation, where <ID> is the unique identifier of the dashboard instance and <ID_GADGET> is the unique identifier of a gadget it contains. Remark: This direct URL is built automatically in the address bar when you navigate to the gadget.

https://<solman_host>:<solman_port>/sap/bc/ui5_ui5/stdf/occ_dash/index.html?configId=<ID>-<ID_GADGET>

To access to several dashboards in the same time, you can use the following notation where <ID1>, <ID2>, <ID3>... are unique dashboard instance's identifier. From this URL it is also possible to manually navigate from one dashboard instance to the other using the arrows.

https://<solman_host>:<solman_port>/sap/bc/ui5_ui5/stdf/occ_dash/index.html?configId=<ID1>,<ID2>,<ID3>...

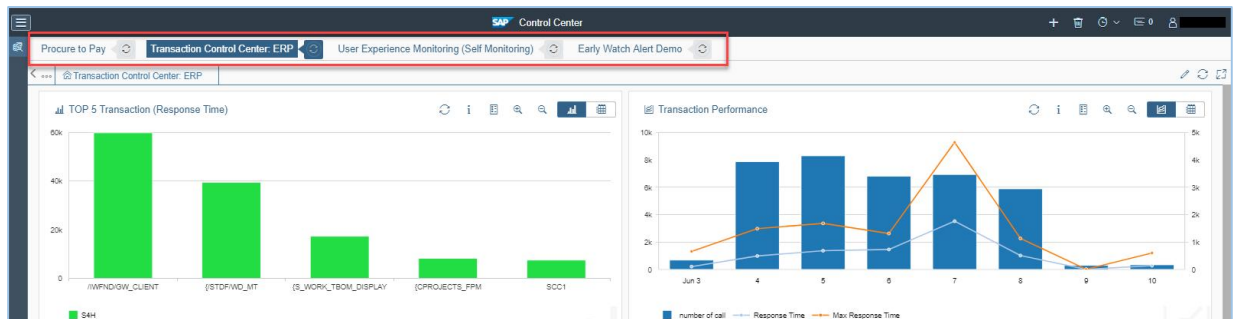


Figure 2. Instances View

.2 Zooming in on a Gadget

To zoom in on a gadget, just click on its title.

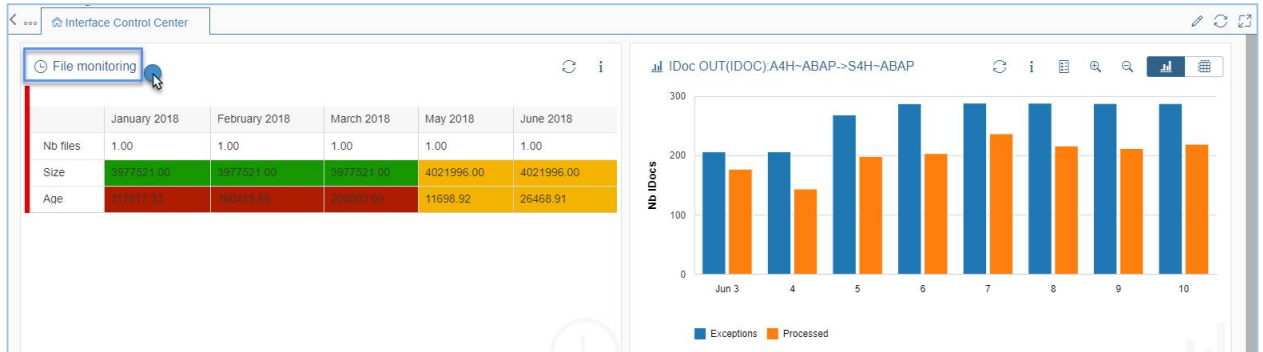


Figure 3. Zoom a gadget (1)

To come back to the dashboard, click on the dashboard's title in the breadcrumb.

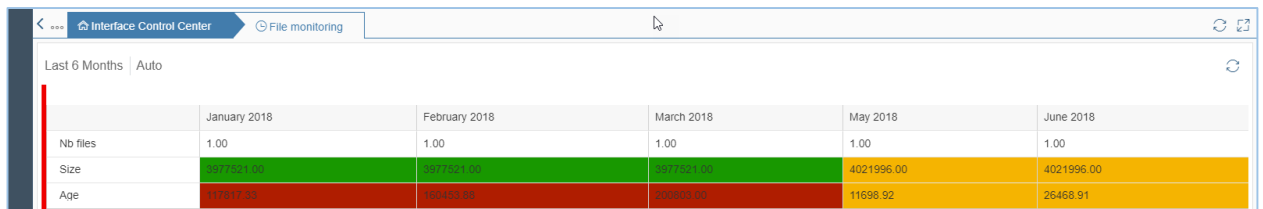


Figure 4. Zoom a gadget (2)

Dashboard

.1 Instance View

The first view is the Instance View. The dashboard will show level 1 items by instances. You can access it by using Focused Insights Launchpad as follow:

- Select OCC tile.

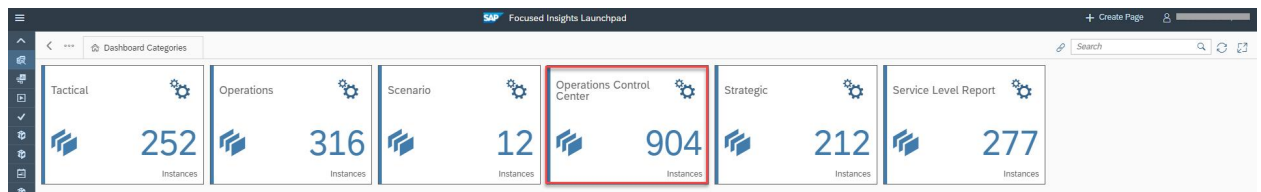


Figure 5. Select OCC Tile

Select the instance you want to go to, and select button Go to Dashboard.

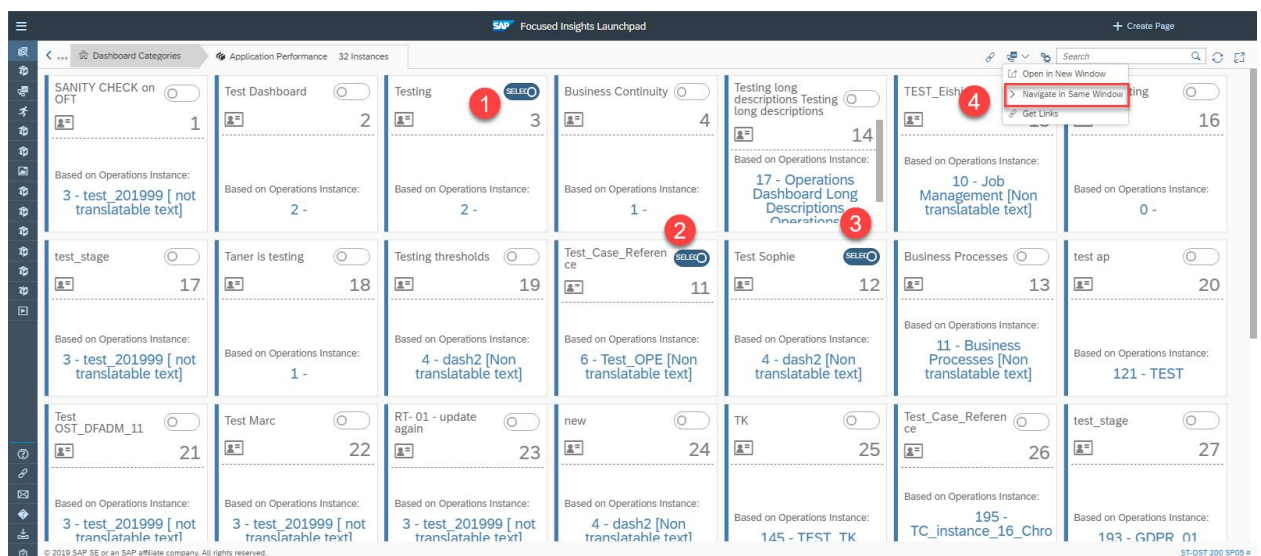


Figure 6. Select instances

Once inside the dashboard with selected instances, you will see as below:

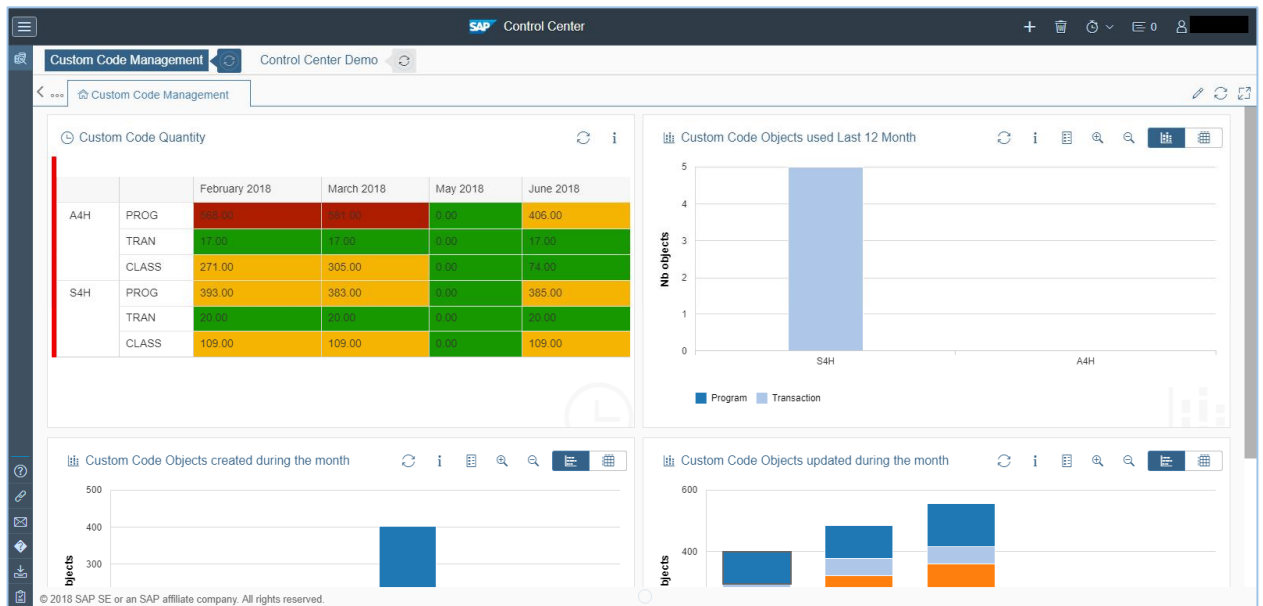


Figure 7. OCC Dashboard: Instances View

The dashboard is showing each instance in the instance selection header. You can switch between instances by clicking the title of the instance. Each instance is composed of several gadgets.

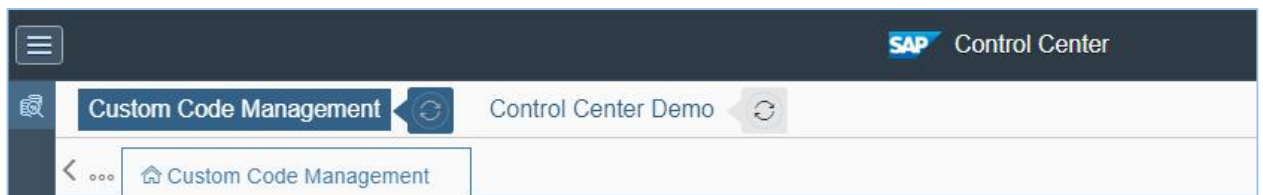


Figure 8. Instance Selection Header

.2 Dashboard Layout

When you enter the application, if not a specified configid is added to the application URL , the user is able to configure a new instance else he access to the selected dashboard content.

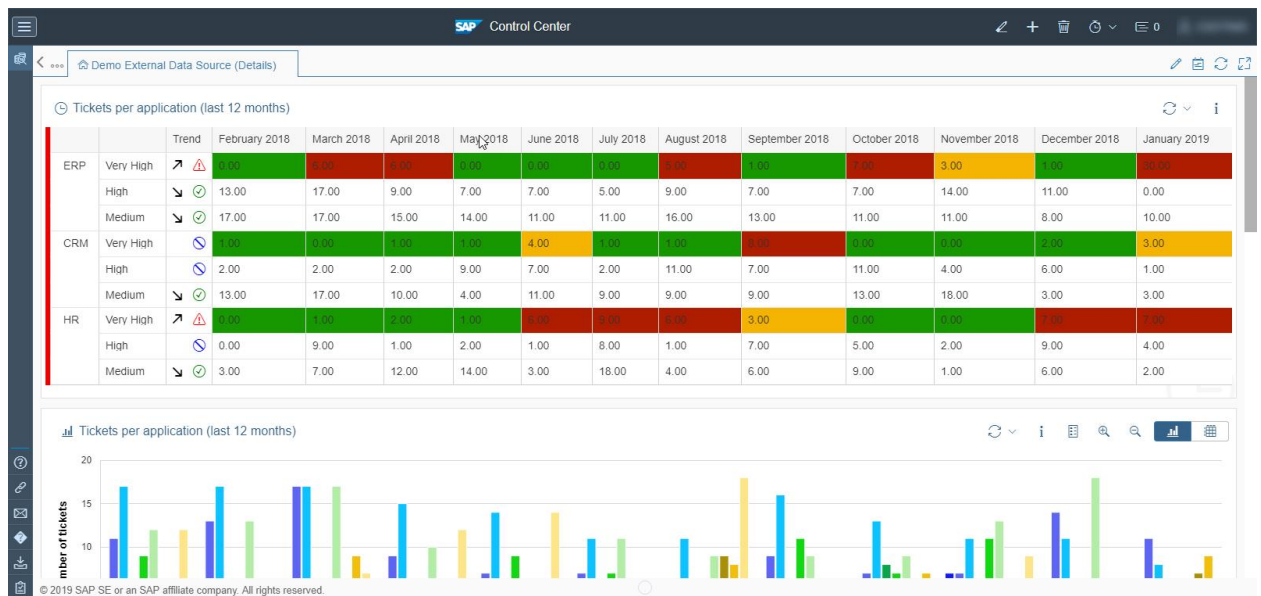


Figure 9. Dashboard Layout

.3 TNT/ UOC Shell Header and URL parameters

The header is composed of:

- 1- The button "Toggle side Navigation" to hide or show the description of the buttons on the left side
- 2- SAP Logo.
- 3- Dashboard Model Name: Control Center.
- 4- User Settings button with user name as label. When chosen, it provides settings that user can set for the dashboard:

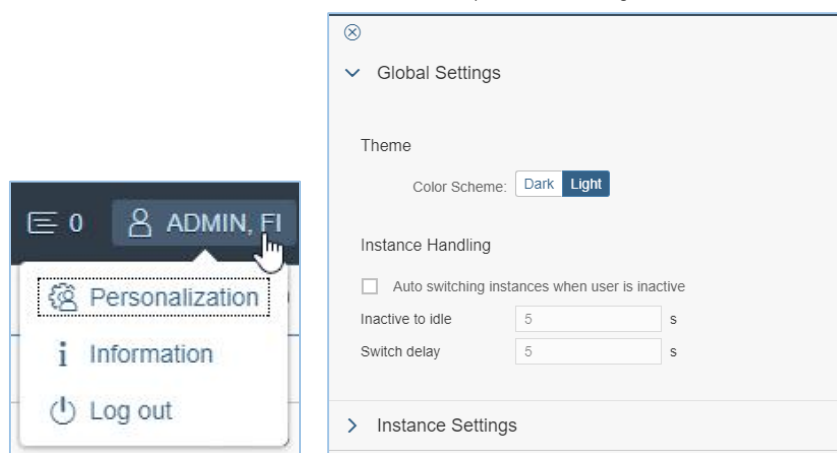


Figure 10. User Settings Dialog

- Global Settings:

You can choose the color scheme either Light (default selected), or Dark as in image below.

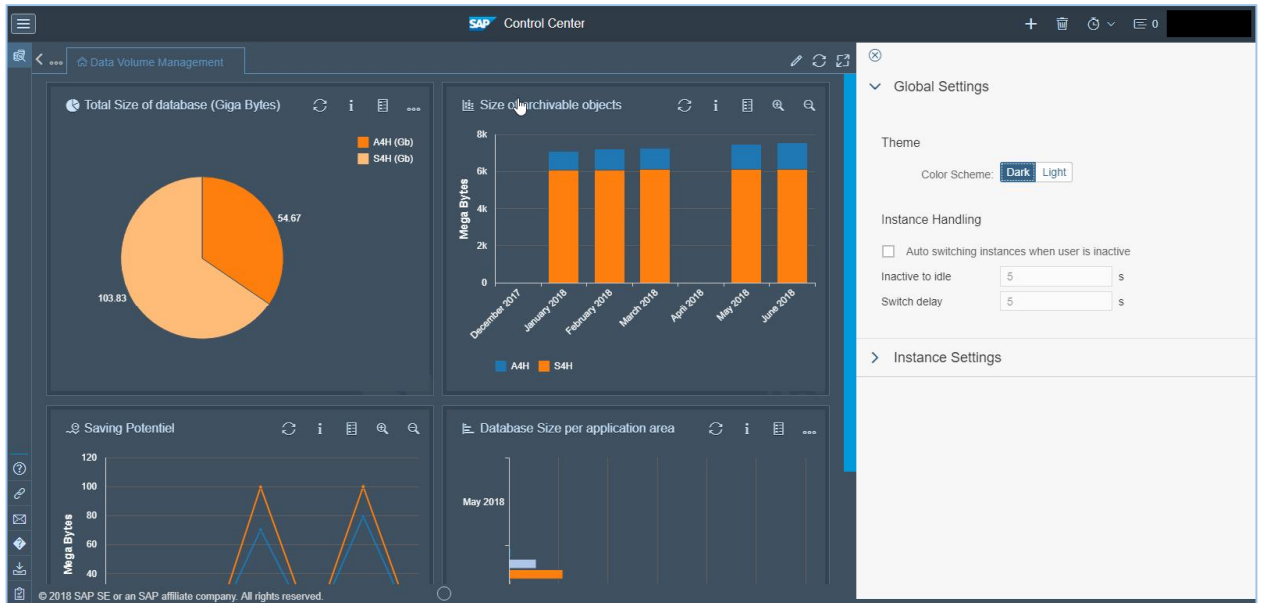


Figure 11. OCC Dashboard: Dark Theme

- 5- The header also has the timer control which apply globally to all the refresh timers of all instances. Select the button, you will see the list of possible controls on the timers as shown in image below

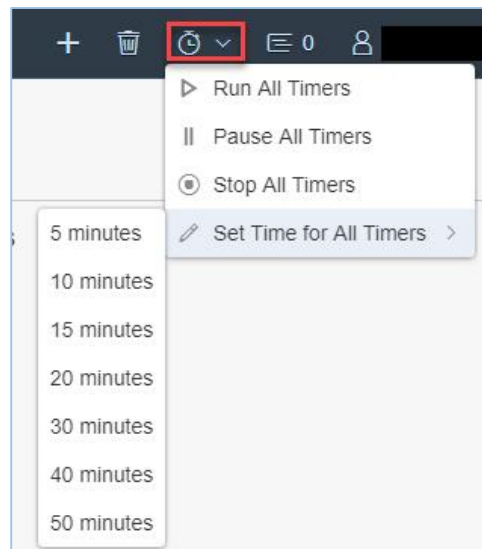


Figure 12. Instance Timers Controls

Each instance will have its own refresh timer, which shows as a circle with refresh icon inside next to the instance name. You can click on the refresh icon to manually refresh the data of the instance. This will not reset the time of the timer.

- 6- The header also has the two buttons which permit to create new instances or to delete selected instance.



Figure 13. Instance Administrative

URL parameters:

The user can persist the below URL parameters when calling a dashboard instance:

- &colorscheme=dark to select the dark mode.
- &fullscreen=true starts dashboard in full screen.
- &autoSwitchOnIdle=true starts the dashboard in carousel mode.
- The maximum number of messages to store in the message dialog.
- The Auto Switching of Instances feature if checked:
 - o By setting the inactive time for the dashboard to determine user is idle to activate the function.
 - o And time waiting between switch of instances
- &hardRefresh = X ' (X = number of hours) This option is used in order to clear the browser cache after a configurable period.
 - Ø In IE, the Browser will be closed and restarted again in order to reinitialize the memory.
 - Ø In chrome and other browsers, the browser will be refreshed after the X hours.

.4 Left Utilities Pane

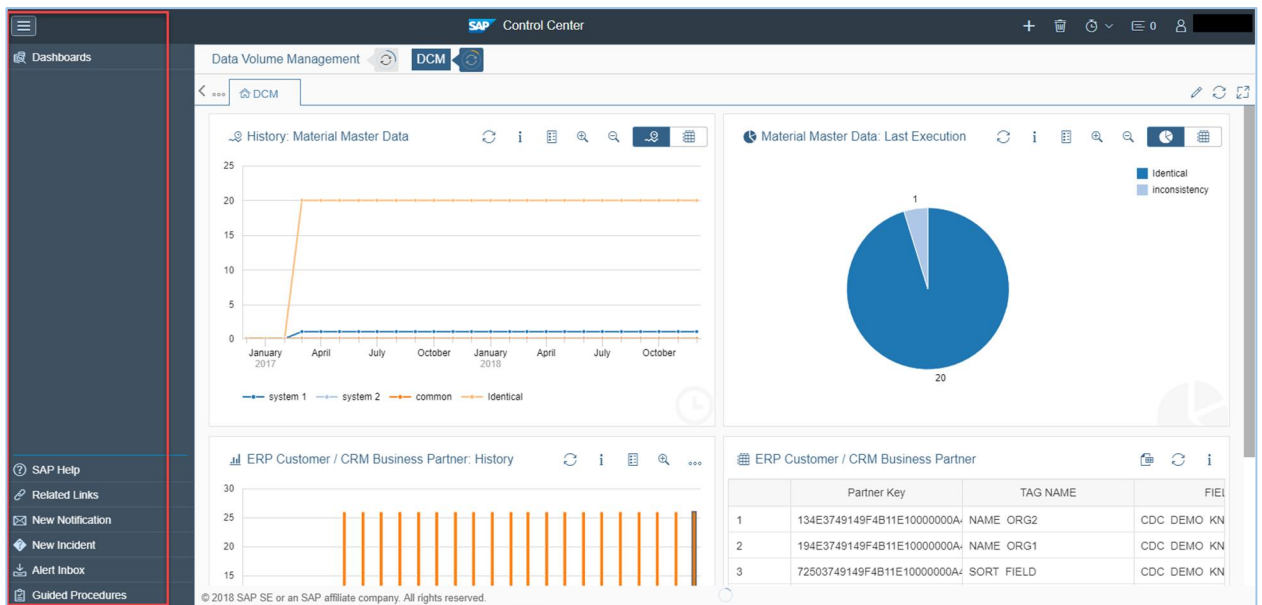


Figure 14. Left Utilities Pane

- 1- The button "Toggle side Navigation" to hide or show the description of the buttons on the left side
- 2- The "SAP Help" button is used to be redirected to SAP help page.
- 3- When using the "New Notification" button a pop up is appearing to create the new notification and send it via SMS or E-mail.

[illegible]

Figure 15. Create notification

- 4- When using the "New Incident" button a pop up is appearing to choose the incident type and enter the incident details.

Create Incident

Select incident type

Incident Type	Description
ZMIN	ZIncident >
SMIN	Incident (IT Service Management) >
SMFG	Functional Gap (ICC) >
SMDT	Test Case Error >
SMOR	Monitoring Requirement >
S1DM	Defect >

Figure 16. Create Incident

- 5- The "Alert Inbox" button is used to be redirected to the system alert Webdynpro.

Auto Refresh

Never

Refresh

Alert Details

New Window

Active Queries

Alert Inbox

System Alerts (56)

Database Alerts (0)

Host Alerts (0)

PI Mon Alerts (0)

UX Mon Alerts (0)

Self Mon Alerts (0)

BI Mon Alerts (0)

Exception Mon Alerts (0)

Interface Mon Alerts (0)

EarlyWatch Alerts (0)

IT Infrastructure Mon Alerts (0)

Job Mon Alerts (0)

Alert Inbox - System Alerts

Show Quick Criteria Maintenance

Change Query

Define New Query

Personalize

View: [Standard View]

Confirm

Show Action Log

Change Configuration

Postponement

Navigate to

Problem Analysis

Print Version

Export

Alert Name	Category	Managed Object	Type	Ext. System ID	TS Type	Instance Description	Current	Priority	Worst	Sold-To Party	Total	Changes	Problem Analysis	Status
ABAP System not available		A4H-ABAP		A4H	ABAP			Very high			10882	2		
Disabled Metrics		HDB00002		HDB00002				Very high			5003	8		
Disabled Metrics		HDB		HDB				Very high			5610	13		
Database Recoverability (log mode OVERWRITE)		HDB00001		HDB00001				Very high			17	1		
ABAP Instance not available		A4H-ABAP-vhcala4hsmc1_A4H_00		A4H	ABAP	vhcala4hsmc1_A4H_00		Very high			19512	3		

Last Refresh

14.06.2018 13:40:04 CET

Refresh

Figure 17. Alert Inbox

- 6- The "Guided Procedures" button is used to be redirected to the Guided Procedure list of All Application Areas

Name	Description	Version	Last Executed By	Last Executed On	GP Plans	Active	Productive	Hidden
Track Projects	Track Projects	2		00.00.0000 00:00:00		●	✓	<input type="checkbox"/>
Prioritized Objects: Create New Analysis	Create Decision Maker Analysis	2		00.00.0000 00:00:00		●	✓	<input type="checkbox"/>
Extra Solution Documentation Content Activations	Perform additional Solution Documentation Content Activation runs	6		00.00.0000 00:00:00		●	✓	<input type="checkbox"/>
OVERDUE_DELIVERIES	Outbound Deliveries overdue for GI	4	BPOP_CONFIG	26.03.2018 13:37:43		●		<input type="checkbox"/>
GP for Incomplete Sales Documents	GP for Incomplete Sales Orders	3		00.00.0000 00:00:00		◇		<input type="checkbox"/>
Onboarding a new hire	Onboarding a new hire	1		00.00.0000 00:00:00		●		<input type="checkbox"/>
Handling Enqueue Alerts	Handling Enqueue Alerts	5		00.00.0000 00:00:00		●	✓	<input type="checkbox"/>
GP for Incomplete Sales Documents	GP for Incomplete Sales Orders	2		00.00.0000 00:00:00		●		<input type="checkbox"/>
HANA Alert 35: Check data backup exists	HANA Alert 03 Check inactive services	13		00.00.0000 00:00:00		●	✓	<input type="checkbox"/>

Figure 18. Guided Procedure

.5 The Footer

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Figure 19. The footer

The footer contains the Copyright in the left area.

.6 The Content Area

The content area is in the middle-center of the dashboard. This is where you see the content of the selected instance.

This area is covered by the navigator which contains:

- 1- Navigating items: which show where you are, and where you are from
- 2- The toggle Edit Mode button
- 3- The full screen button which allows you to show only the content area.
- 4- The Refresh Button
- 5- The set dashboard's global time range

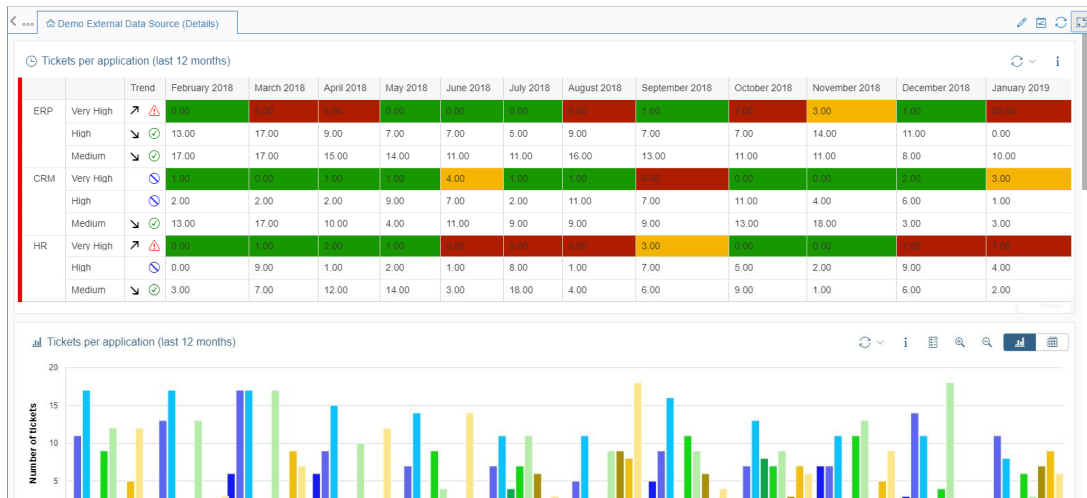


Figure 20. Content Area

.7 Gadgets

The default period and default resolution are defined at the dashboard level in the dashboard settings tabs:

Dashboard Settings
Id - 209

Title: Performance

Columns: 3 Rows: 3

Time Range:

Period: Auto

Resolution: Auto

Figure 21. Set Dashboard's Global Time Range

It can be overridden at the gadget level in the gadget settings tab

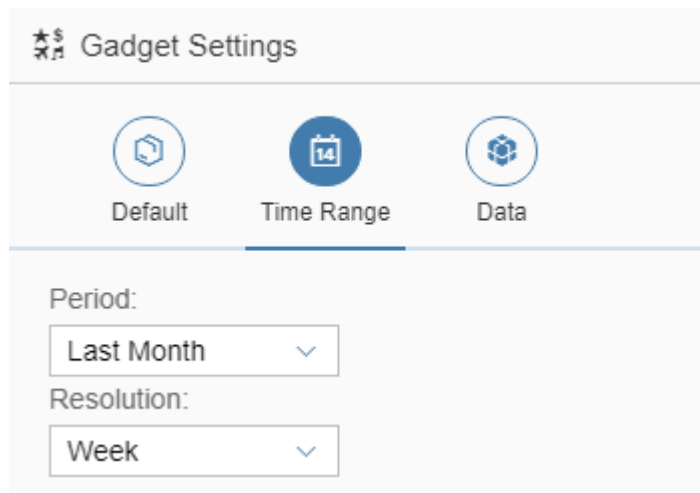


Figure 22. Set gadget's Time Range

At runtime, we can choose a time range using the button set dashboard's global time range but this is only applicable with the gadgets which had auto as period and auto as resolution and only the display of the gadget will be changed. The configuration should still the same (Auto/Auto).

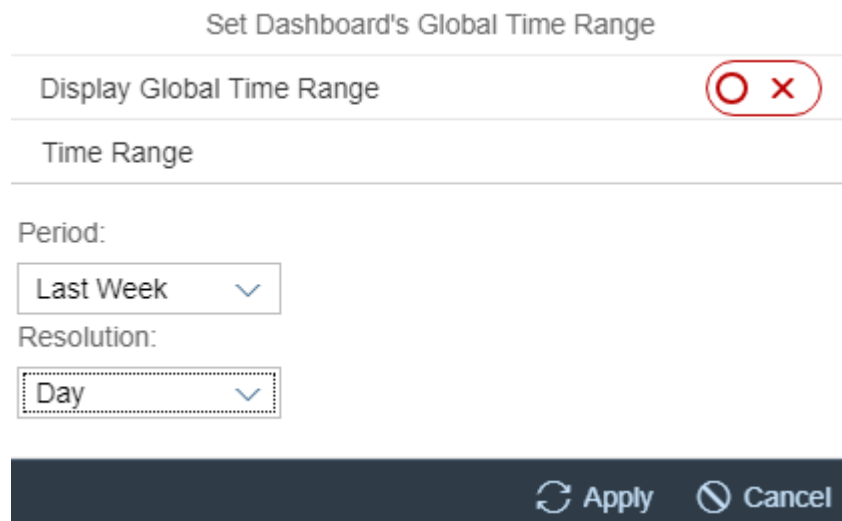


Figure 23. Set Dashboard's Global Time Range

After zooming in the gadget, the last update date is on the bottom of the gadget.

The dashboard's time frame is indicated in the top of every gadget.

It contains:

- 1- The period
- 2- The resolution

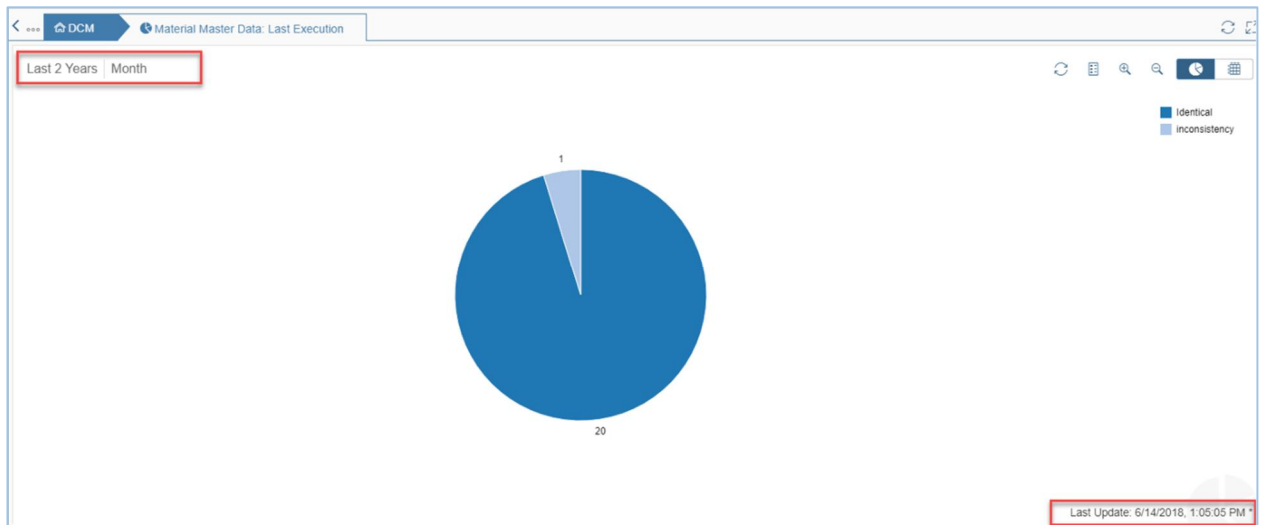


Figure 24. Gadget time frame

The refresh of gadget data is done by the Refresh button and the user can whether to refresh it (this will get the data from the cache if the data are still valid for the selected period/resolution) and to hard reload the gadget(always bypasses the cache).

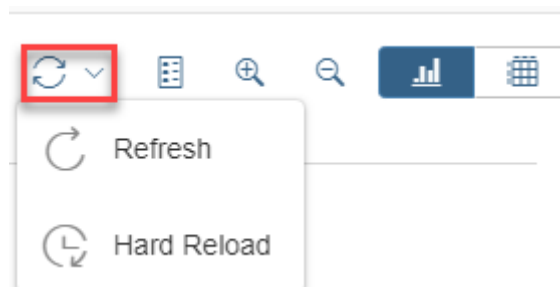


Figure 25. Refresh and Hard Reload buttons

Configuration

.1 Creating a dashboard

To create a new dashboard, click on the button "Create New Instance" button.

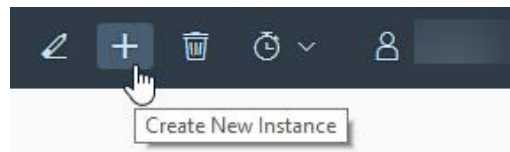
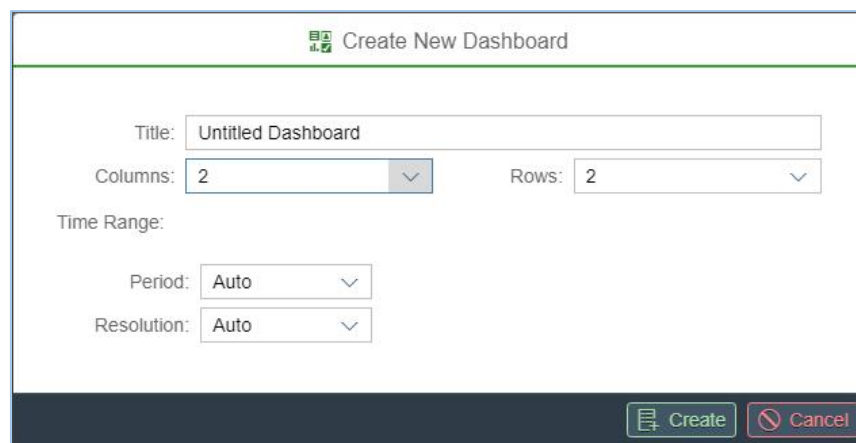


Figure 26. Create new instance

A popup setting is displayed. You should choose several information:

- 1- Title: This is the title of the dashboard
- 2- Columns, Rows: If you select for example 2 columns and 3 rows, your dashboard will contain $2 \times 3 = 6$ gadgets
- 3- Time range: You can optionally choose the time range for the dashboard (period and resolution)

A screenshot of a "Create New Dashboard" popup window. It has a title bar with a green icon and the text "Create New Dashboard". The form contains the following fields:

- Title: A text input field with "Untitled Dashboard" entered.
- Columns: A dropdown menu showing "2".
- Rows: A dropdown menu showing "2".
- Time Range: A section with two sub-fields:
 - Period: A dropdown menu showing "Auto".
 - Resolution: A dropdown menu showing "Auto".

At the bottom right, there are two buttons: "Create" (green) and "Cancel" (red).

Figure 27. Create New Dashboard Popup

.2 Editing a dashboard

To edit an existing dashboard, you must first access it and then press the button edit. Then, you'll be able to edit gadgets settings.



Figure 28. Dashboard Edit button

After pressing the edit button, a new view is displayed containing on the right side the Gadget Settings. On the left side we can access to Dashboard Settings, Dashboard Layout and Galleries:

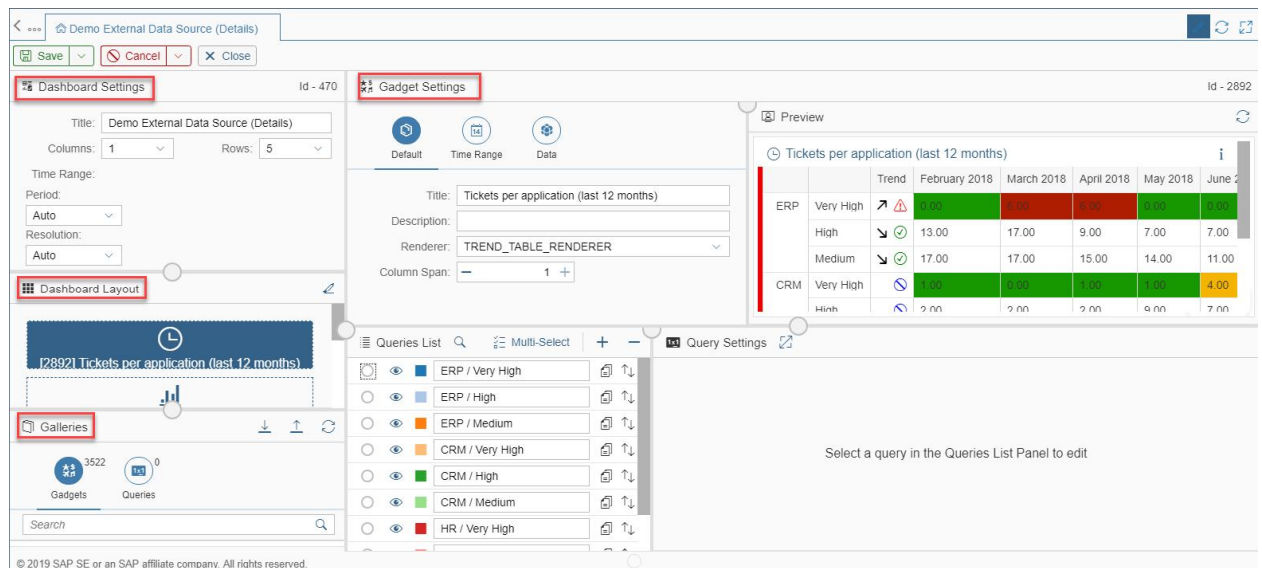


Figure 29. Dashboard Edit Mode

On the section Dashboard Settings, the dashboard id is displayed on the top right of the tab. You can edit several information:

- 1- Title
- 2- Columns, Rows
- 3- Time Range (Period and resolution)

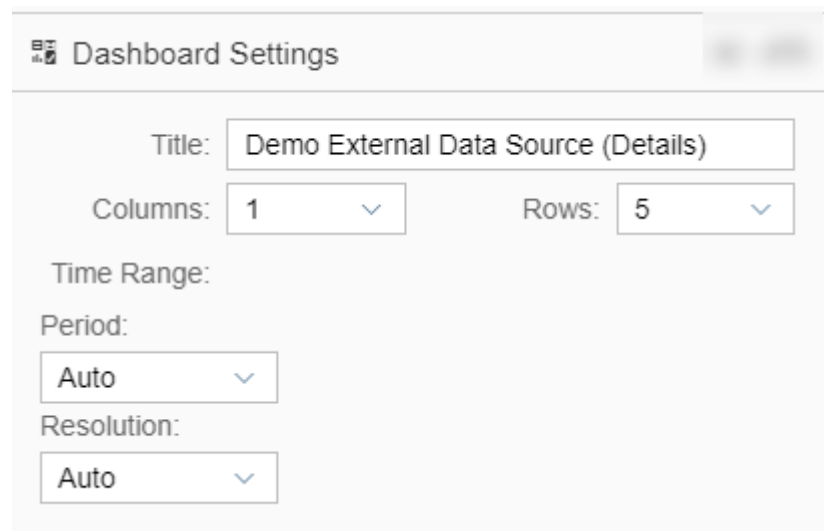


Figure 30. Dashboard Settings

On the section Dashboard Layout, we can see the list of the gadgets existing in the selected dashboard. Every gadget is represented by the title, the id and a figure corresponding to the used renderer.

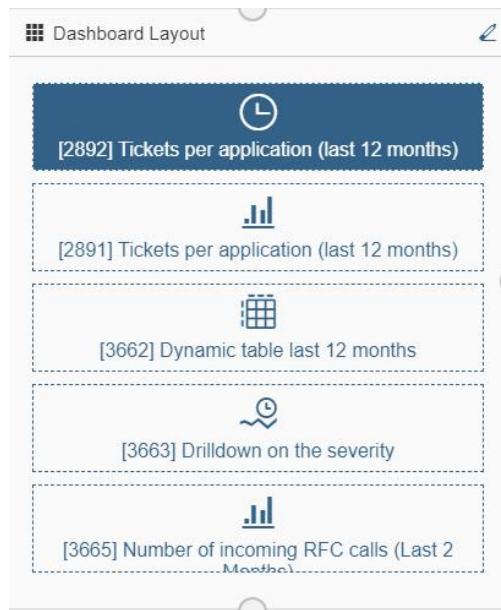


Figure 31. Dashboard Layout

You can reset a gadget to its initial phase using the button

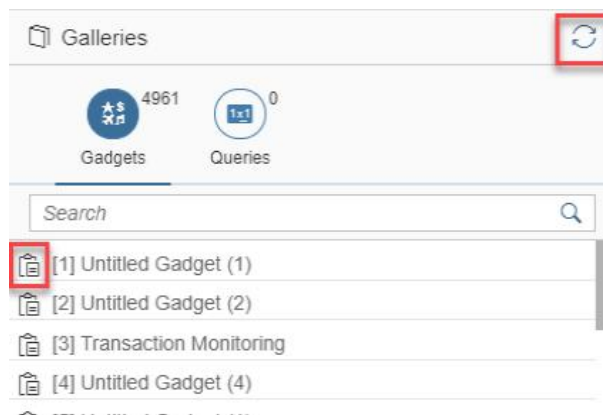


Figure 32. Galleries

You can also use the button Paste Gadget to paste a certain gadget in multiple dashboards.

If a gadget is empty the wanted gadget will be pasted directly

If a gadget is not empty a pop-up message containing two buttons (confirm and cancel) will appear.

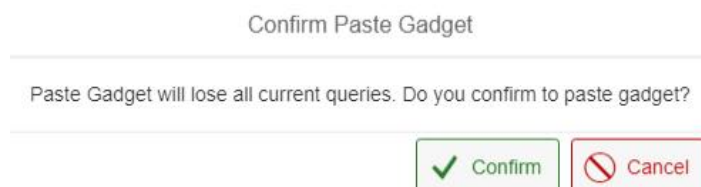


Figure 33. Confirm Paste Gadget Pop-up

If the user clicks on the button confirm the gadget will be pasted and if the user clicks on the button cancel nothing happens.

When the edit of the dashboard has been done you can choose to:

- 4- Save
- 5- Save and Close Editor
- 6- Cancel
- 7- Cancel and Close Editor
- 8- Close

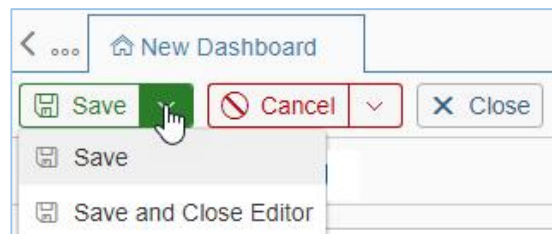


Figure 34. Edit Mode Bar

.3 Deleting a dashboard

To delete a dashboard, click on the "Delete Selected Instance" button.

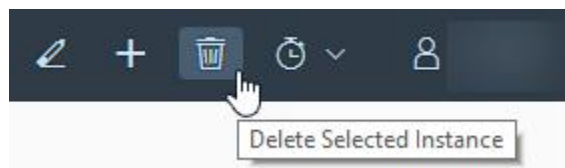


Figure 35. Deleting Dashboard

.4 Editing Gadget Settings

To edit the Gadget Settings, you need first to switch to dashboard edit mode by pressing the button "Toggle edit mode" button. Then, choose the gadget to be edited from the section "Dashboard Layout".

The gadget settings are then displayed on the right side of the page.

The id of the gadget is displayed on the top right of the section gadget settings.

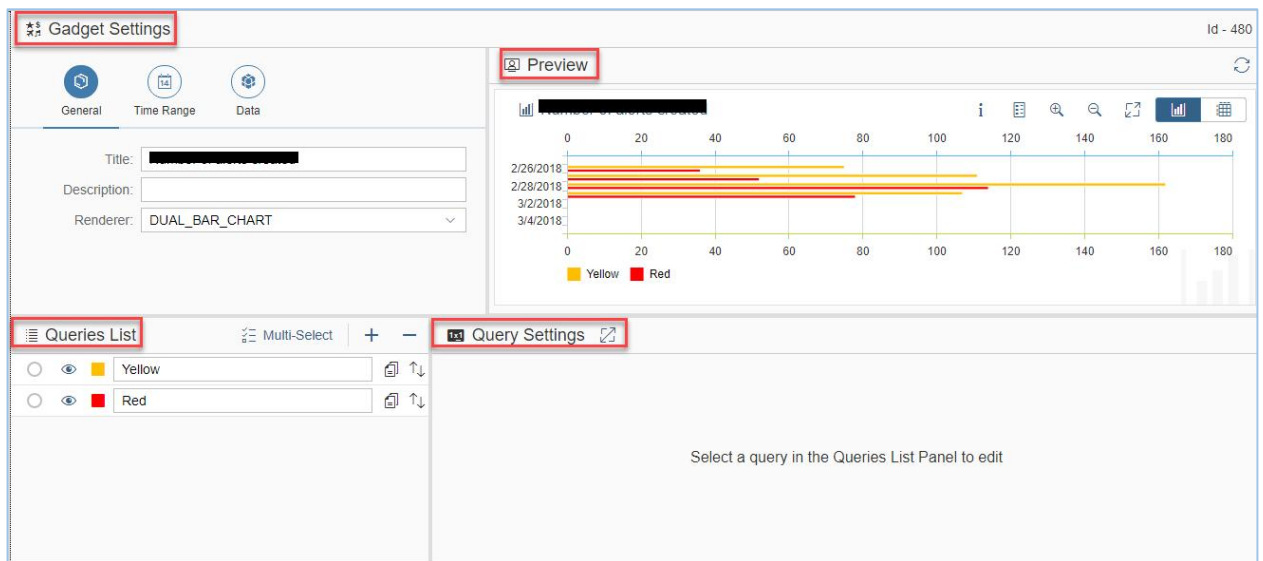


Figure 36. Gadget settings

Ø The gadget settings are composed of three tabs:

- Default:
 - \$ Title
 - \$ Description
 - \$ Renderer
 - \$ Display format à only in use of HTML Renderer and Column Span.

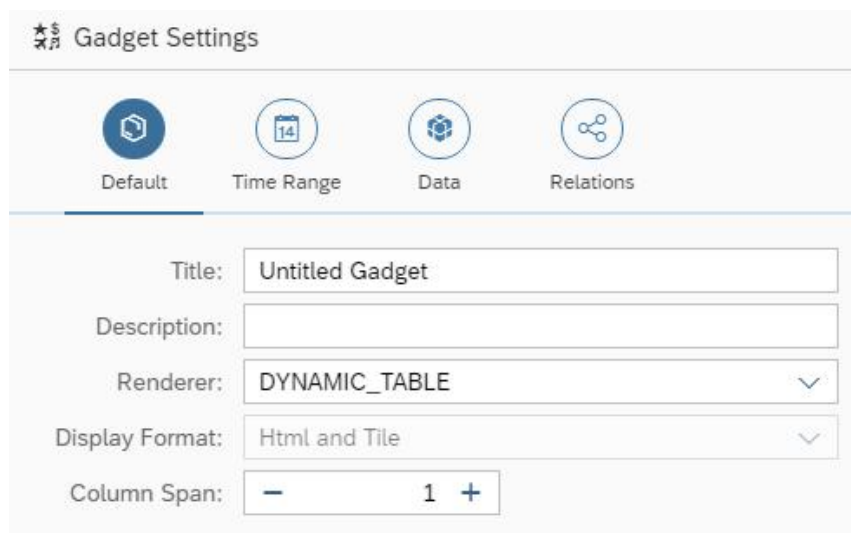


Figure 37. Gadget Settings General

- Time range: you can force the time range for the gadget. In this case, the gadget will ignore the dashboard's time frame.

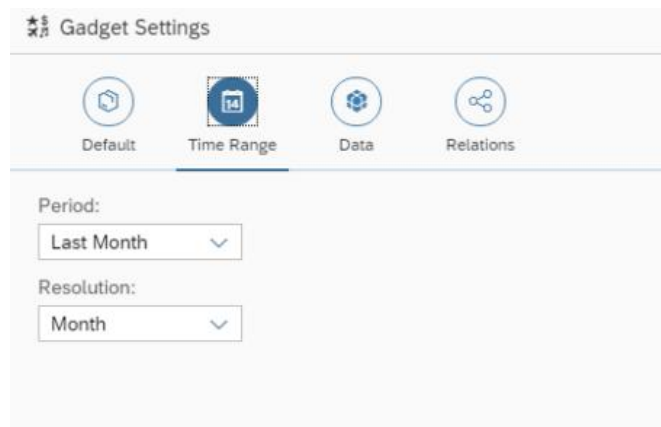


Figure 38. Time Range Tab

Note that if the gadget time range is "Auto|Auto", the gadget will inherit the global time range of the dashboard and a message strip will appear in the gadget time range configuration area. This message is a control that is used as an information bar.

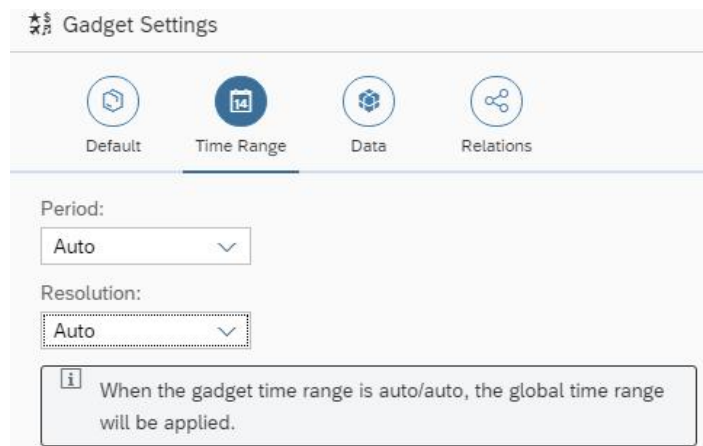


Figure 39. Time Range Values Auto/Auto

- Data: this tab is containing the fields:
 - Category unit
 - Value unit
 - Yellow threshold
 - Red threshold
 - Value max

Gadget Settings

Default Time Range **Data** Relations

Category Unit:

Value Unit:

Yellow Thresh... : Red Threshold:

Value Max: Value Min:

Figure 40. Data Tab

- Relations:

Gadget Settings

Default Time Range Data **Relations**

Dependants:

Figure 41. Relations Tab

The Relations tab enables you to select gadgets which are depended on the current selected gadget. Note that the dependents list is restricted to gadgets which are not itself and not its parent.

This feature works only for Time Axis Chart Renderers Type, select points or time spot in the chart to makes dependent gadgets react to the time range.

When multiple points are selected, the time range are selected from the left most point and the right most point.

When points are selected after some already selected, time range can be increase if either left most point and right most point changes.

When unselect points, dependents will reset their own time range.

- Ø The preview section: it contains the gadget view with minimized size. You can update data via the refresh button.

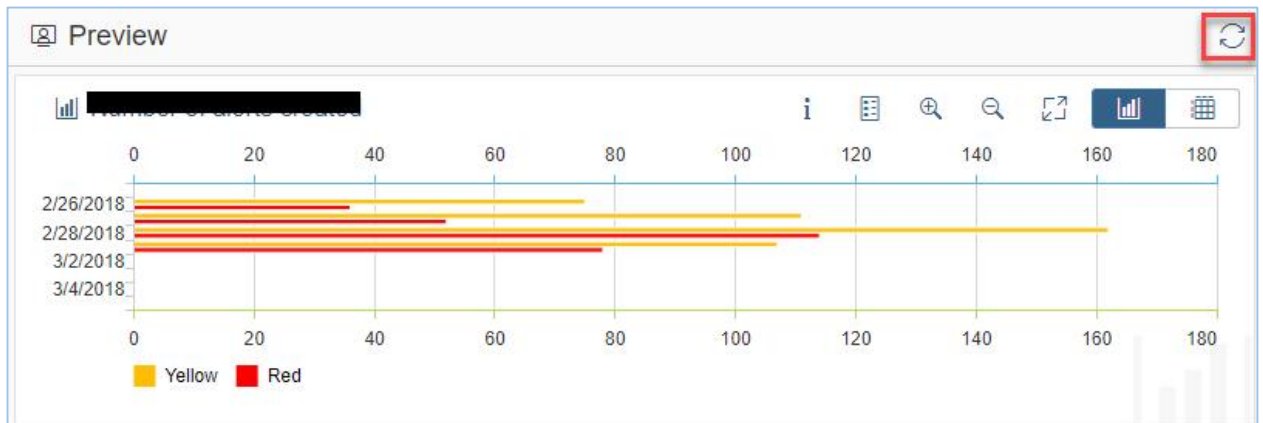


Figure 42. Preview section

- Ø The queries section: The list of queries existing in the gadget. You can use one of these buttons to edit the list of queries: choose to select or unselect the queries.
 - ✓ The button is used to add a query
 - ✓ The button is used to delete a query
 - ✓ Select All queries
 - ✓ Deselect All queries
 - ✓ Toggle Multi-select

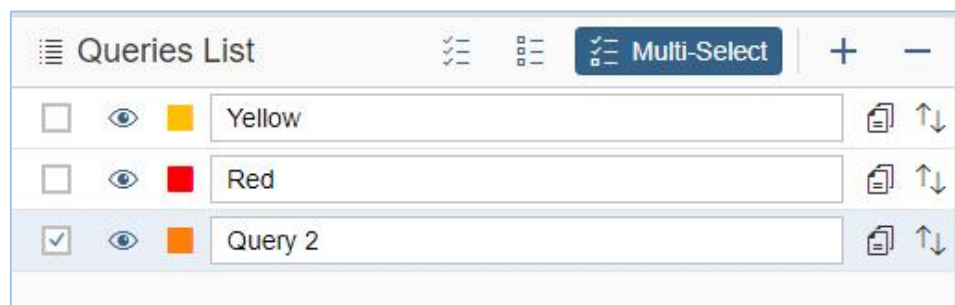


Figure 43. Queries list

For every query you can choose to:

- ✓ Copy the query
- ✓ Sort by Drag and Drop
- Query Settings: After selecting a query from the list, the settings are enabled with 3 tables:
 - Content: The configuration of the gadget strongly depends on the data provider you'll choose from the dropdown list

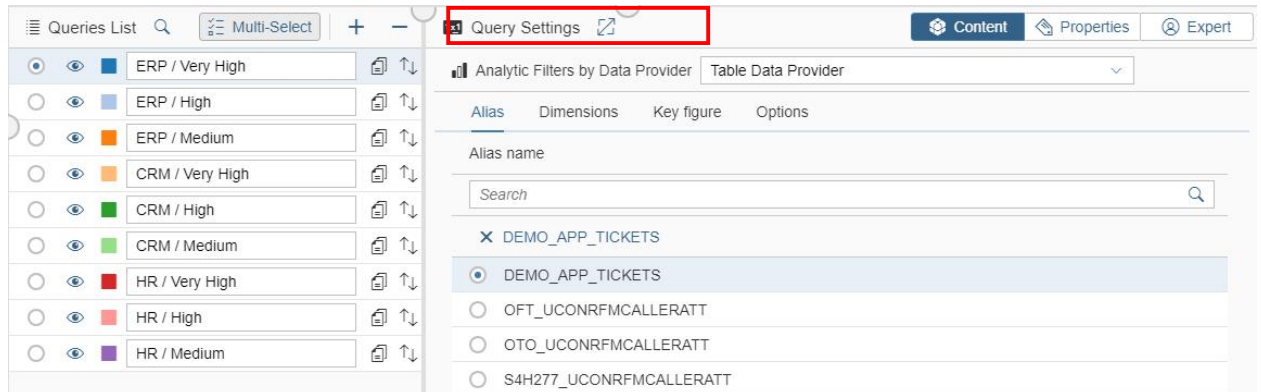


Figure 44. Query settings

- Properties: The properties Tab contains theses information:

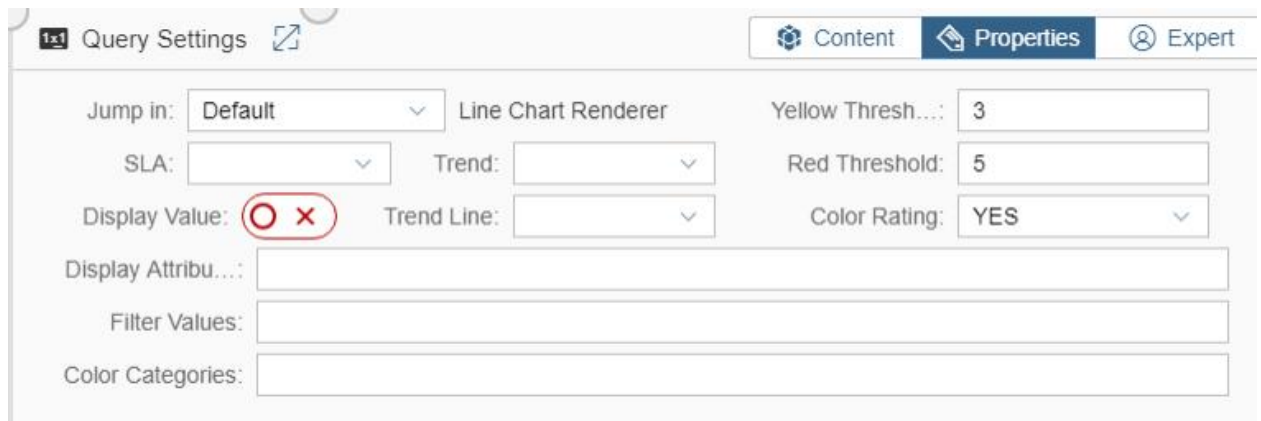


Figure 45. Query Properties

- Jump in

This feature enables the user to navigate from the current gadget to the same gadget but with a different renderer type, to another gadget or to a specific dashboard.

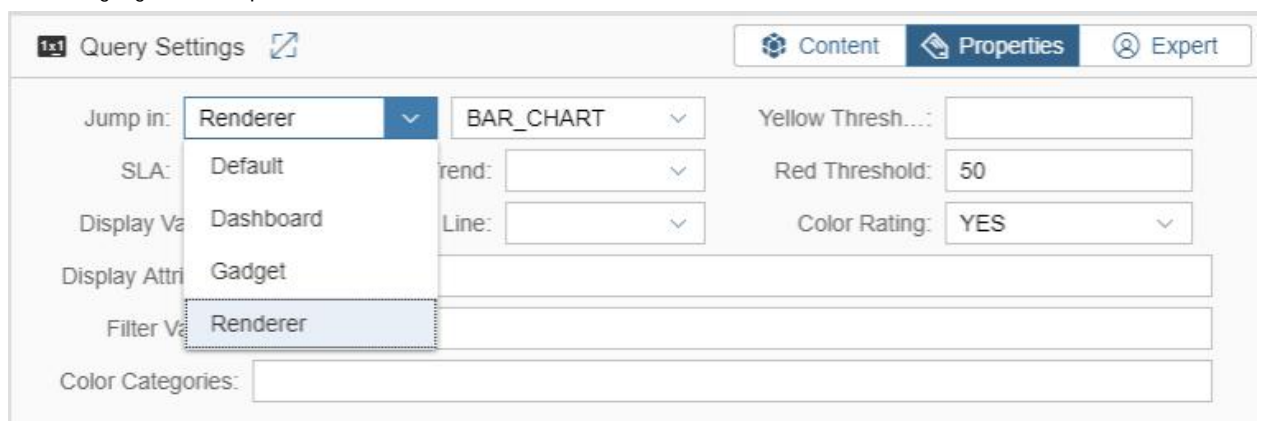


Figure 46. Jump in Property Values

When we double click on the gadget legend the user will redirected depending on the Jump in Property Configuration. In the following an example of the use of Jump in Property

Query Settings [🔗](#)

Content Properties Expert

Jump in: **Renderer** **BAR_CHART**

SLA: Trend:

Display Value: ☐ ☒ Trend Line:

Yellow Threshold:

Red Threshold: 50

Color Rating: YES

Display Attribute:

Filter Values:

Color Categories:

Figure 47. Jump in Property Configuration

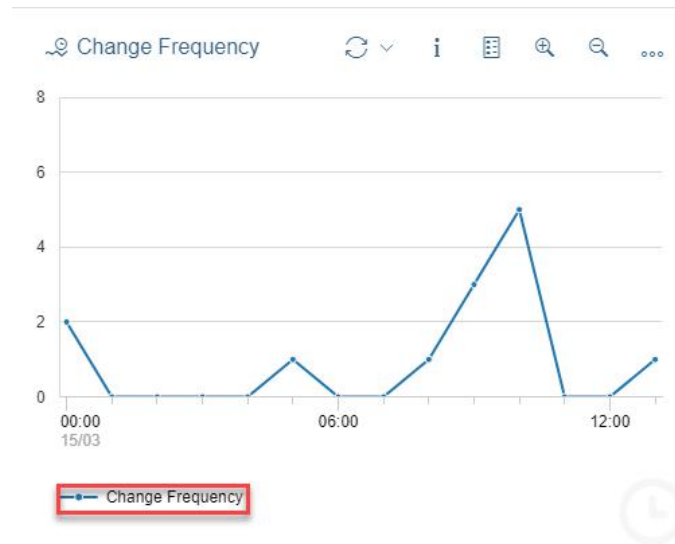


Figure 48. Detail View (1)

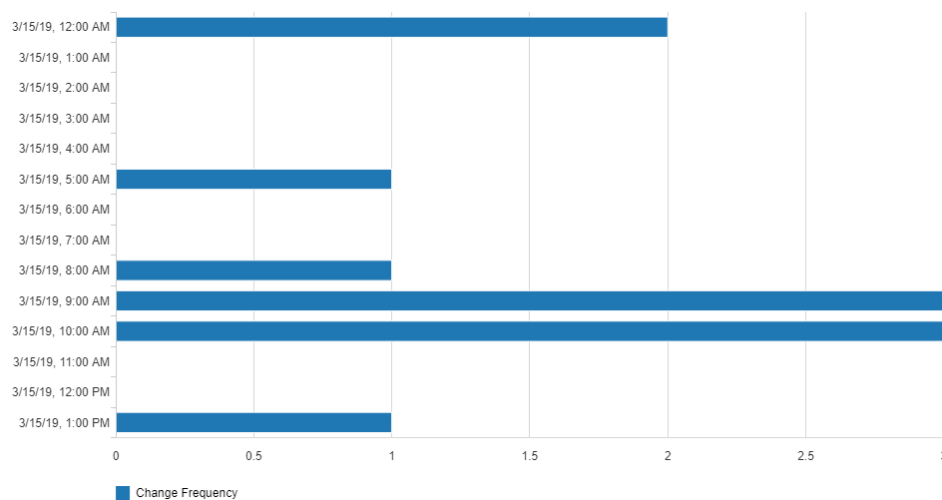


Figure 49. Detail View (2)

- SLA (Average, Maximum, Minimum, Sum, Last)

Figure 50. SLA Property Values

The SLA property has five values which are respectively MIN, MAX, AVG, SUM and LAST and it is used with the SLR Renderer and SLR Table Renderer

Average

Using the Average parameter the returned value is the average of all values returned by the query in the chosen period.

Minimum

Using the Minimum parameter, the returned value is the minimal one among all values returned by the query in the chosen period.

Maximum

Using the Maximum parameter, the returned value is the maximal one among all values returned by the query in the chosen period.

SUM

Using the SUM parameter, the returned value is the sum of all the values among returned by the query in the chosen period.

LAST

Using the LAST parameter, the returned value is the last value among returned by the query in the chosen period.

DIRECTION

Using the Direction parameter, the returned value is the average of all values returned by the query in the chosen period.

- Rating: based on the direction of the regression

- Quadratic Regression: $Y = BX^2 + AX + C$

§ Calculate B using the below formula: $B = \frac{Sx^2ySxx - SxySxx^2}{SxxSx^2x^2 - (Sxx^2)^2}$

§ If B is positive and the Trend is "UP", the rating will be GREEN

§ If B is negative and the Trend is "DOWN", the rating will be GREEN

§ Else, it will be RED.

- Linear Regression: $Y = BX + A$

§ Calculate B using this formula: $B = \frac{n(Sxy) - (Sx)(Sy)}{n(Sx^2) - (Sx)^2}$

§ If B is positive and the Trend is "UP", the rating will be GREEN

§ If B is negative and the Trend is "DOWN", the rating will be GREEN

§ Else, it will be RED.

SLA: DIRECTION			
B > 0		B < 0	
Trend = UP	Trend = DOWN	Trend = UP	Trend = DOWN

RAW

Using the Raw parameter, the returned value is the last of all values returned by the query in the chosen period.

- Rating:
 - If the last value is "POSITIVE" and the trend is "UP", the rating will be GREEN
 - If the last value is "NEGATIVE" and the trend is "DOWN", the rating will be GREEN
 - Else RED

SLA: RAW			
Last Value > 0		Last Value < 0	
Trend = UP	Trend = DOWN	Trend = UP	Trend = DOWN

RANGE

Using the Range parameter, the returned value is the average of all values returned by the query in the chosen period.

- Rating: Success (green) if all values of the series are between G2Y and Y2R.
 - Trend (Up, Down)

The Trend property has two values which are Up and Down, and it is used with the SLR_RENDERER, SLR_TABLE, TABLE_HISTORY_RENDERER, TREND_TABLE_RENDERER, DONUT_RENDERER

This renderer type compares the trend calculated from the set of point returned by the query.

If the trend calculated is an ascending trend and the user chose the value Up or the trend calculated is a descending trend and the user chose the value Down, there will be a green icon displayed.

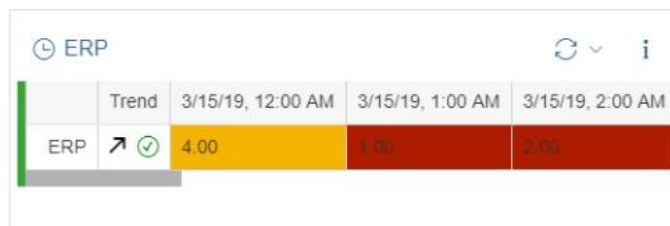


Figure 51. Detail View with a Green Icon

If the trend calculated is an ascending trend and the user chose the value Down or the trend calculated is a descending trend and the user chose the value Up, there will be a red icon displayed

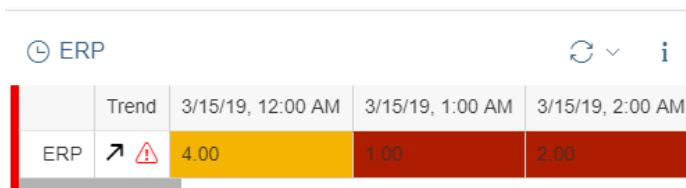


Figure 52. Detail View with a Red Icon

- Thresholds (yellow and red)

The user can also define depending on which limits the value rendered can be considered as good or critical and this feature is strongly tight to the previously explained Trend (up, down) feature,

The behavior is resumed in the following table:

Y2R < G2Y Trend = up	Y2R > G2Y Trend = Down	(Y2R = G2Y or G2Y not set) Trend = Down	(Y2R = G2Y or G2Y not set) Trend = Up	Y2R not set Trend = Down	Y2R not set Trend = Up	(Y2R not set and G2Y not set) or COLOR_RATING = no

Figure 54 : threshold setting's type

- Trend Line (Linear Regression, Quadratic Regression)

The Trend Line property has two values which are respectively Linear Regression and Quadratic Regression

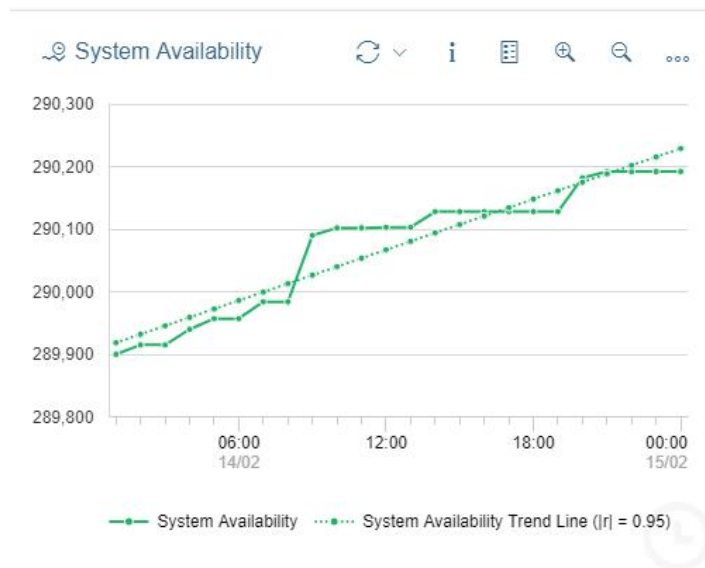


Figure 53. Detail View using Linear Regression
Trend Line

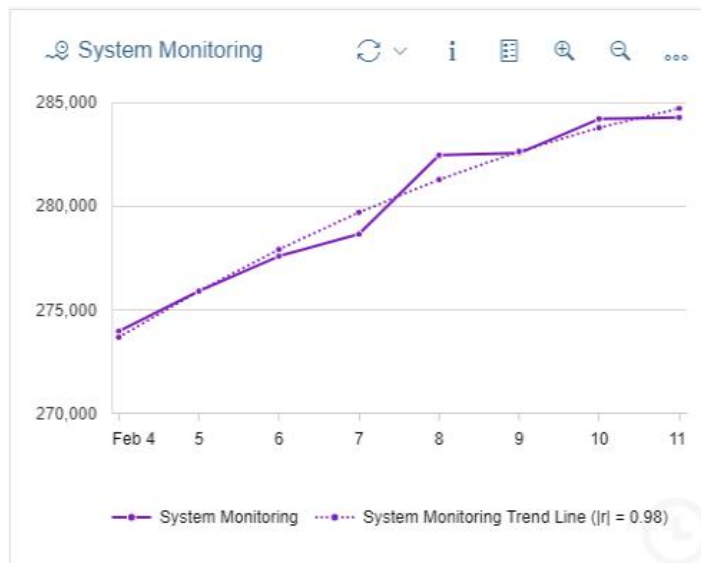


Figure 54. Detail View using Quadratic Regression
Trend Line

- Color Rating (Yes, No, Only)

The Color Rating property has three values which are respectively Yes, No and Only.

If Color Rating = YES

- If the value of the query is strictly less than the yellow threshold the value will be displayed in the green color.
- If the value of the query is between the yellow threshold G2Y (it represents the MIN value) and the red threshold Y2R (it represents the MAX value) then it will be displayed in yellow.
- If the value of the query is strictly superior of the Red threshold Y2R then it will be displayed in the red color.

In the following an example using the Donut chart showing the use of the color rating property.

Query Settings

Content Properties Expert

Jump in: Default Line Chart Renderer

SLA: Maximum Trend: Trend Line:

Yellow Threshold: 100

Red Threshold: 300

Display Value: ☒ ☐ ☐ Color Rating: YES

Display Attribute:

Filter Values:

Color Categories:

Figure 55. Color Rating Property Configuration

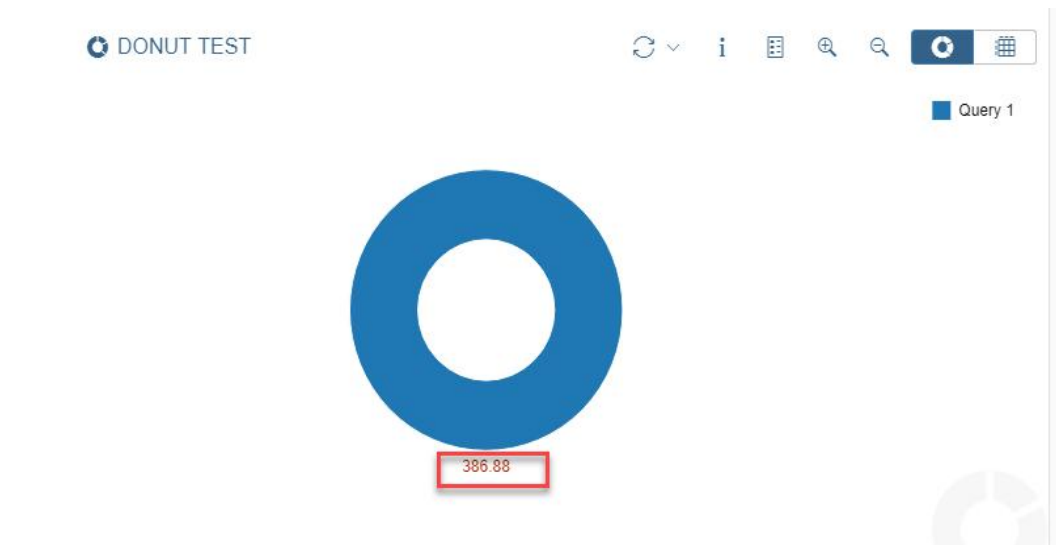


Figure 56. Donut Chart Detail View with a Red rating

The "Query Settings" panel is shown with the "Properties" tab selected. The configuration includes:

- Jump in: Default
- Line Chart Renderer
- SLA: Maximum
- Trend: (empty dropdown)
- Yellow Threshold: 100
- Red Threshold: 400
- Display Value: (radio button selected, with a red 'x' icon next to it)
- Trend Line: (empty dropdown)
- Color Rating: YES (highlighted with a red box)
- Display Attribute: (empty text field)
- Filter Values: (empty text field)
- Color Categories: (empty text field)

Figure 57. Color Rating Property Configuration

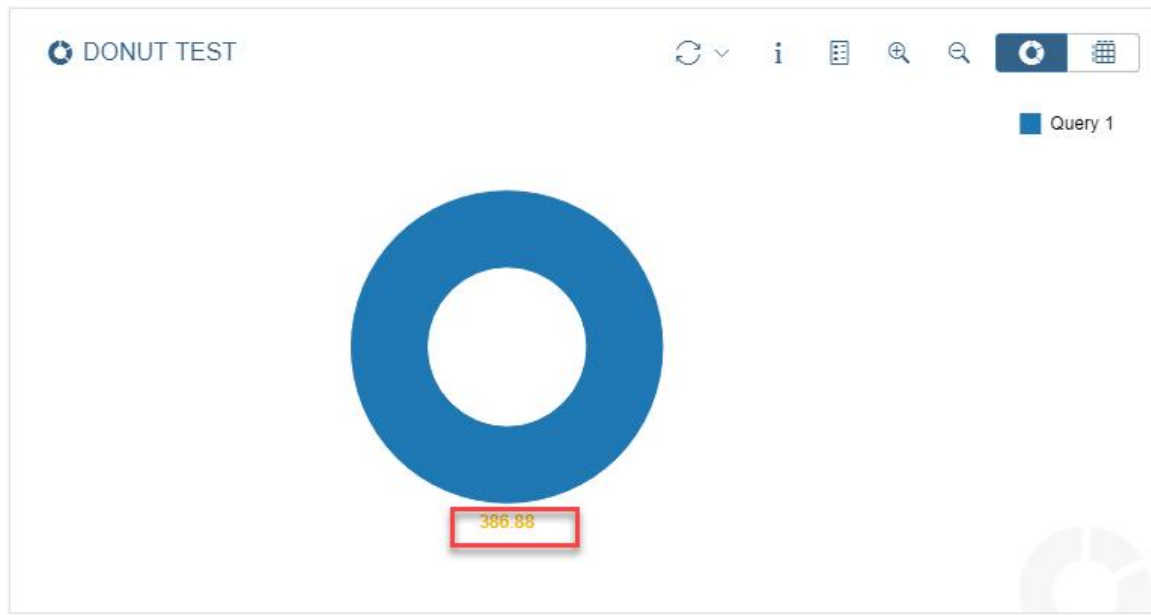


Figure 58. Donut Chart Detail View with a Yellow rating

1x1 Query Settings		Content		Properties		Expert	
Jump in:	Default	Line Chart Renderer	Yellow Thresh...:	400			
SLA:	Maximum	Trend:	Red Threshold:	450			
Display Value:	<input checked="" type="radio"/> <input type="radio"/>	Trend Line:	Color Rating:	YES			
Display Attribu...:							
Filter Values:							
Color Categories:							

Figure 59. Color Rating Property Configuration

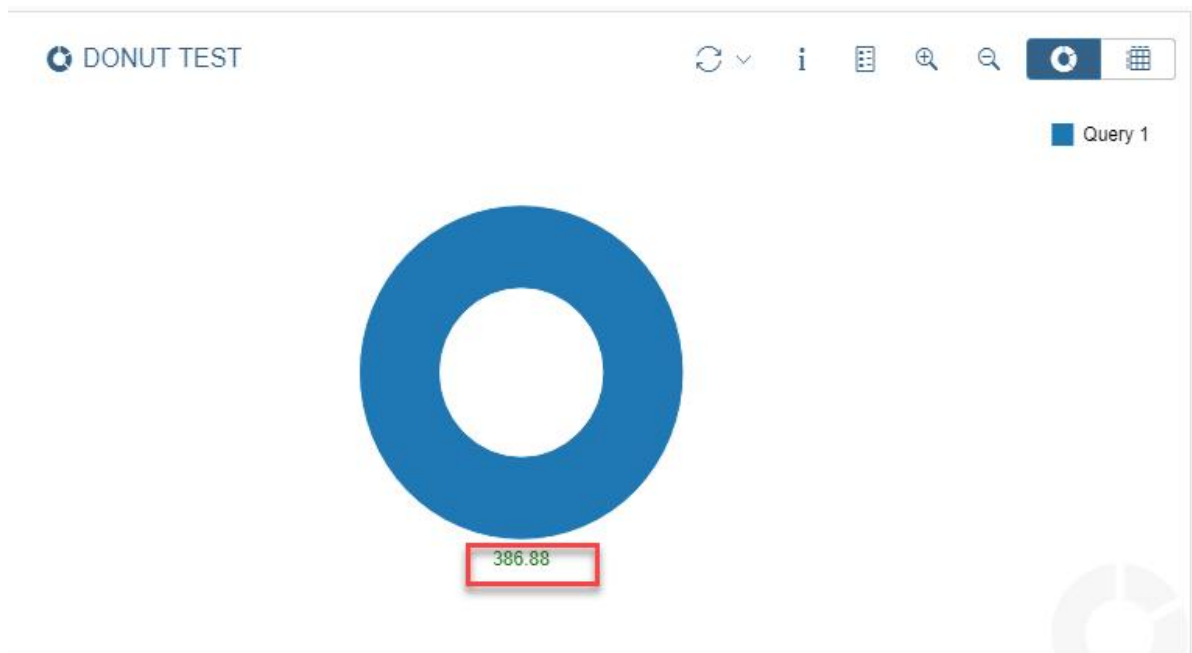


Figure 60. Donut Chart Detail View with a Green rating

If Color Rating = No

The value should be displayed in the color black.

Query Settings

Content Properties Expert

Jump in: Line Chart Renderer

SLA: Trend:

Yellow Thresh...:

Red Threshold:

Display Value: Trend Line:

Color Rating:

Display Attribu...:

Filter Values:

Color Categories:

Figure 61. Color Rating Property Configuration

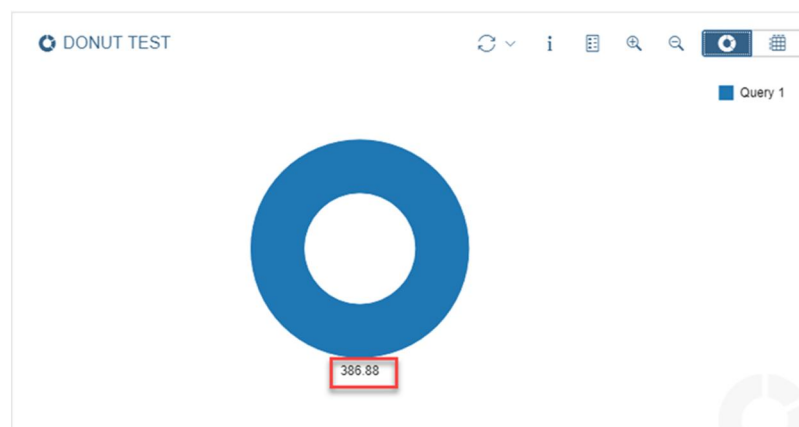


Figure 62. Donut Chart Detail View with a no rating

- Display Attributes: This property enables to rename and manage the displayed columns (An example is detailed on the page 117)
- Filter Values: This property enables to manage the displayed rows (An example is detailed on the page 118)
- Color Categories: This property enables to classify the displayed data in distinct categories (An example is detailed on the page 111)
- Expert:



Figure 63. Expert tab

.5 Export Dashboard

After you satisfy with your dashboard, you can export it to use as template for future reference.

Not only you can export dashboard, but you can also parameterize parts of content information, so you can easily change during the importing of dashboard which will be introduced in latter section.

To export dashboard, choose the Export Dashboard button in Dashboard Settings Panel of Editor screen of the dashboard like in figure below.

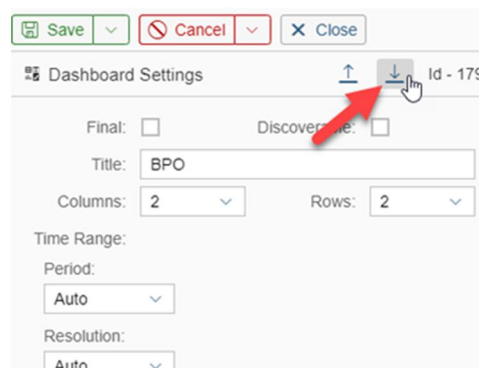


Figure 64. Export Dashboard Button

This will open Export Dialog as you can see in Figure 65 below. There are 3 main sections:

1. The first one is where you put your exported dashboard file's name. The default name will be the combination of dashboard name and timestamp at that moment.
2. As stated, you can parameterize some content, so the biggest section is for parameterization of the content.
3. The last section is to accept and export the dashboard, or to close the dialog.

- Note

If you close the export dialog, all parameter settings that you did will be erased.

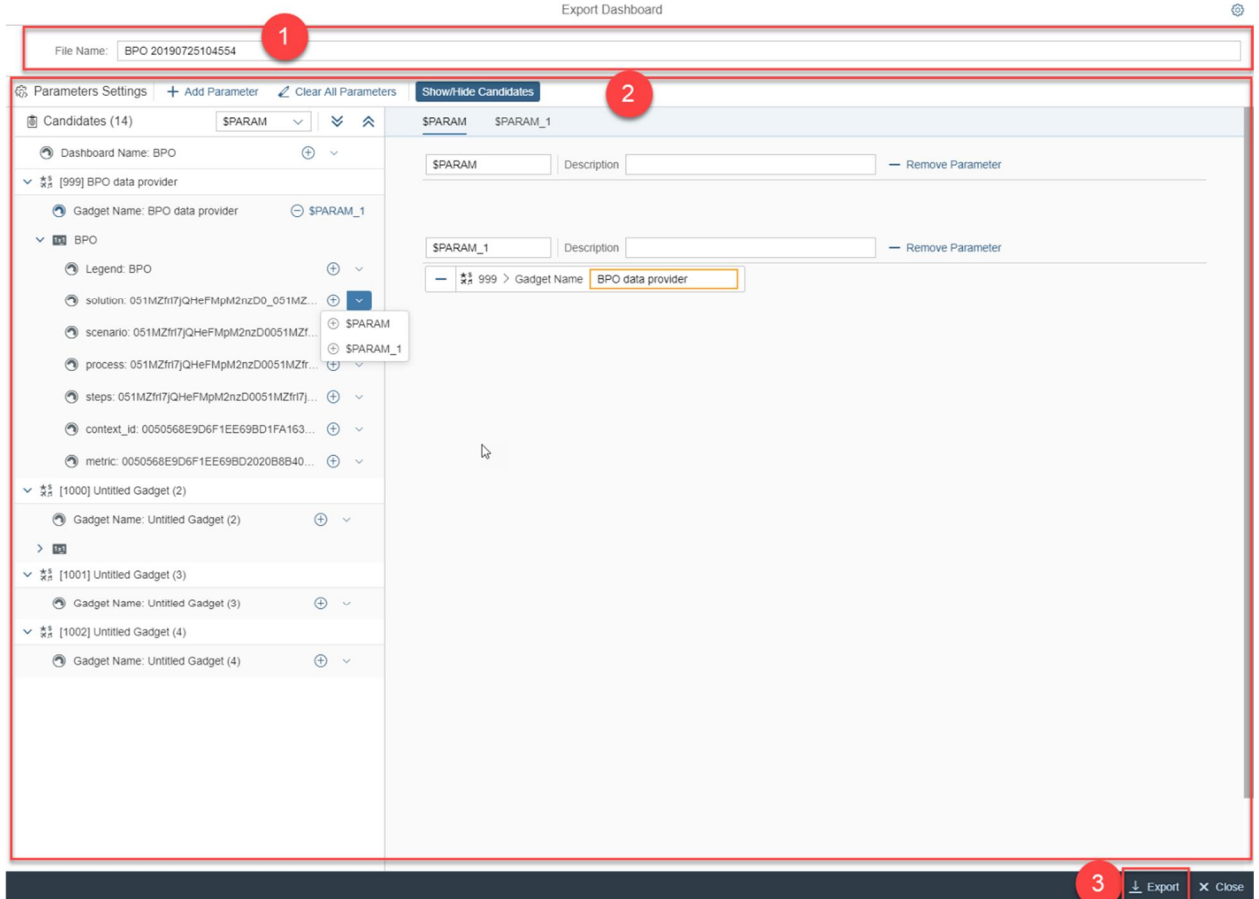


Figure 65. Export Dashboard Dialog

Let's go to the big feature of the export dashboard which is the parameterization. The way it works for the parameterization is that you choose the content which you think it can be changed in target dashboard and set it as a candidate for the parameter, which you will define. In import phase, the candidate value will be changed according to selected value of the parameter.

There are limited contents which you choose as candidates. They are:

- Dashboard name.
- Gadget name.
- Query legend
- Data provider's filters in query.

When you parameterize these contents, and later import to a dashboard, the way the value changes is not the same.

Specifically, for *dashboard name*, *gadget name*, and *query legend*, the value will be changed by insert parameter's selected value to the specified place. For *data provider's filters* in query, parameter's selected value will replace the default value.

To parameterize, you need parameters first, so you can put the contents as candidates in those. You can find the controls in Parameters Settings header.



Figure 66. Parameters Settings Header

1. Use the **+ Add Parameter** button to start adding parameters. After that you will see your parameters on the right panel as show in figure below. You can name your parameter, and optionally provide meaningful description so that one can know what this parameter is about when importing.

Figure 67. Added parameters

You can quickly remove all parameters by using button **Clear All Parameters**. Or you can use button **Remove Parameter** to remove specific paramter

2. Now you can choose candidates for parameters. On the left-hand side, you will see a tree with all the candidates. The tree is organized according to dashboard structure.

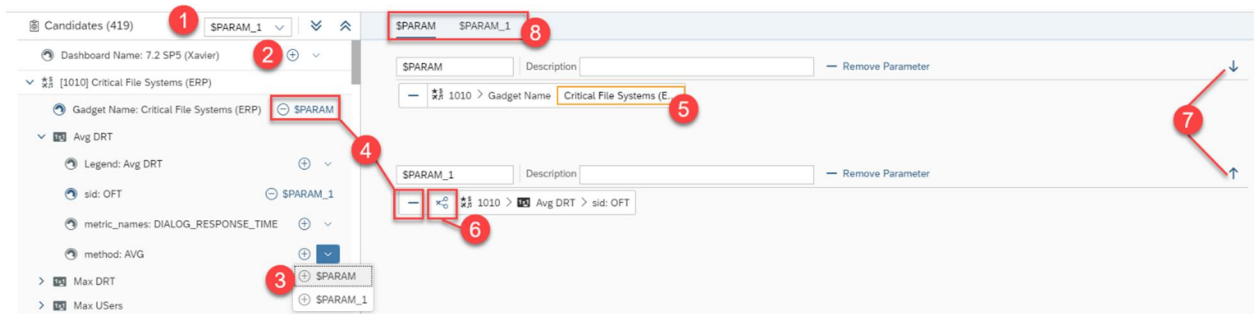


Figure 68. Export Dashboard – Choosing Paramter Candidates

1. You can choose the default parameter to be used when the add button is chosen.
2. Quick add candidate to default parameter. Default parameter is selected in the header of the tree.
3. Add candidate to specific parameter by using the menu next to the add button.
4. The candidate can only be added once. If you want to add to another parameter, you have to remove it from containing parameter.
5. As mentioned before, for candidates related to name, you have to choose a place where parameter value will be inserted to. You can do it by adding \$\$ to the specific location of the text in the input of the chosen candidate in parameters panel.
6. If the dashboard has many queries in different places with same property which you want to replace, you can toggle propagation for this candidate, so that the value will automatically propagate to all other queries when import. The propagation rules for candidate are query property, same data provider, and same filter.
 - When you toggle the propagation on, you should see the total number of candidates to be propagated.
 - You can choose the arrow button to see the list of propagate candidates. In the Dialog, you will be able to choose which candidate to be propagated on. By default, all are selected.
 - To toggle off, click the propagation button again.

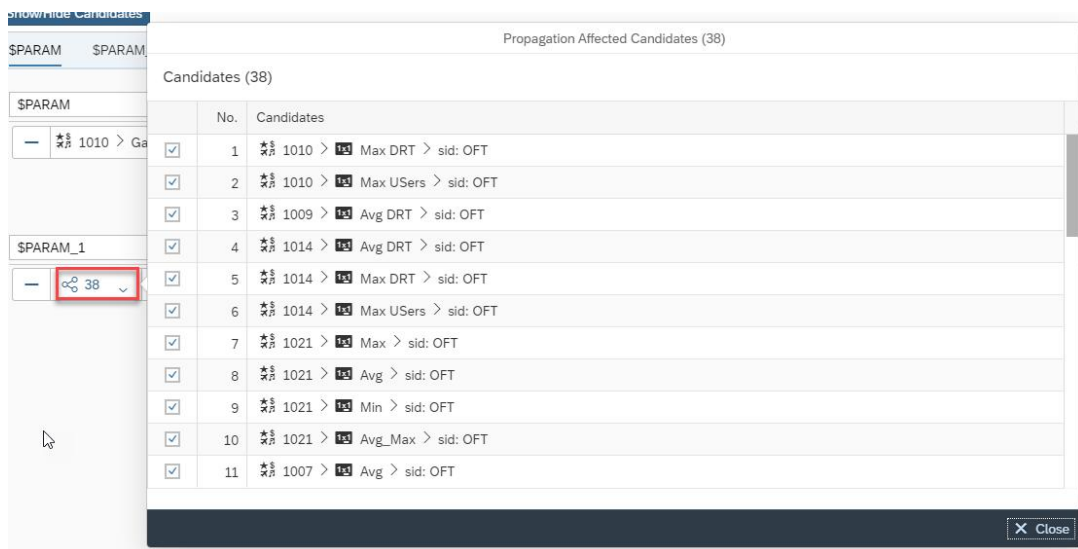


Figure 69. Export Dashboard – Propagation of Candidates

7. You can also adjust the order of parameters by using arrow buttons at the end of each parameter. This is important as when you use the propagation, the overwriting of candidate value may happen.
8. You can quickly navigate scrolling to parameter with this header.

After all this, you can export the dashboard. The exported file will be in format of JSON.

• Editing Export Dashboard JSON File

Be careful when editing the JSON file. We do not suggest editing it, but if you must, all parameters settings are in properties importSettings.

.6 Import Dashboard

If you already exported a dashboard to a JSON file, you can import it to your dashboard to inherit the rich content that you created.

To import dashboard, choose Import Dashboard button as figure below.

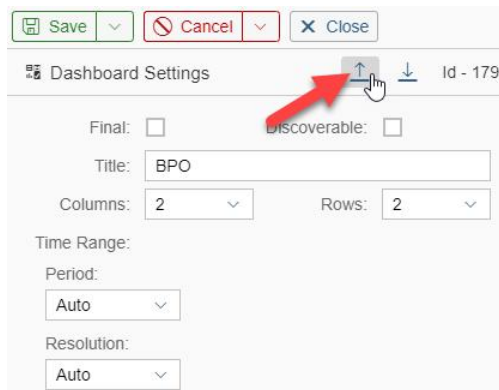


Figure 70. Import Dashboard Button

This will open Import Dashboard dialog.

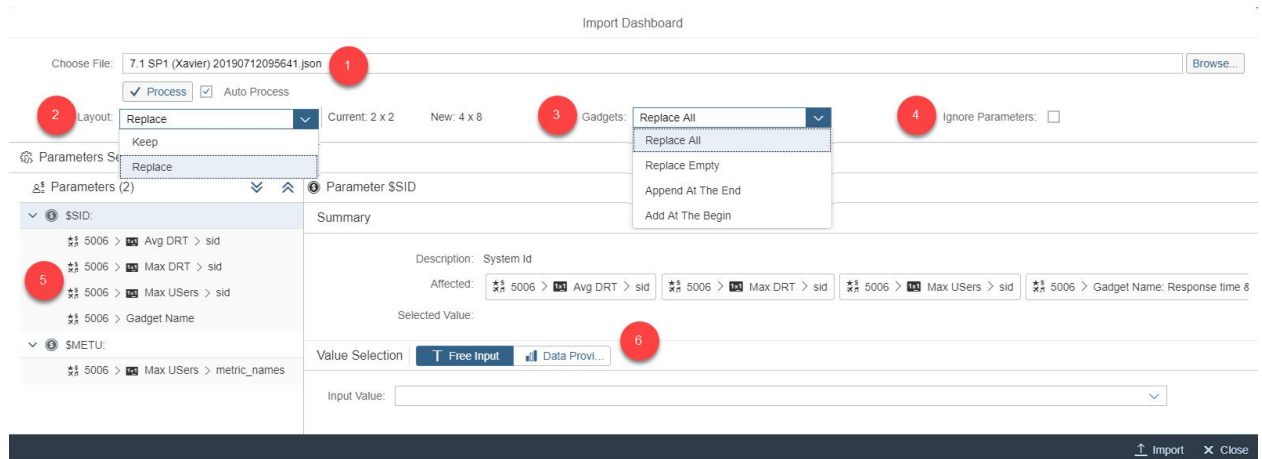


Figure 71. Import Dashboard Dialog


As mentioned in Export Dashboard section, the exported dashboard allows you to parameterize some of the contents. The Import Dashboard will assist you with that.

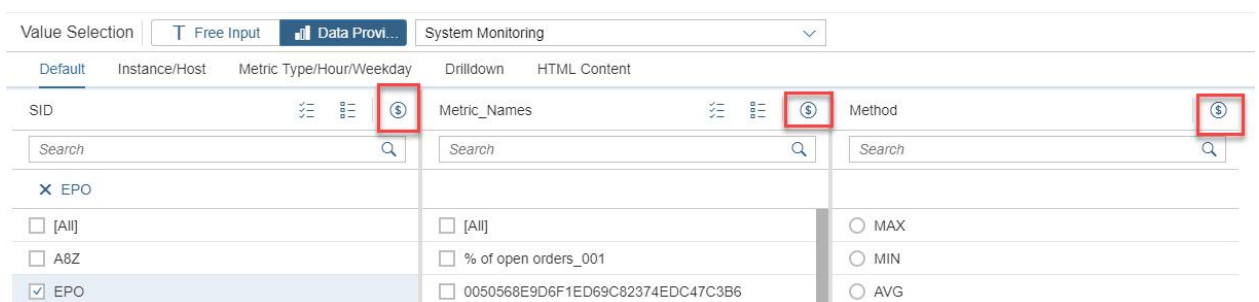
- Import Dashboard as default

If you decide to not use parameters, just choose Import button at the bottom to import dashboard as is.

In this dialog, there are:

1. Choose file to import, or input the content of the file in case your browser does not support file reader.
By default, when you choose the import file, it will be automatically processed for importing contents. However, if you choose not to, especially in case of manual input, you unselect the Auto Process checkbox.
2. Choose your layout strategy when it's different between your dashboard and the import one. If there are more gadgets, it will be added based on gadget insertion strategy. You can either:
 1. Keep your current layout.
 2. Replace your current layout.
3. Choose your gadgets insertion strategy. You can either:
 1. Replace All: To replace all your current gadgets with import gadgets. If more gadgets need to be imported, new provisional ones will be added. If the number of import gadgets is less than your current gadgets, the exceeding current gadgets will be kept.

2. **Replace Empty:** Replace only your empty gadgets with the import gadgets. If more gadgets need to be imported compare to the number of empty gadgets, new provisional ones will be added. If the number of import gadgets is less than your current empty gadgets, the exceeding current gadgets will be kept.
3. **Append At The End:** All import gadgets will be appended and as provisional ones.
4. **Add At The Begin:** All import gadgets will be inserted at the beginning and as provisional ones.
4. You can choose to ignore parameter settings below if you wish to import as is.
5. **Select value for your parameters.** You have to select a parameter in order to be able to select a value for your parameter. You don't need to care about the ids displayed. They are from exported dashboard for reference. You can select value in 2 ways:
 1. Free input with suggestion.
 2. Using data provider filters search. When using this, you have to specifically choose the  button as in figure below to effectively use selected filters as value of parameter.



The screenshot shows the 'Value Selection' tab in the OCC Dashboard configuration. It features three main sections: 'SID', 'Metric_Names', and 'Method'. Each section has a search bar and a list of options. The 'SID' section has a search bar and a list of options including 'EPO'. The 'Metric_Names' section has a search bar and a list of options including '% of open orders_001' and '0050568E9D6F1ED69C82374EDC47C3B6'. The 'Method' section has a search bar and a list of options including 'MAX', 'MIN', and 'AVG'. The 'Data Provider Filter Search' button is highlighted with a red box.

Figure 72. Choose value of parameter by Data Provider Filter Search

After satisfying with your selection for parameters, you can choose Import button at bottom to import the dashboard.

• Gadgets with relationship

If the import dashboard has gadgets that have relationship, you may need to save the dashboard first to be able to see the relationships. This is due to the gadgets in question may appear as provisional ones after importing based on your strategies of layout and gadget insertion. Provisional gadgets do not have Id, and relationship is working based on Id.

• See gadget name

You can hover above the gadget id to see the gadget name.

.7 Tackling Huge Data points

In a gadget, when we have a huge number of data points (> 5000, coming from multiple queries); it takes a toll on the performance of backend and front-end resulting in unresponsive application.

To deal with that we have introduced the "Automatic Time Range Limitation" feature:

- We provide a new URL parameter called Maximum Data Points `MaxDataPoints=XXXX`, which is defaulted to 3000 for now at instance level. This parameter is configurable. It will be used as a factor to compare whether the Automatic Time Range Limitation will be applied or not.
- We need to have a checkbox to activate this system of limitation or not. By default, all existing instances have this deactivated by default. Newly created ones will have it activated as shown below:

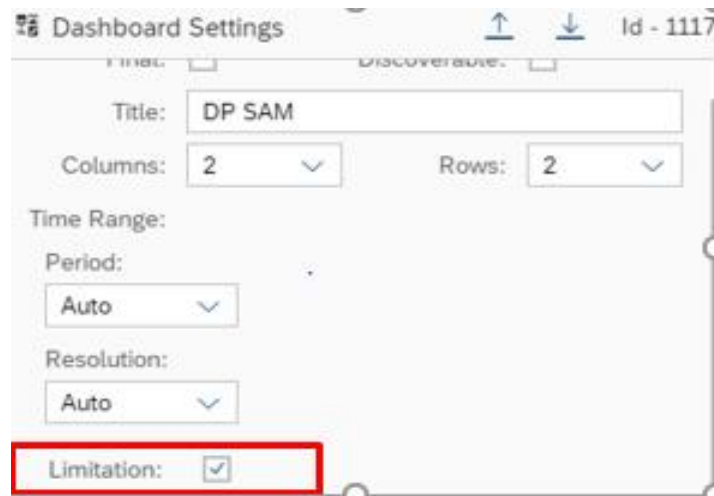


Figure 74. Configure the Limitation parameter

In the case we have changed the period to last 5 Months and the resolution to Hour, the number of the returned points is equal to $5 \times 30 \times 24 = 3600$ points > 3000 which is the defaulted value for the MaxDataPoints parameter so the Data Points Limitation will be enabled automatically and we have :

- The Preview section is deactivated, and the following message is displayed: "Too many data points: Preview is deactivated, Filters will be applied automatically at runtime for this chart".

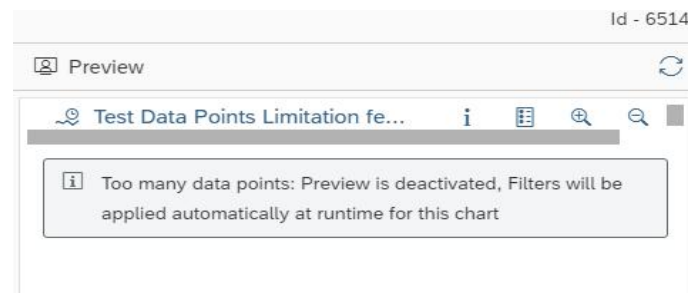


Figure 75. The preview mode with huge data points

- For the display mode the number of displayed data points is reduced. Only the value of MaxDataPoints parameter points will be displayed. Note that the following message is displayed "Filters applied automatically to reduce volume of information in chart".

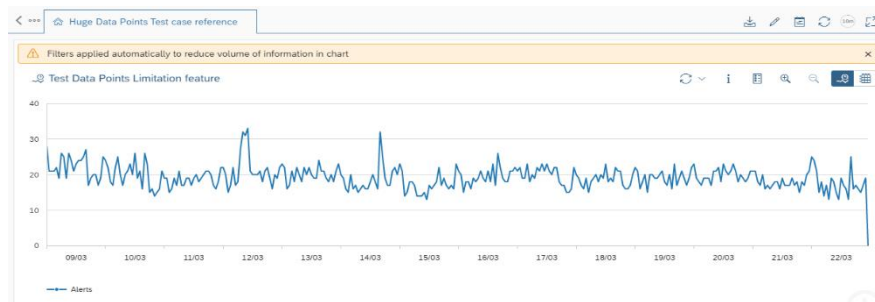


Figure 76. Display Mode

- Note

- At the run time it will check if the maximum data points returned by all the configured queries in the same gadget is higher than the configured value for **MaxDataPoints**. Then, we apply a filter by reducing the time frame with a message saying, "Filters applied automatically to reduce volume of information in chart".
- This filter on time range applies only to first view. Details view should still use configured time range. Also, the preview section will be deactivated with a message "Too many data points: Preview is deactivated, Filters will be applied automatically at runtime for this chart"
- There is another way to activate this feature when a dashboard is stuck because of too many returned datapoints and cannot open it in the edit mode: It is by adding the **ForceLimit=true** to the dashboard URL and this Parameter will override the existing configuration.

Data Provider

.1 Data Provider /STDF/DP_SYSMON

Data provider /STDF/DP_SYSMON gives you access to all metrics of MAI's (Monitoring and Alerting Infrastructure) system monitoring scenario. Data are read from Solution Manager's BW.

To be accessible from this data provider, metrics must be configured and activated properly. Moreover, the metrics must be reported to SAP Solution Manager's BW.

One way to configure this data provider is to first identify the metrics you are interested in from Solution Manager's system monitoring tree (System Monitoring application). From there, you can first make sure that the metrics are working properly and then retrieve the metrics' technical name you'll need to configure the data provider.

The following procedure details how to configure this data provider:

- 1- Go to Technical Monitoring Work Center
- 2- Select Technical System
- 3- Start System Monitoring application
- 4- Open a node at Technical System level
- 5- Select the metric in the tree (metric should have a numerical value)

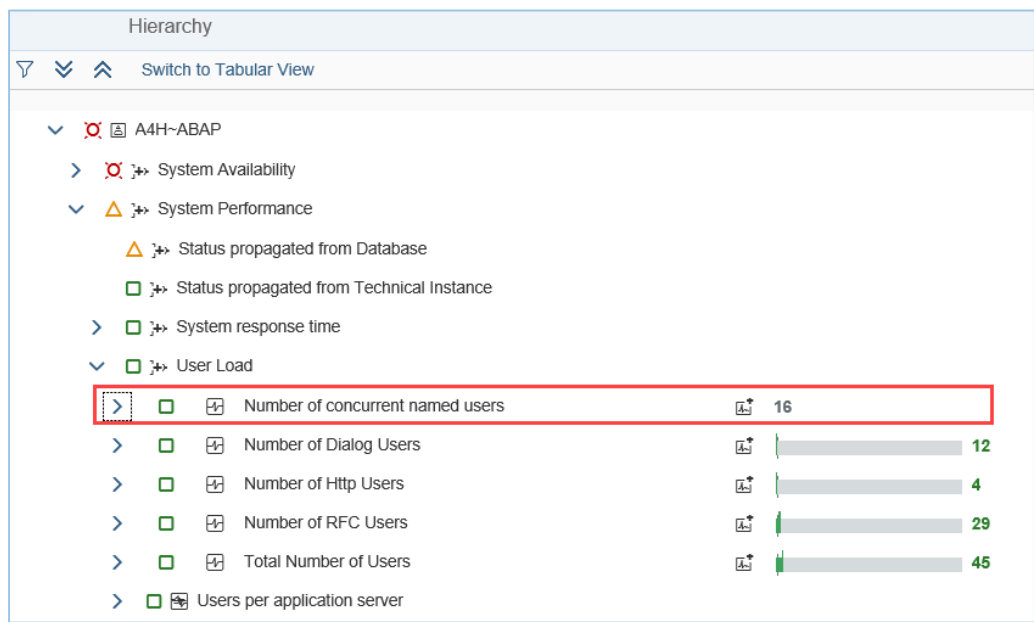


Figure 77. System monitoring view

- 6- Select "Check Data Collection"

Metric Details

Metric Name: Number of concurrent named users

Value: 16

Text: A4H\System Configuration\...\Concurrent Users\Concurrent Users (all Clients)

TimeStamp: Jun 12, 2018 10:30:14 AM UTC

Collection Interval: 900

Threshold Type: Information Only

System Name: A4H~ABAP

Useful Links: [Metric Documentation](#)
[Change Configuration](#)
[Check Data Collection](#)

Close

Figure 78. Select "Change Configuration"

7- Click "Monitoring and Alerting Infrastructure Directory Browser"

Metric Troubleshooting			
Status	Result	Description	Tools
✓	Status of the Alert Calculation Job: The job ran properly. Last run 12.06.2018 10:38:52		
✓	The data provider definition is correct in directory		
✓	Metric has a parent event in hierarchy		
✓	Rule definition for the rule type "NONE" is available. Workmode is "No workmode configured".		
	A4H/ST_PI_15: Last extractor run at 12.06.2018 10:29:14 (UTC).		
✓	A4H/ST_PI_15: Extractor definitions are consistent, all extractors are active.		
✓	A4H/ST_PI_15: Logs do not contain any errors or warnings for the last 45 minutes.		
	Last Data Collection was scheduled at 12.06.2018 10:29:15 (UTC).		
	Next Data Collection will be scheduled after 12.06.2018 10:44:15 (UTC).		
✓	Metric store contains valid measured value		

Figure 79. Click "Monitoring and Alerting Infrastructure Directory Browser"

8- Copy the metric name

View:	[Standard View]	Print Version	Export	
Category	Metric Type Name	Metric Group	Monitoring Use-Case	Activation Status
Availability	ABAP System Remote RFC Availability		Technical System Monitoring	Active
Configuration	A high number of users have critical authorizations.		Early Watch Alerts Integration	Active
	A large number of deleted records have been found on the system.		Early Watch Alerts Integration	Active
	A primary index is missing on the DB2 for i database.		Early Watch Alerts Integration	Active
	A primary index is missing on the DB2 for LUW database.		Early Watch Alerts Integration	Active
	A primary index is missing on the DB2 for z/OS database.		Early Watch Alerts Integration	Active
	A primary index is missing on the ORACLE database.		Early Watch Alerts Integration	Active
	A secondary index is missing on the DB2 for LUW database which can be important for performance.		Early Watch Alerts Integration	Active
	Adapter Engine tables found in Top Growing Tables. Messaging System and Mapping processing is affect		Early Watch Alerts Integration	Active
	An unnecessary *INTERACT Pool is configured on your system.		Early Watch Alerts Integration	Active

Details for Metric Type: Number of concurrent named users

Overview | Data Collection | Data Usage | Threshold | **Others**

Metric Name: **ABAP_SYS_CONCURRENT_USERS**
Metric ID: 0050568A7A4B02EEB9ADC45E618E1EBD
Managed Object Name: **A4H-ABAP**
Managed Object ID: 0A0F93FEF7E51ED5A9FFCCD553BD0ACA
Global ID: 0a0f93fe-f7e5-1ed5-a9ff-ccd553bd0aca
Applied from Template: Z_System_SAP_ABAP 7.10_and_higher
Applied Template ID: 0A491FA9DB571ED689E6DEADE1325EBC
Originating Template: Base template for Technical System
Originating Template ID: T_SYSTEM0

Figure 80. Copy the metric name

9- Access OCC dashboard

10- Press button "Edit"

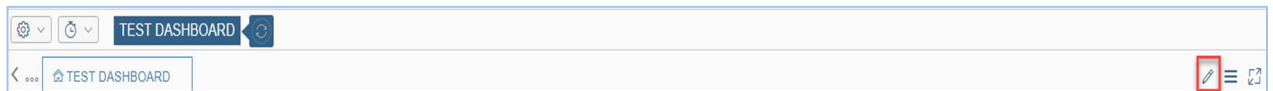


Figure 81. Press button "Edit"

- 11- Select an empty gadget in the "Dashboard Layout". The Gadget Settings should be enabled.
- 12- Enter gadget title. Since the gadget could be reused in other dashboards, you should choose a meaningful name for the gadget.
- 13- Select a description and a renderer
- 14- Click on "Add Query" in the section "Queries List". The "Query Settings" should be enabled.
- 15- Select data provider /STDF/DP_SYSMON
- 16- Paste the metric name you copied in step 8 (in this example ABAP_SYS_CONCURRENT_USERS)
- 17- Select the SID of the system (in this example OTO)
- 18- Select the method (in this example MAX as we are interested in the maximum value on the period)

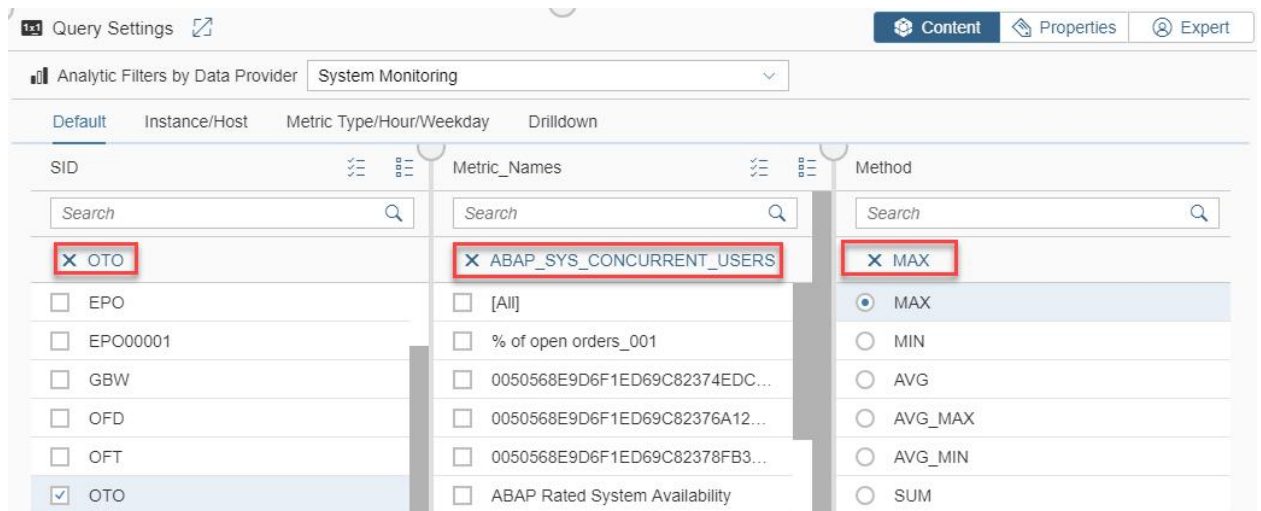


Figure 82. Method Selection

19- In the section Query Settings, go to the tab "Expert". A query is generated:

Legend	Query
User (Max.)	/STDF/DP_SYSMON:legend= users (max.) COLOR=#1f77b4 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true SID=OTO Instances= Hosts= Metric_Names=ABAP_SYS_CONCURRENT_USERS Method=MAX metric= Hours= Weekdays= Drilldown=

20- Enter a name for the legend (in this example "User (Max.)")

21- Select renderer (in this example we keep the default: LINE_CHART)

22- Remark: you can also select more options with the tab "Data" (in this example we keep the default values)

23- You can add multiple queries to the chart. In this example, we add a query for Users (Avg.).

Legend	Query
User (Avg.)	/STDF/DP_SYSMON:legend=users (avg.) COLOR=#aec7e8 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true SID=OTO Instances= Hosts= Metric_Names=ABAP_SYS_CONCURRENT_USERS Method=MAX metric= Hours= Weekdays= Drilldown=

24- In the preview section, press button "Refresh"

25- Click on "Save" button.



Figure 83. Save Dashboard

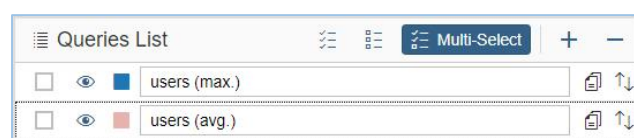


Figure 84. Multiple Queries

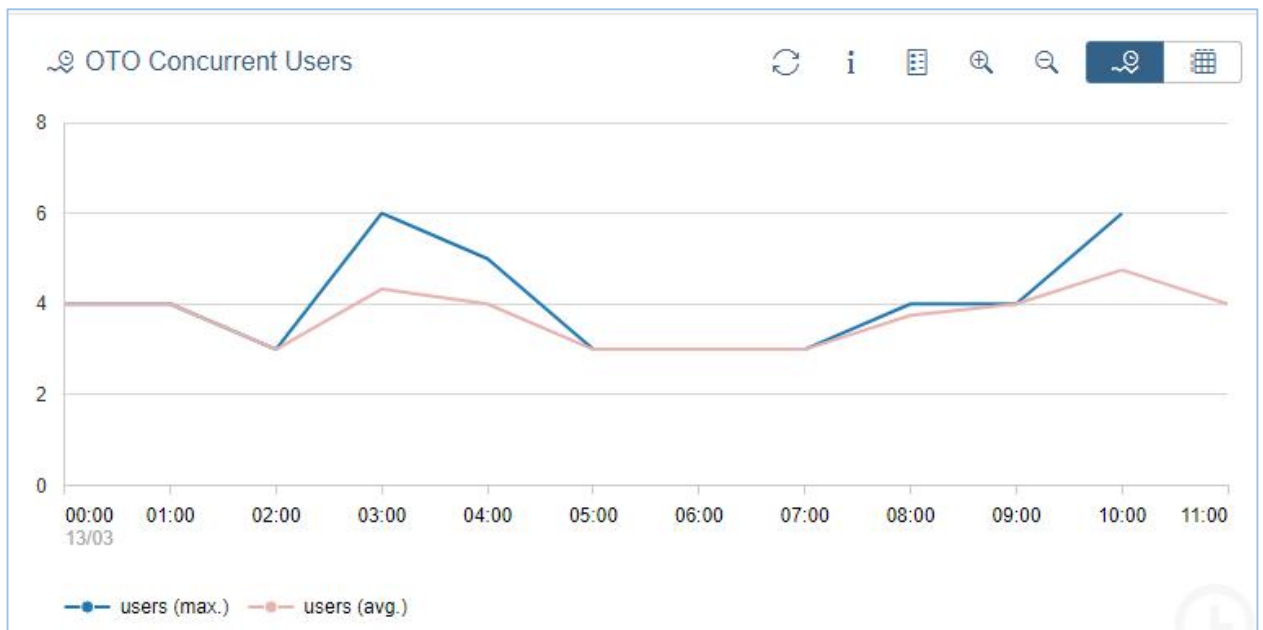


Figure 85. Displayed Chart

1.1 System Monitoring Metrics at Instance or Host Level

1. Select the metric in the proper node of the system monitoring tree

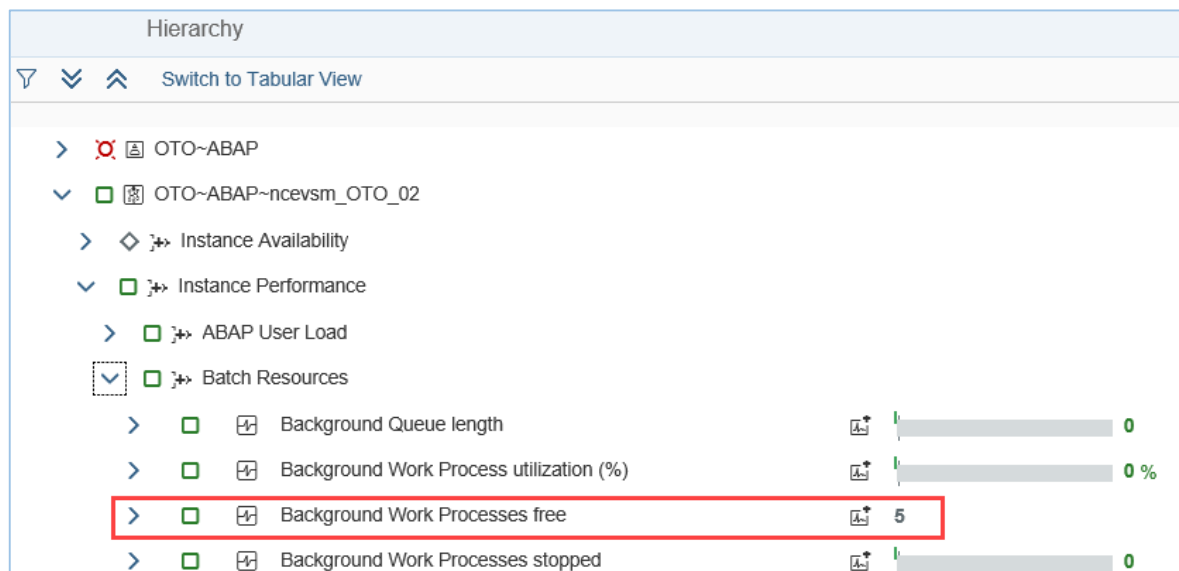


Figure 86. System monitoring metrics

2. Copy the metric's technical name as well as the managed object's name (in this example, we select a technical instance, with managed object name equals to "OTO-ABAP-ncevm_OTO_02")

View: [Standard View] Print Version Export

Category	Metric Type Name	Metric Group	Monitoring Use-Case	Activation Status
Availability	ABAP Message Server Status		Technical System Monitoring	Active
	Instance Local Http Availability		Technical System Monitoring	Active
	Instance Local RFC Availability		Technical System Monitoring	Active
	Instance Status		Technical System Monitoring	Active
Exceptions	Frequency of Short Dumps [min]		Technical System Monitoring	Active
	Frequency of System Log messages [/min]		Technical System Monitoring	Active
	Number of Short Dumps on instance		Technical System Monitoring	Active
	Total number of ABAP System Log Messages		Technical System Monitoring	Active
	Metric group variant: MESSAGE_NO=B19	Number of specific ABAP System Log Messages	Technical System Monitoring	Active
	Metric group variant: MESSAGE_NO=BV4	Number of specific ABAP System Log Messages	Technical System Monitoring	Active

Details for Metric Type: Background Work Processes free

Overview Data Collection Data Usage Threshold Others

Metric Name: ABAP_INST_BTC_WP_FREE

Metric ID: 0050568E6E9A02DDBFE3302461CED20D

Managed Object Name: OTO~ABAP~ncevsm_OTO_02

Managed Object ID: 0050568E9D6F1ED68E91615514BD8910

Global ID: 0050568e-9d6f-1ed6-8e91-615514bd8910

Applied from Template: SAP ABAP 7.00 - 7.03

Applied Template ID: 80E0ED08ADA71DDE8BD04A3DEBB15FDC

Originating Template: Base template for Technical Instance

Originating Template ID: INSTANCE0

Figure 87. System monitoring Overview

- Enter gadget title. Since the gadget could be reused in other dashboards, you should choose a meaningful name for the gadget.
- Select a description and a renderer
- Click on "Add Query" in the section "Queries List". The "Query Settings" should be enabled.
- Select data provider /STDF/DP_SYSMON
- Enter the metric's name (ABAP_INST_BTC_WP_FREE) and the method (AVG)
- Select the SID of the system (in this example OTO)
- Select the method (in this example MAX as we are interested in the maximum value on the period)

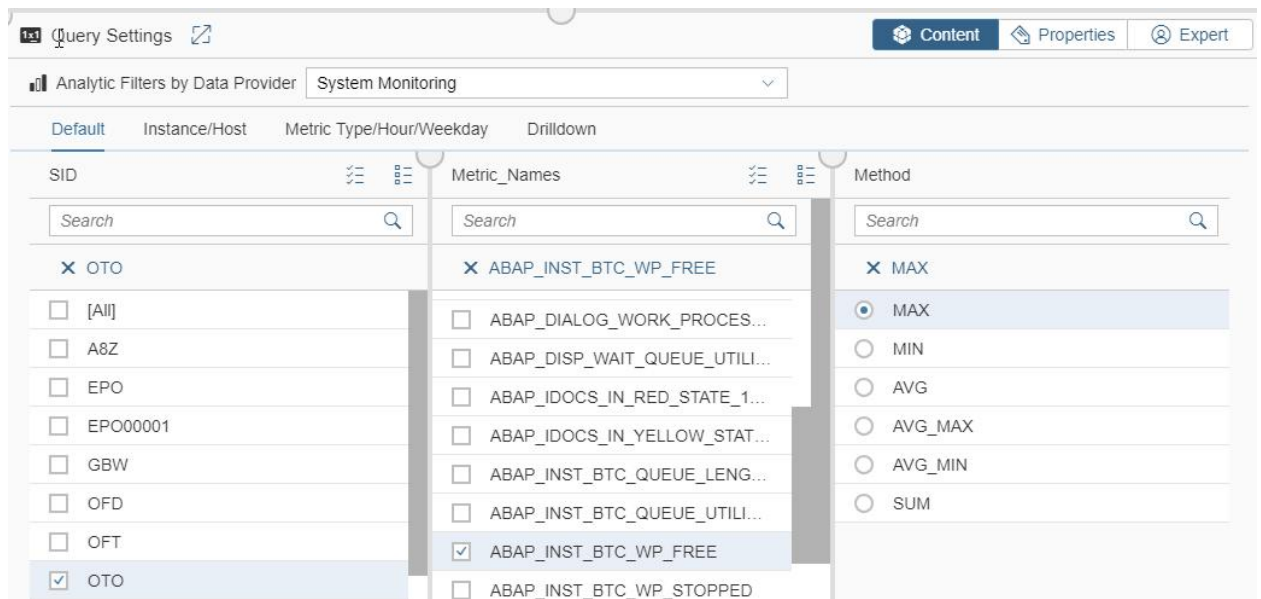


Figure 88. Metric name

10. Select the tab "Instance/Host"

11. In the filter ("Instances*"), enter the name of the instance. In this example "ncevsm_OTO_02" (remark: the technical system name, "OTO-ABAP" is not used as prefix of the technical instance name).

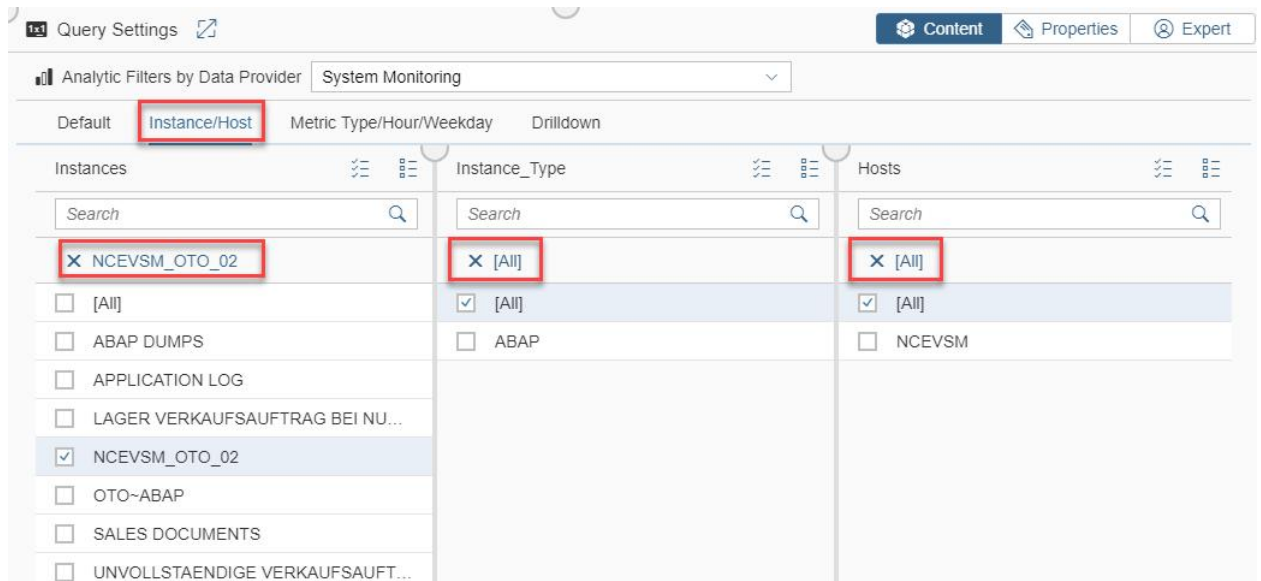


Figure 89. Instance name

12. In the section Query Settings, go to the tab "Expert". A query is generated:

Legend	Query
Avg. free WP	/STDF/DP_SYSMON:legend=Avg. free WP COLOR=#1f77b4 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true SID=OTO Instances=NCEVSM_OTO_02 Hosts= Metric_Names=ABAP_INST_BTC_WP_FREE Method=AVG metric= Hours= Weekdays= Drilldown=

13. Enter a text for the legend. In this example: "Avg. free WP".

14. In the preview section, press button "Refresh"

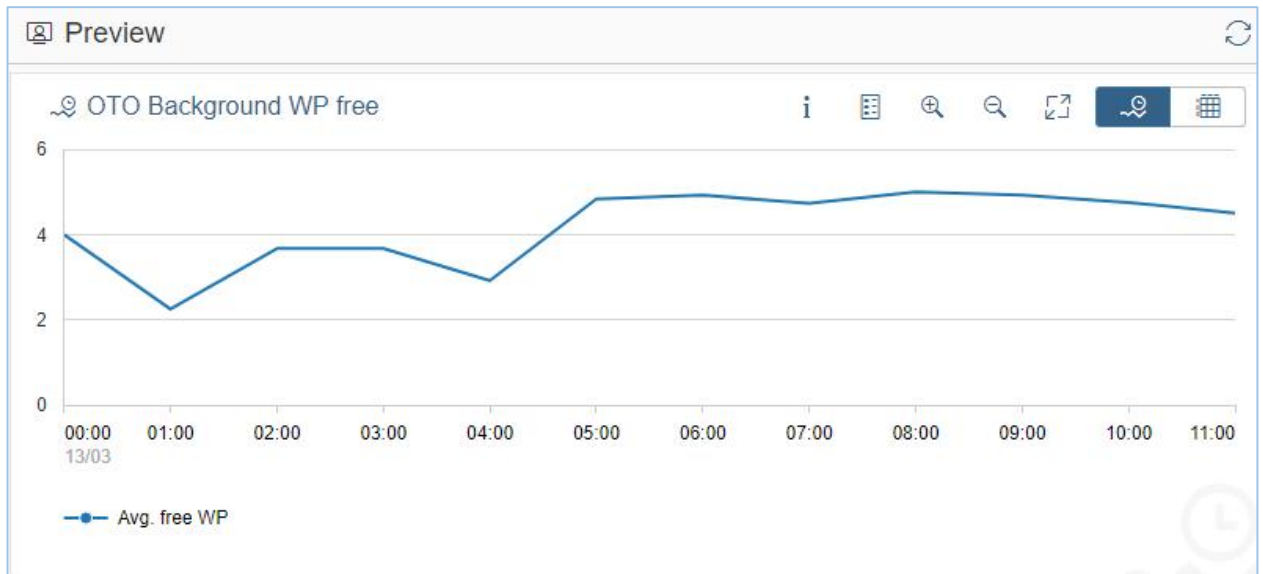


Figure 90. App/Save Dashboard

15. Click on "Save and Close" button.

- Note

If you select an instance or host related metric but you do not specify a specific instance or a specific host in the gadget's settings, then you will get for example the average or the maximum value (it depends on the method selected) for the technical system (if specified in the query) or for all available values.

.1.2 System Monitoring and Metric Variants

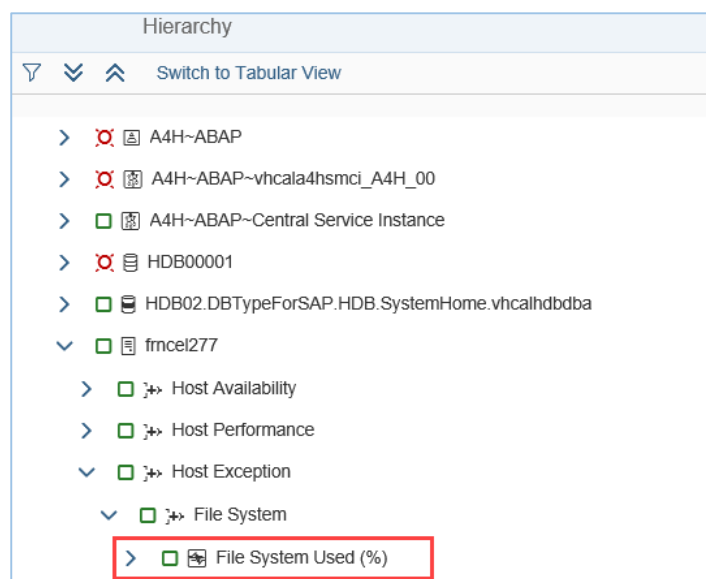


Figure 91. System monitoring and metrics variants

For metric groups like for example “File System Used (%)” at host level, you can use data provider /STDF/DF_SYSMON_SNAPSHOT and the copy paste feature (see after) to create a gadget displaying one or several metric variants part of the group.

.1.3 System Monitoring and Custom Metrics

Custom MAI metrics can be display in an OCC gadget using data provider /STDF/DF_SYSMON. Make sure that in the template definition, you have selected options “Send values to SP NetWeaver Business Warehouse” and at least granularity “Long”.

The screenshot shows the SAP system monitoring interface. At the top, there is a table with columns: Category, Metric Type Name, Metric Group, Monitoring Use-Case, and Activation Status. The table lists several metrics, with 'Number of running batch jobs' highlighted in blue. Below the table, there is a section titled 'Details for Metric Type: Number of running batch jobs' with tabs for Overview, Data Collection, Data Usage, Threshold, and Others. The 'Data Usage' tab is selected, showing a 'Work mode' dropdown set to 'No workmode configured'. Below this, there are two checked checkboxes: 'Alerting / Monitoring' and 'BW Reporting', which are highlighted with a red rectangle. Further down, there are input fields for 'Default BI-mapping rule', 'Target in BW' (set to 'Default Target'), and 'Granularity' (set to 'Optimized for Metric Monitor').

Category	Metric Type Name	Metric Group	Monitoring Use-Case	Activation Status
Configuration	Number of installed SAP notes		Technical System Monitoring	Active
Exceptions	Number of qRFC Inbound Queues		Technical System Monitoring	Active
Exceptions	Number of qRFC Inbound Queues in error state		Technical System Monitoring	Active
Exceptions	Number of qRFC Outbound queues		Technical System Monitoring	Active
Exceptions	Number of qRFC Outbound queues in error state		Technical System Monitoring	Active
Performance	Number of RFC Users		Technical System Monitoring	Active
Exceptions	Number of running batch jobs		Technical System Monitoring	Active
Exceptions	Number of Short Dumps (last 5 minutes)		Technical System Monitoring	Active
Exceptions	Number of Short Dumps (last hour)		Technical System Monitoring	Active
Exceptions	Number of Short Dumps (Today)		Technical System Monitoring	Active

Details for Metric Type: Number of running batch jobs

Overview | Data Collection | **Data Usage** | Threshold | Others

Work mode: No workmode configured

☒ Alerting / Monitoring

☒ BW Reporting

Badl Implementation: Default BI-mapping rule

Target in BW: Default Target

Granularity: Optimized for Metric Monitor

Figure 92. System monitoring and custom metrics

.1.4 Drilldown option

This option enables the user to make a drilldown on the displayed data. There are two possibilities of drilldown: Host & Instance.

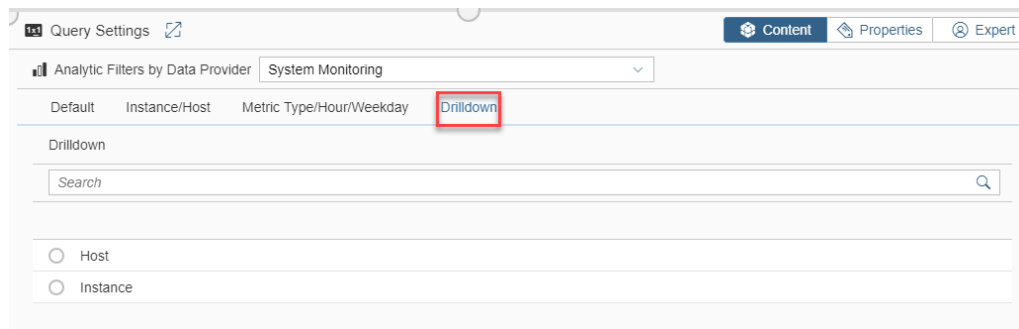


Figure 93. Drilldown Tab

1. In the gadget settings section, enter the title
2. Click on 'Add Query' button in the "Queries List "section
3. Select the data provider /STDF/DP_SYSMON in the "Queries Settings "section
4. Enter the SID, the metric's name (DIALOG_RESPONSE_TIME) and the method (AVG)

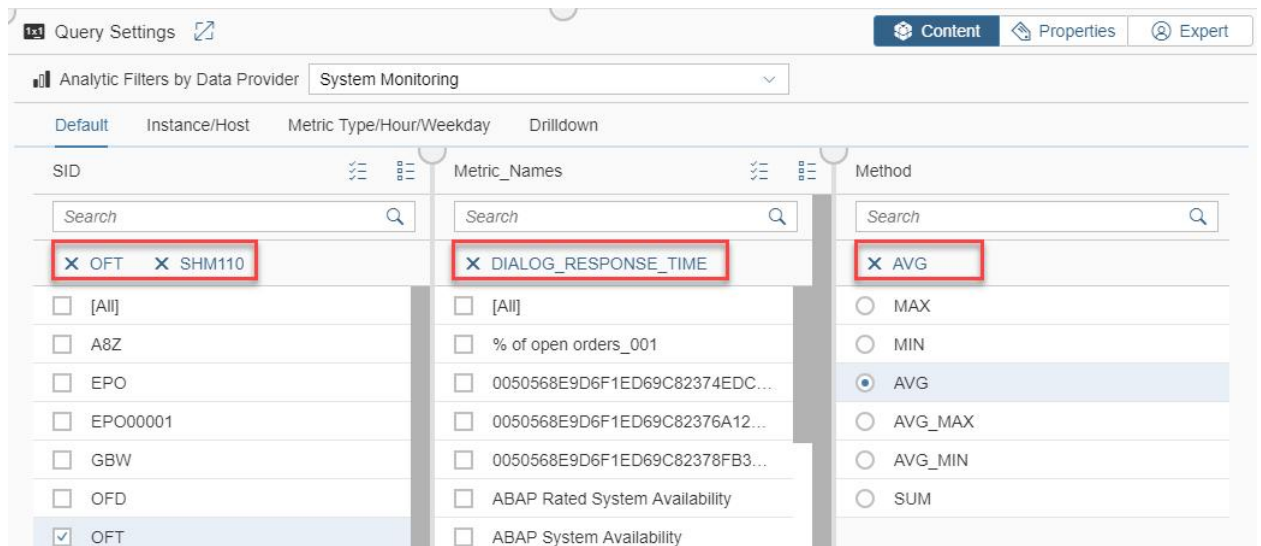


Figure 94. Metric name

5. Select the tab "Instance/Host"

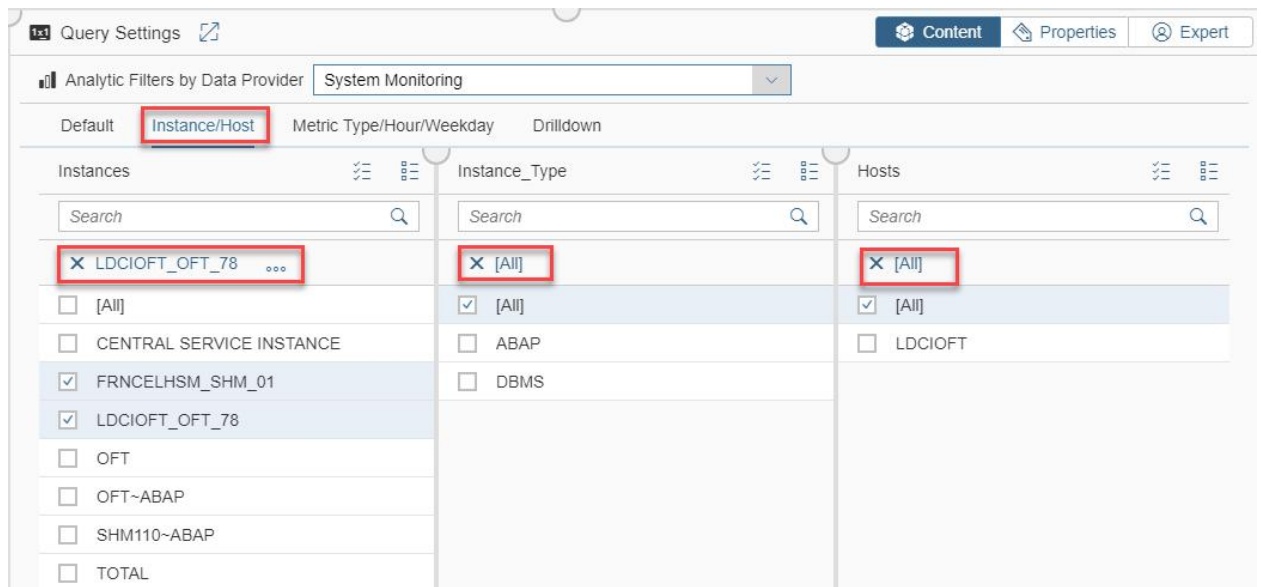


Figure 95. Instances name

6. Select the tab "Drilldown"

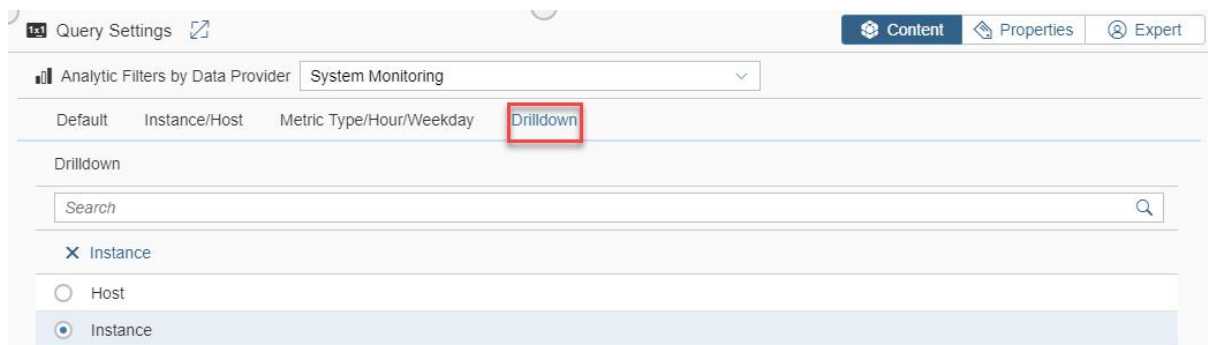


Figure 96. Drilldown type

7. In the section Query Settings, go to the tab "Expert". A query is generated:

Legend	Query
Query 0	/STDF/DP_SYSMON:legend=Query 0 COLOR=#1f77b4 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true SID=OFT,SHM110 Instances=LDCIOFT_OFT_78,FRNCELHSM_SHM_01 Hosts= Metric_Nam s=DIALOG_RESPONSE_TIME Method=AVG metric= Hours= Weekdays= Drilldown=Instance

8. Enter a text for the legend. In this example: we didn't add a legend in order to display the instances name.

9. In the preview section, press button "Refresh"

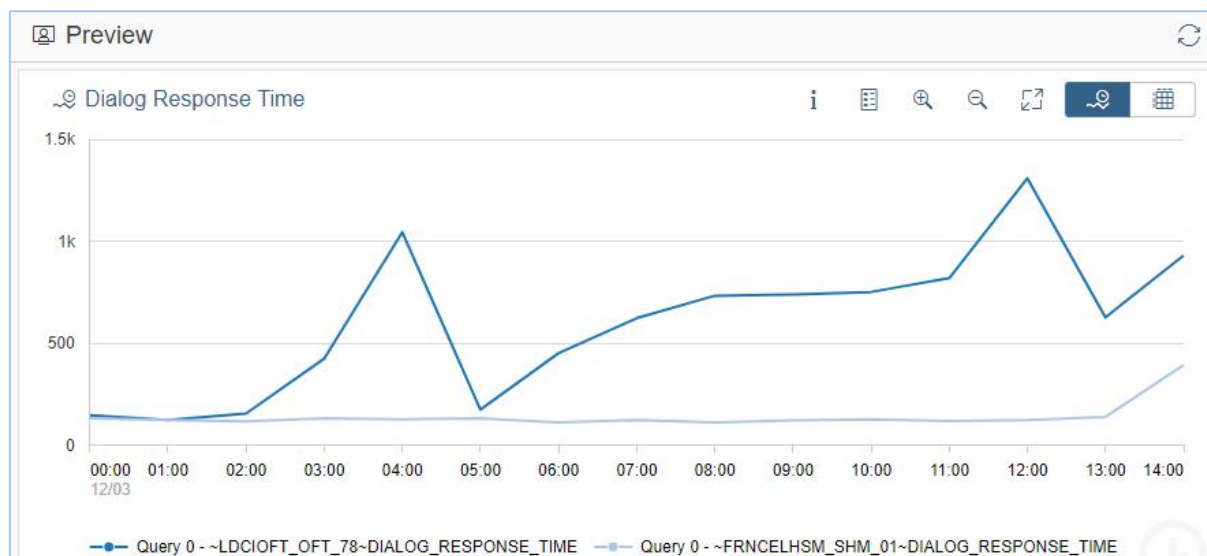


Figure 97. Displayed chart

10. Click on "Save and Close" button.

PS: When using STACK_COLUMN_CHART_2LABEL renderer, we have to:

Check that all the displayed series of data are not null else the renderer won't return any value.

Specify a legend like shown in this screenshot

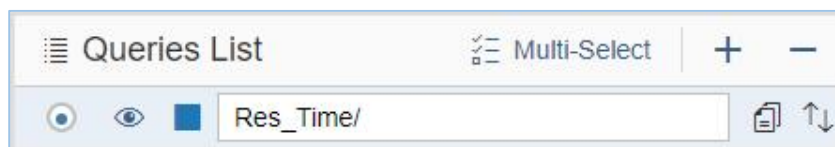


Figure 98. Legend

.2 Data Provider /STDF/DP_SYSMON_SNAPSHOT

This data provider associated with renderer ALERT_TABLE, offers two types of view described below: Overview & Detail.

.2.1 Overview View

This is a table which summarizes the real time monitoring status for the four monitoring categories of MAI (performance, availability, error and configuration) as well as the number of alerts. Each line corresponds to one managed object.

System	Avail	Config	Error	Perf	Alerts
SHD110	✓	?	🔥	🔥	13 Alerts

Figure 99. System monitoring overview

All types of monitored object supported by MAI infrastructure can be picked from the list (technical system, technical instance, host, job monitoring scenarios, EEM scenarios...).

Remark: monitoring categories are not relevant to all monitoring scenarios.

To add a monitored object in the overview table:

1. In the gadget settings section, enter the title
2. Select ALERT_TABLE renderer
3. Click on 'Add Query' button in the "Queries List" section
4. Select /STDF/DP_SYSMON_SNAPSHOT data provider
5. Choose a monitoring object from the list "SHD110 (DBMS)"
6. Select the view "Overview"
7. Select a category "PERFORM"
8. Select a type "DBMS"
9. Select a legend for the row in the table

Remarks:

10-From the gadget, a click on the monitored object legend jumps to the detail view for this monitoring object.

11-From the gadget, a click on the number of alerts jumps to the Alert Inbox.

12-For some monitoring object types, detail view is not available.

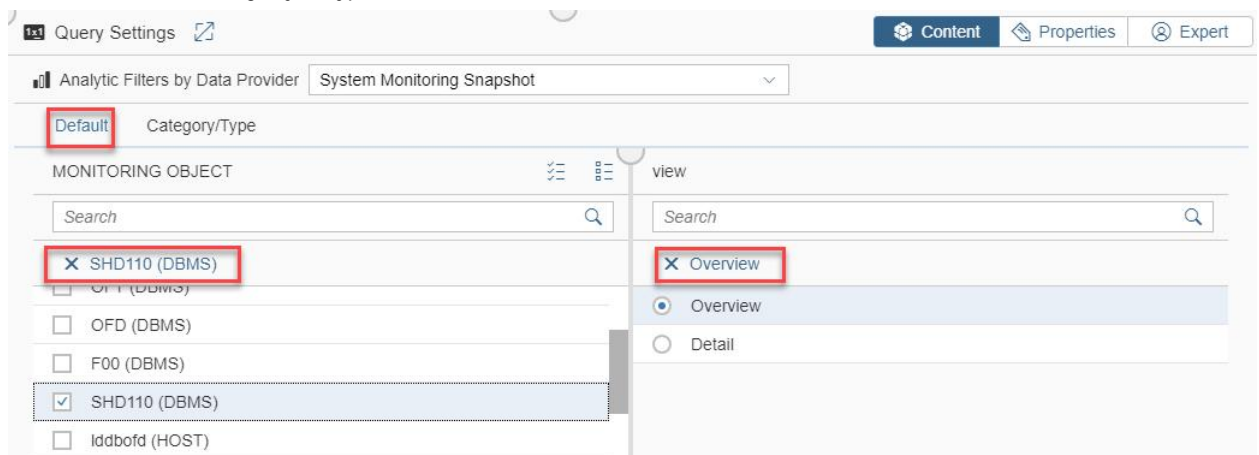


Figure 100. Configure Gadget (1)

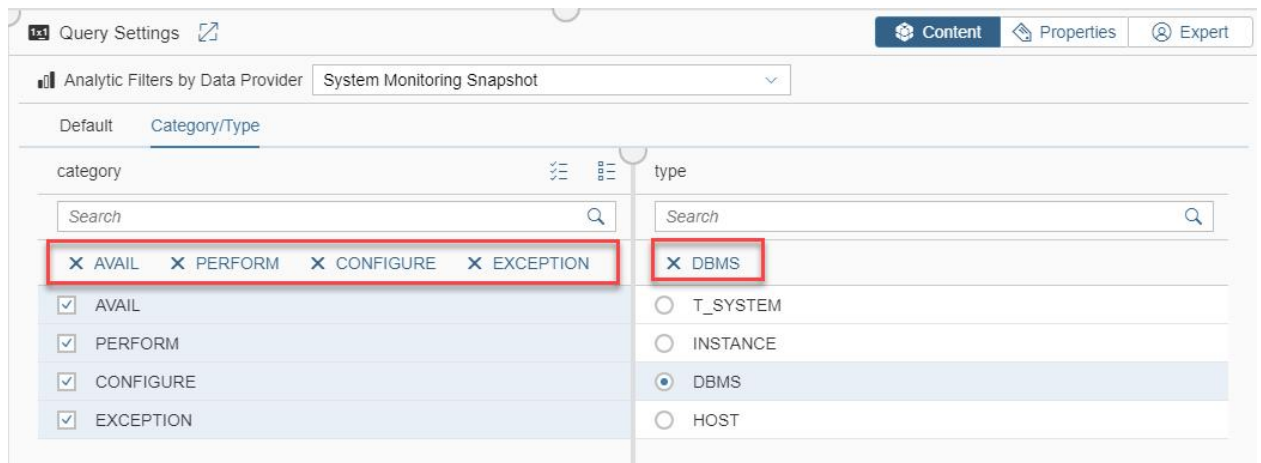


Figure 101. Configure Gadget (2)



Figure 102. Legend

PS:

If there are multiple systems, the legend field is disabled and for each system the system column will be automatically filled with the appropriate system name.

The legend would be valid and used only if we have a single system.

To see the legend, the customer should configure a query for each system.

.2.2 Detail View

Detail view shows the monitoring tree for the monitoring object. This view is very similar to the one offered by standard system monitoring application. However, only one monitored object is displayed and not the complete tree starting from the technical system. This view works only for managed object types supporting the tree representation (host, database, technical instance, technical system...).

Overview SYSMON_SNAPSHOT	
Metric\DBMS	SHD110
SHD110	✓
Database Performance	NaN
Avg. data backup throughput (GB/h, yesterday)	NaN
Avg. data backup throughput (GB/h, yesterday)	NaN
- Parameter=Alert ID=1026	No data during last collector run
Bad avg. I/O throughput (MB/s, last hour)	NaN
I/O read throughput data avg. (MB/s, last hour)	NaN

Figure 103. Detail view (1)

A click on a metric value will open a new gadget “on the fly” to display its historical values. This works only for numerical metrics.

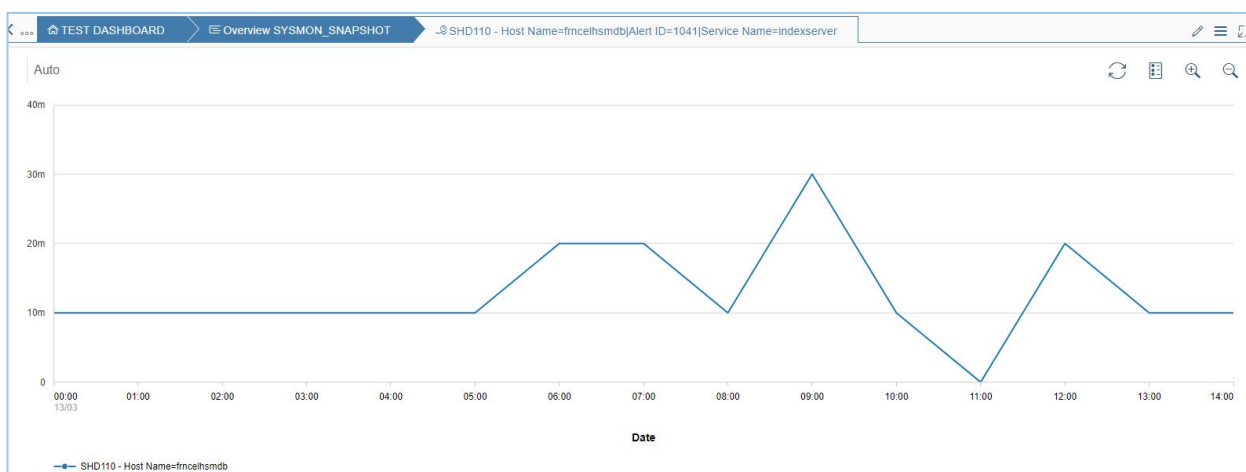


Figure 104. Detail view (2)

.2.3 Copy & Paste Query

the two table views “Overview” and “Detail view” for data provider /STDF/DP_SYSMON_SNAPSHOT supports the copy & paste feature.

From the Overview, it is possible to copy & paste one monitored object in a separated gadget. This operation could be done only in edit mode and it should be saved.

- 1- Click on the System you want to copy
- 2- Click on “Copy Query”. Check in the section Queries you have a new query added.

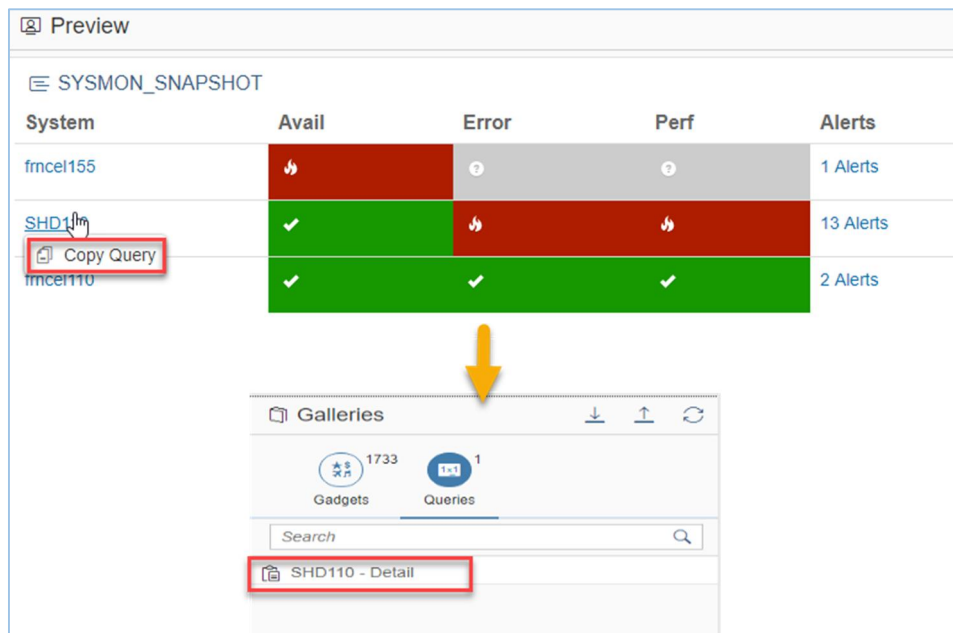


Figure 105. Copy Query (Overview view)

- 3- Select an empty gadget in the section gadget Layout. Select the copied query and click on the button "Paste query"
- 4- Select the renderer ALERT_TABLE and the title then save the changes.

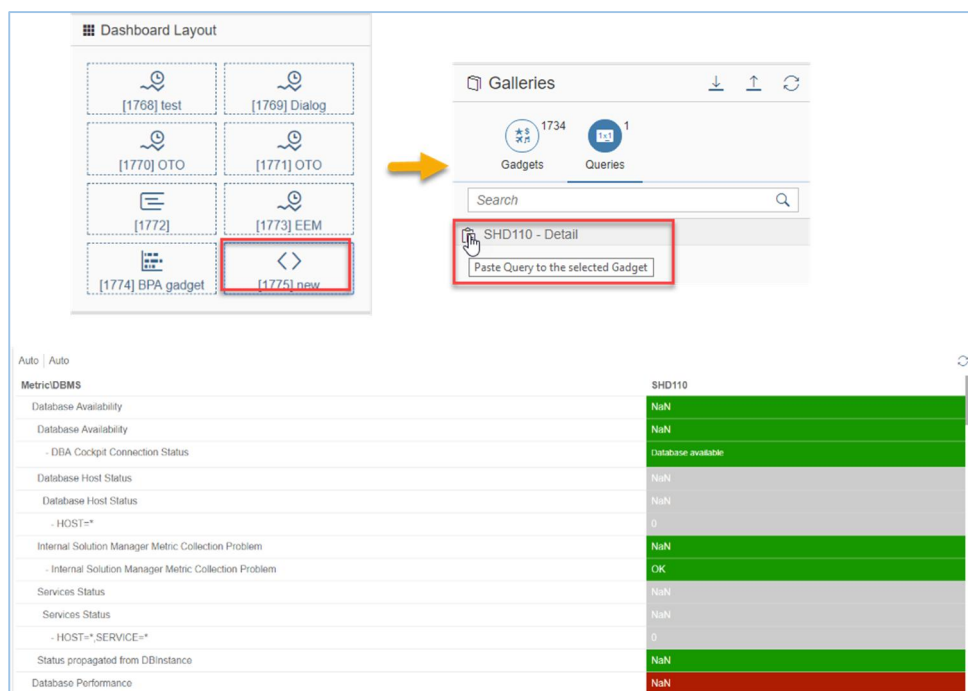


Figure 106. Paste Query (Overview view)

From the detail view, it is possible to copy and paste a metric (with numerical value) in a separated gadget to display it. This operation could only be done in edit mode and it should be saved.

- 1- Click on the Metric (with numerical value) you want to copy
- 2- Click on "Copy Query". Check in the section Queries you have a new query added

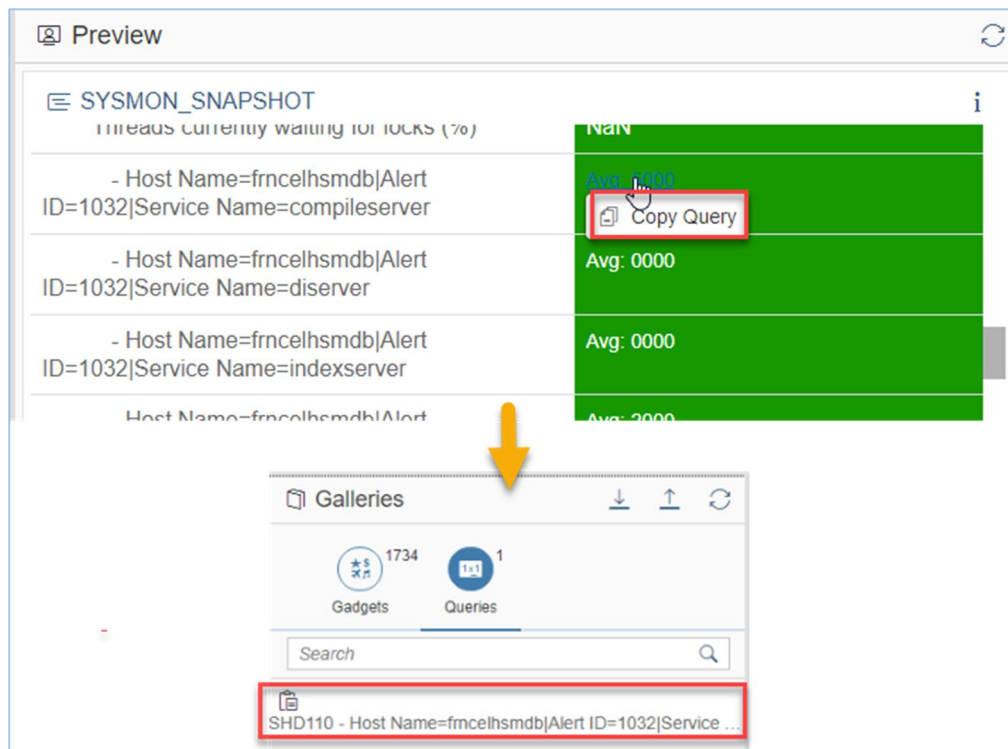


Figure 107. Copy Query (Detail View)

- 3- Select an empty gadget in the section gadget Layout. Select the copied query and click on the button "Paste query"
- 4- Select the renderer LINE_CHART and the title then save the changes.

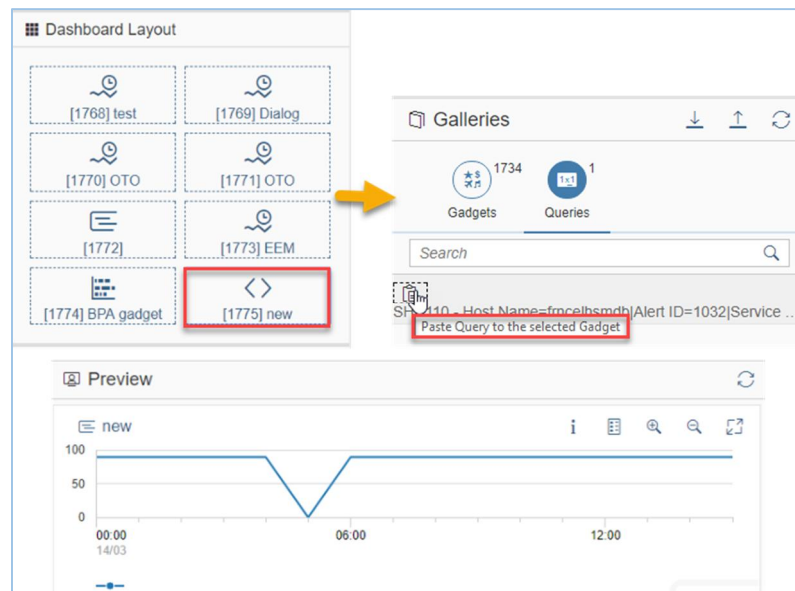


Figure 108. Paste Query (Detail View)

.3 Data Provider /STDF/DP_EEM

This data provider reports either the status or the response times of an EEM script. You need to select a robot and a script together with the type of metric (status or response time).

This data provider is convenient for real time monitoring with short time frame and small granularities (raw, minutes, hours) as it reads the values from EEM tables. For longer period, data provider /STDF/DP_EEM_BI should be used instead.

Figure 109. EEM data provider

Legend	Query
Query 0	/STDF/DP_EEM:COLOR=#1f77b4 legend=Query 0 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true M=AVAILABILITY:AVAILABILITY T=YESTERDAY:DAY D=TECH_SYSTEM:HDB F=SYS_TYPE:HANADB P= display_value=false agent=vhcala4hsmci script=UXMon Selfcheck Script metric=RESPONSE_TIME

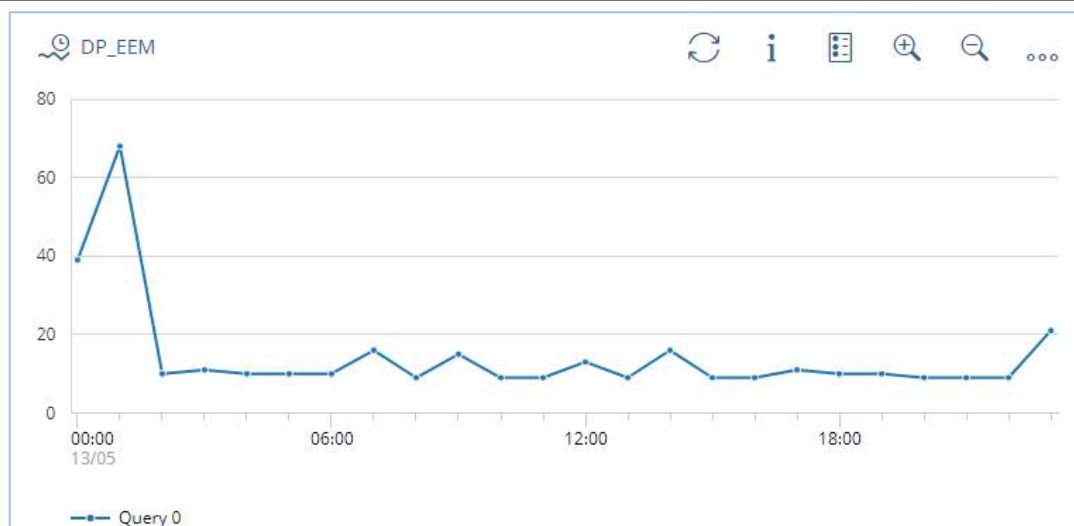


Figure 110. Metric chart

.4 Data provider /STDF/DP_EEM_BI

This data provider reports, for a given robot, the average response time of an EEM script or some EEM script's steps execution. Since data are extracted from BW, It is recommended to report on longer time periods.

You must choose:

- The agent
- The script
- The step

Analytic Filters by Data Provider: End-user Experience Monitoring BI Data Provider		
Agent/Script/Step	Hour/Weekday	
agent	script	step
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input checked="" type="checkbox"/> vhcala4hsmci	<input checked="" type="checkbox"/> UXMon Selfcheck Script	<input checked="" type="checkbox"/> [All]
<input type="checkbox"/> [All]	<input type="checkbox"/> [All]	
<input type="checkbox"/> vhcals4hci	<input type="checkbox"/> Sales Order Full	
<input type="checkbox"/> frontend	<input type="checkbox"/> MII Scheduler Status	

Figure 111. Gadget Configuration (1)

Using the tab "Hour/Weekday" It's possible to filter on business hours or business days.

Analytic Filters by Data Provider: End-user Experience Monitoring BI	
Agent/Script/Step	Hour/Weekday
hour	weekday
<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input checked="" type="checkbox"/> [All]	<input checked="" type="checkbox"/> [All]
<input type="checkbox"/> 00	<input type="checkbox"/> MO
<input type="checkbox"/> 01	<input type="checkbox"/> TU
<input type="checkbox"/> 02	<input type="checkbox"/> WE
<input type="checkbox"/> 03	<input type="checkbox"/> TH
	<input type="checkbox"/> FR
	<input type="checkbox"/> SA

More
[20 / 25]

Figure 112. Gadget Configuration (2)

Legend	Query
All_week	/STDF/DP_EEM_BI:COLOR=#aec7e8 legend=All_week OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true agent=vhcala4hsmci script=UXMon Selfcheck Script step=Call Public Ping hour= weekday= display_value=false subchart=COLUMN
MO_TU	/STDF/DP_EEM_BI:COLOR=#aec7e8 legend=MO_TU OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true agent=vhcala4hsmci script=UXMon Selfcheck Script step= hour= weekday=1,2 display_value=false subchart=LINE

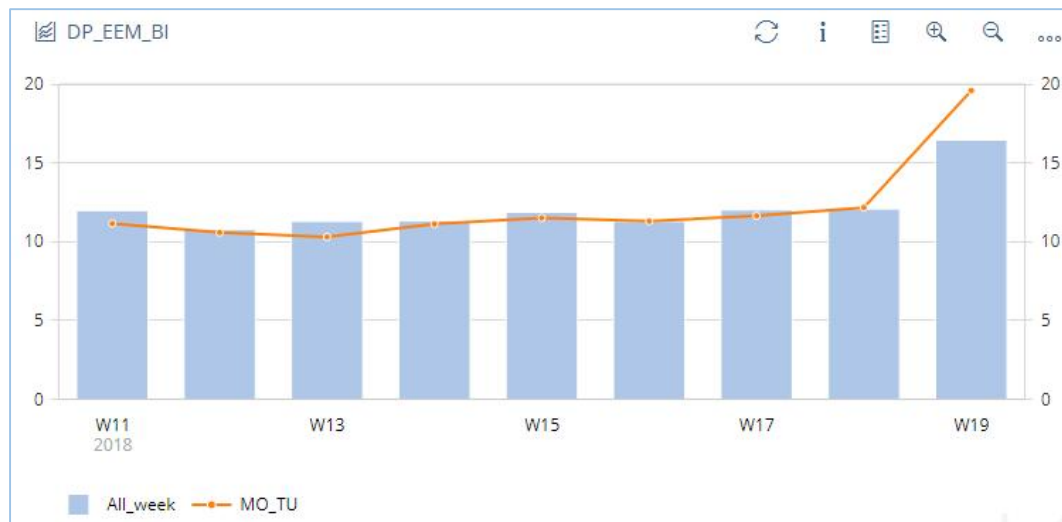


Figure 113. EEM Dashboards overview

.5 Data Provider /STDF/DP_BPA_KPI

This Data provider gives you access to all metrics of BPA (Business Process Analytic). You need to select solutions, Key figures, dimensions, filters and options.

Figure 114. DP_BPA_KPI Gadget configuration (1)

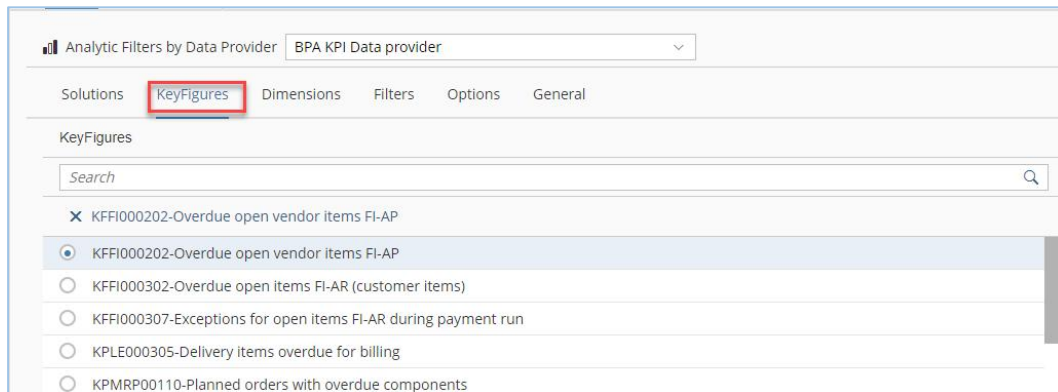


Figure 115. DP_BPA_KPI Gadget configuration (2)

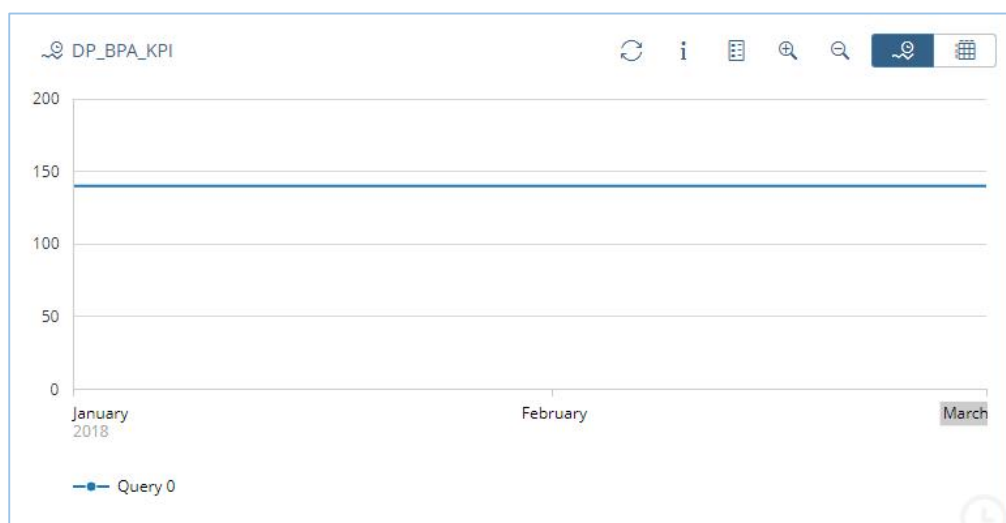


Figure 116. Detail view

.6 Data Provider /STDF/DP_BEX_QUERIES

This data provider gives you access to create a new query.

The user can choose a query then the filters that are supported will be dynamically displayed.

The selection will be also dynamically displayed as follow:

- Selection
- Fill_gaps
- X_axis

Legend	Query
--------	-------

Availability	/STDF/DP_BEX_QUERIES:COLOR=#1f77b4 legend=Availability OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Queries=OCCMPDATA-/STDF/QM_AVAILABILITY Filters= Selection= Fill_gaps= X_axis= OSMD_LSID=A4H
--------------	---

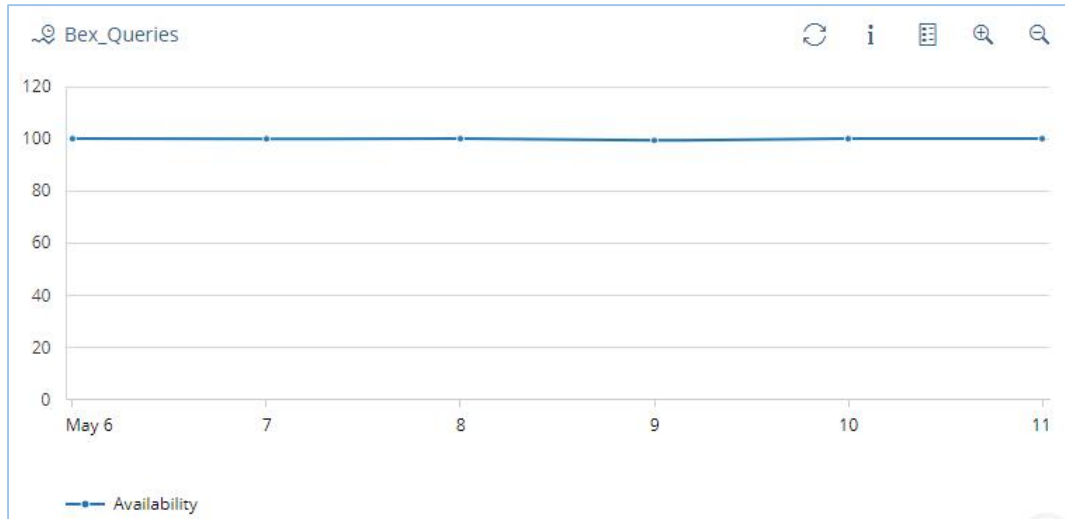


Figure 117. Detail view

.7 Data Provider /STDF/DP_DF_TAC

This Data provider gives you access to add the instances which are added in the TAC dashboard.

The user is able to add a new query.

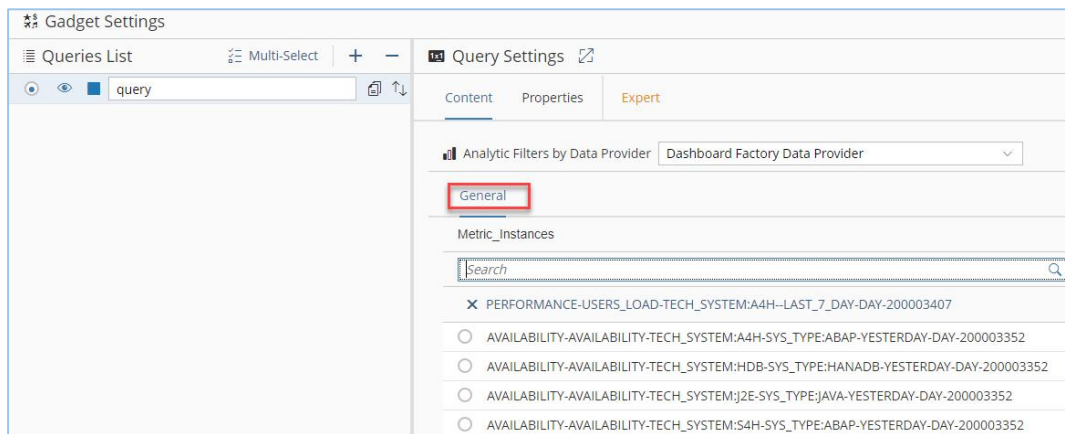


Figure 118. DP_DF_TAC configuration gadget

Legend	Query
query	/STDF/DP_DF_TAC:Metric_Instances=200003407 M=PERFORMANCE:USERS_LOAD T=LAST_7_DAY:DAY D=TECH_SYSTEM:A4H F=P= visible=true legend=query COLOR=#1f77b4 OCC_JUMP_IN=

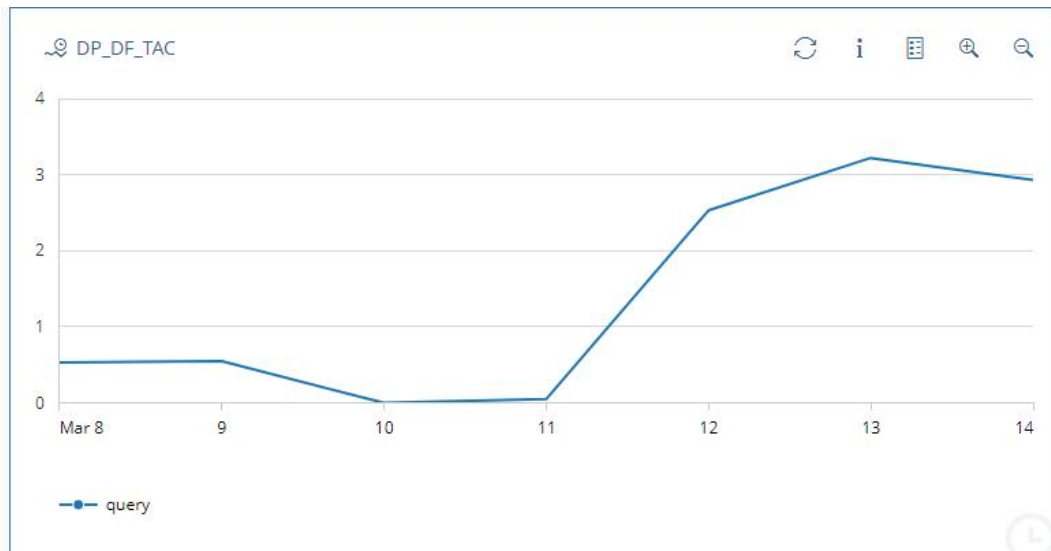


Figure 119. DP_DF_TAC Gadget

.8 Data Provider /STDF/DP_DVM (Data Volume Management)

The Data Volume Management Data Provider provides access to 4 keys metrics in the data volume management area.
As a Pre-requisites: setup Solution Manager DVM scenario.

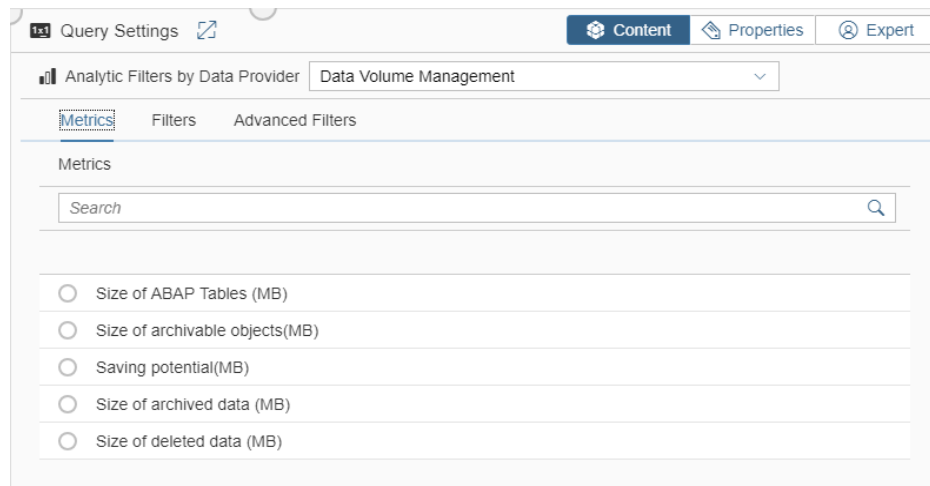


Figure 120. DVM DP: KPI List

This data provider gives you access to calculate:

- 1- Size of achievable objects (MB): Total size of DB data concerned by archiving process. See also Archive Administration tool in Solution Manager (TCODE SARA).
- 2- Saving potential (MB): Size of DB data that could be potentially archived by applying a given archiving strategy (prerequisite: configure a DVM saving potential scenario).

- 3- Size of archived data (MB): Size of data archived.
- 4- Size of deleted data (MB): Size of data deleted from the DB.
- 5- Size of ABAP table (MB): Total size of DB data.

Depending on the metric, several filters are possible (see table below): Scenario(s) (DVM saving potential scenario, dedicated configuration required), product(s), application area(s), technical system(s), archiving object(s), document type(s). For each filter it is possible to select one value, several values or all values.

Metric	Filters
Size of ABAP table (MB)	Product, Application Area, System, Document Type
Size of achievable objects (MB)	Product, Application Area, System, Archiving Object, Document Type
Saving potential (MB)	Scenario, Application Area, System, Archiving Object, Document Type
Size of archived data (MB)	Archiving Object, System
Size of deleted data (MB)	

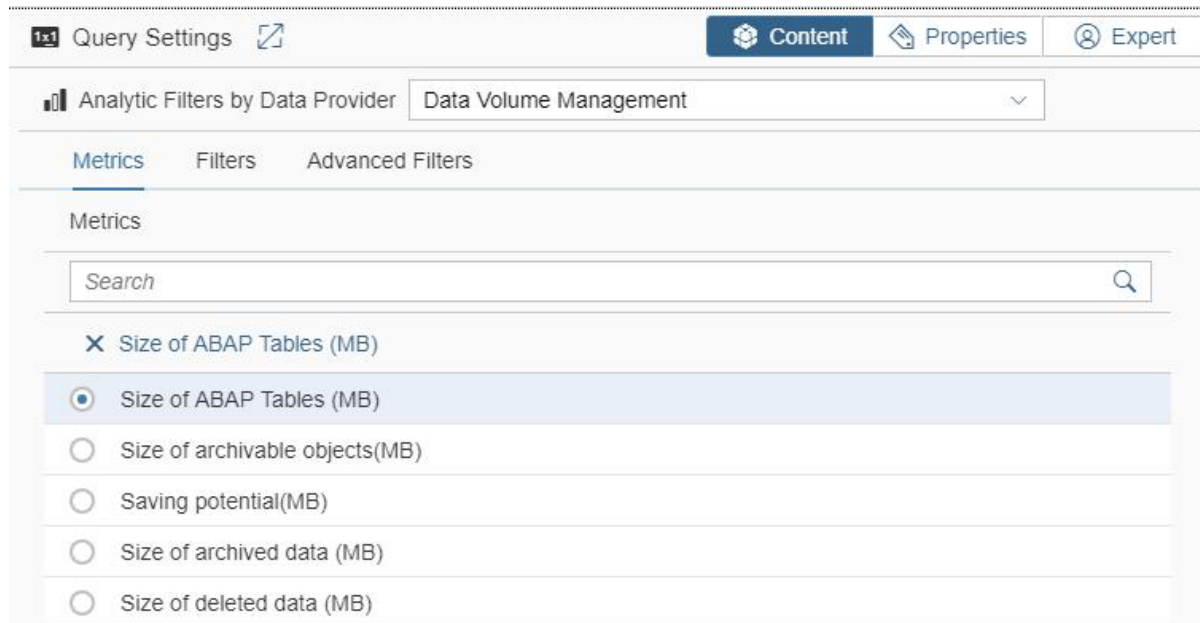


Figure 121. DVM data provider

Legend	Query
Size of ABAP Tables (MB)	/STDF/DP_DVM:COLOR=#1f77b4 legend=Size of ABAP Tables (MB) OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Metrics=Size of ABAP Tables (MB) Filters= Advanced_Filters= Product=SAP SOLUTION MANAGER 7.2 Application_Area=BC System=A4H Document_type=ABAP Connectivity and Integration Tools

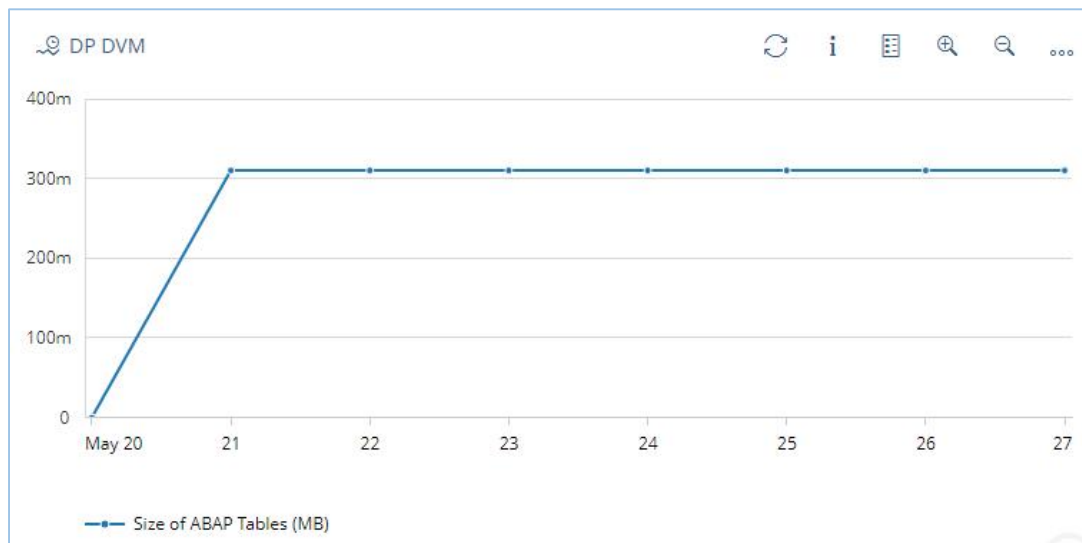


Figure 122. DVM DP detail view

9 Data Provider /STDF/DP_MAI_ALERTING

This data provider gives an access to calculate these metrics:

- 1- Number of alerts created (Number of new alerts created during the time period)
- 2- Current number of alerts (Current number of open alerts in the alert inbox during the requested time period)
- 3- Average alert processing duration (min) (Average processing time (in minutes) of open alerts in the alert inbox during the requested time period)
- 4- Average time from Alert is opened till confirmed by Operator (min) (Average time (in minutes) between the alert is opened (i.e. created by the system) until the alert is closed manually by the operator)
- 5- Number of alerts confirmed by Operator (Number of alerts closed by operator)
- 6- Maximum time from Alert is opened till confirmed by Operator (Min) (Maximum time (in minutes) between the alert is opened (i.e. created by the system) until the alert is closed manually by the operator)
- 7- Average time from Alert is opened till manual Incident is created (Min): (Average time in minutes between the alert is opened (i.e. created by the system) until the operator open an incident for this alert)
- 8- Number of manual Incidents created (Number of incidents opened by operator)
- 9- Maximum time from Alert is opened till manual Incident is created (Min) (Maximum time in minutes between the alert is opened (i.e. created by the system) until the operator open an incident for this alert)

For these metrics, we have to select the specified tabs and choose the appropriate information:

- Filters
 - Managed Object
 - Alert Name
 - Technical Scenario
- Options
 - Managed Object Type
 - Category

- Rating
- With incident
- Severity

PS: Another tab named "Duration" exists and it applied only with the Current number of alerts metric.

The selected managed object must be compatible with the chosen managed object type, else the DP returns no data.

The screenshot shows the 'Analytic Filters by Data Provider' interface for the 'Alert Monitoring Data Provider'. The 'KPI' tab is selected and highlighted with a red box. Below the tabs, there is a search bar and a list of KPI options. The option 'Current number of alerts' is selected and highlighted with a red box. Other options include 'Number of alerts created' and 'Average alert processing duration(min)'.

Figure 123. Gadget configuration (1)

The screenshot shows the 'Analytic Filters by Data Provider' interface for the 'Alert Monitoring Data Provider'. The 'Filters' tab is selected and highlighted with a red box. Below the tabs, there are three columns of filters: 'Managed Object', 'alert Name', and 'Technical Scenario'. Each column has a search bar and a list of filter options. The 'Managed Object' column shows options like 'A4H-SELF MONITORING 1(RFC):A...', 'A4H-SELF MONITORING 2(HTTP):...', and 'A4H-SELF MONITORING 3(GW):U...'. The 'alert Name' column shows options like 'ABAP Aborted Job (ExMon)', 'ABAP Application Log Errors (Ex...', and 'ABAP Central Service not available'. The 'Technical Scenario' column shows options like 'Advanced Monitoring', 'Business Intelligence, SBOP Mon...', 'Business Process Monitoring', 'Connection Monitoring', and 'Data Readiness Monitoring'. Each column has a 'More' link and a count of items.

Figure 124. Gadget configuration (2)

The screenshot shows the 'Analytic Filters by Data Provider' interface for the 'Alert Monitoring Data Provider'. The 'Duration' tab is selected and highlighted with a red box. Below the tabs, there are three columns: 'Threshold Unit', 'Threshold Value', and 'With Processor'. Each column has a search bar and a list of options. The 'Threshold Unit' column shows options like 'Day', 'Minute', 'Hour', and 'Day'. The 'Threshold Value' column shows options like '2', '1', '2', and '3'. The 'With Processor' column shows options like 'Yes' and 'No'. Each column has a 'More' link and a count of items.

Figure 125. Gadget configuration (3)

The generated query is:

Legend

Query

L1

/STDF/DP_MAI_ALERTING:KPI=Counter_Cur|CONTEXT_ID=OTO-ABAP|ALERT=|TECHNICAL_SCENARIO=|CONT
EXT_TYPE=|CATEGORY=|RATING=|Incident=|SEVERITY=|Threshold_unit=Day|Threshold_value=2
|processor=|visible=true|legend=|COLOR=#1f77b4|OCC_JUMP_IN=

< ... TEST DASHBOARD

MAI_ALERTING

Auto | Auto

	ALERT_LINK	RATING	CATEGORY	MANAGED_OBJECT	TYPE	STATUS	START_TIME	END_TIME	
1	https://fdci0ft.wdf.sap.corp:44378/	3	EXCEPTION	OTO-ABAP	T SYSTEM	Transferred	05.03.2018 10:58:31	16.03.2018 11:32:08	Upd

Duration = 11 days > 2 days

Figure 126. Detail view

PS: In this case, the returned result will show the alerts of the specified managed object that have a duration (Duration= END_TIME - START_TIME) equal or greater than 2 Days.

.10 Data Provider /STDF/DP_DF_KPI

The Dashboard Factory KPI are predefined metrics offering best practices IT indicators abstracting the technical source of the data.

The Metrics are used by the Focused Insights Dashboards.

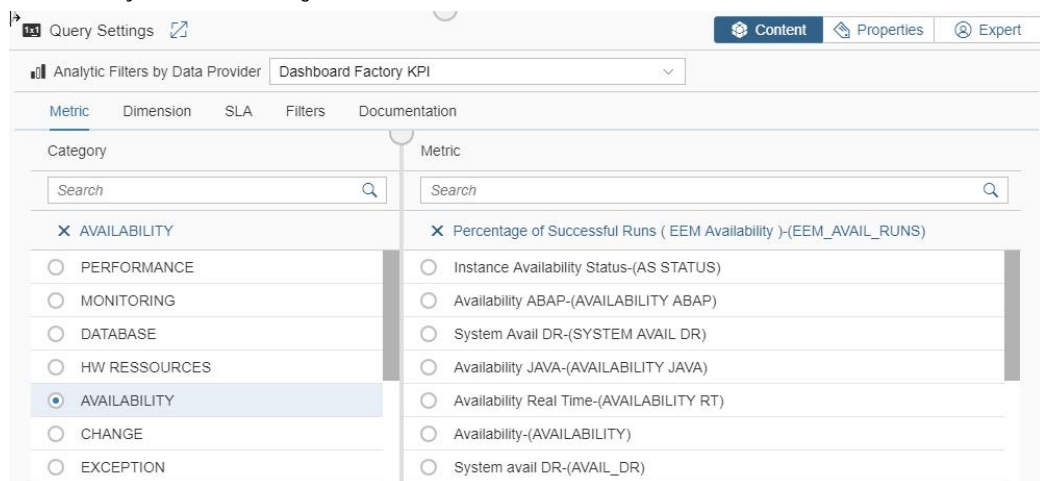


Figure 127. Gadget configuration (1)

Figure 128. Gadget configuration (2)

Legend	Query
Selfmon	/STDF/DP_DF_KPI:Category=AVAILABILITY Metric=/STDF/CL_EEM_AVAIL_RUNS__1_0 Dim_name=OSMD_SCRI Dim_value=UXMon Selfcheck Script Period= SLA= G2Y= Y2R= UNIT= Filters= Documentation= OSMD_AGENT= OSMD_TSCN= legend=Selfmon visible=true COLOR=#1f77b4 OCC_JUMP_IN= display_value=false



Figure 129. Detail View

.11 Data Provider /STDF/DP_ITSM

The ITSM data provider gives an access to calculate these KPIs:

- 1- Number of Tickets For ITSM Transactions
- 2- Average Processing Time
- 3- Average Work Effort
- 4- Total Average Work Effort
- 5- Average Number of Status Iterations
- 6- Number of Tickets out of IRT
- 7- Number of Tickets out of MPT
- 8- Number of Open Tickets

- 9- Average deviation from MPT
- 10- Average deviation from IRT

For these metrics, we can filter on:

- 11- Transaction
- 12- Priority
- 13- Business Partner
- 14- Category level
- 15- Status

The following screenshots show an example of the gadget configuration for the Number of Tickets For ITSM Transactions:

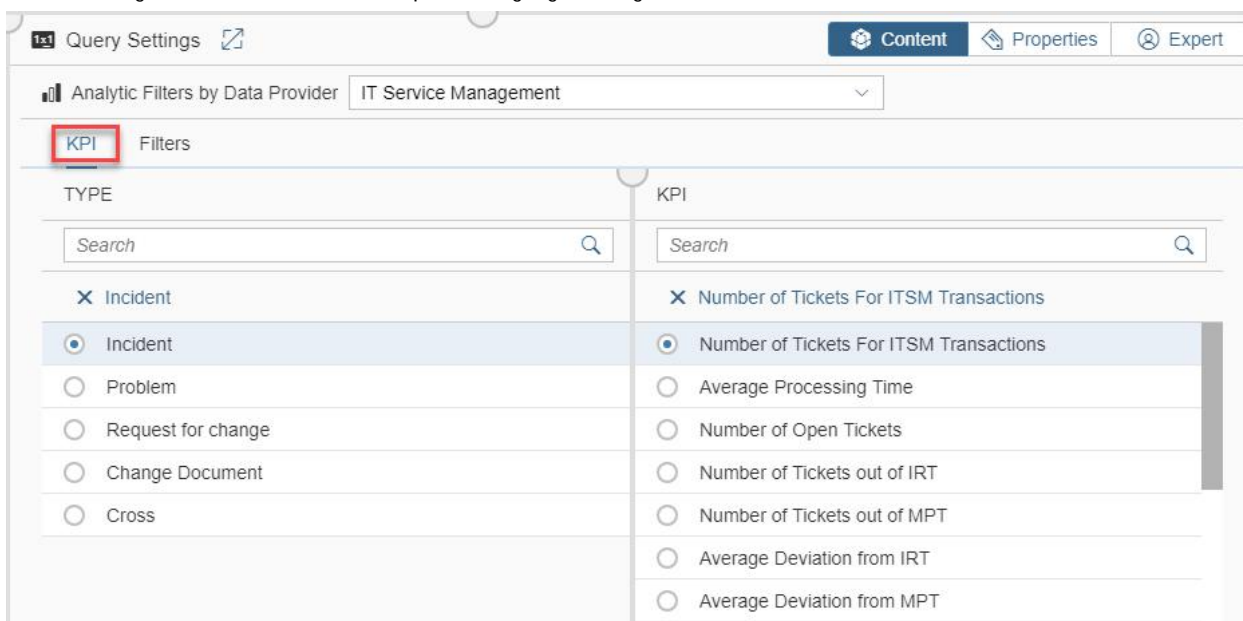


Figure 130. Gadget configuration (1)

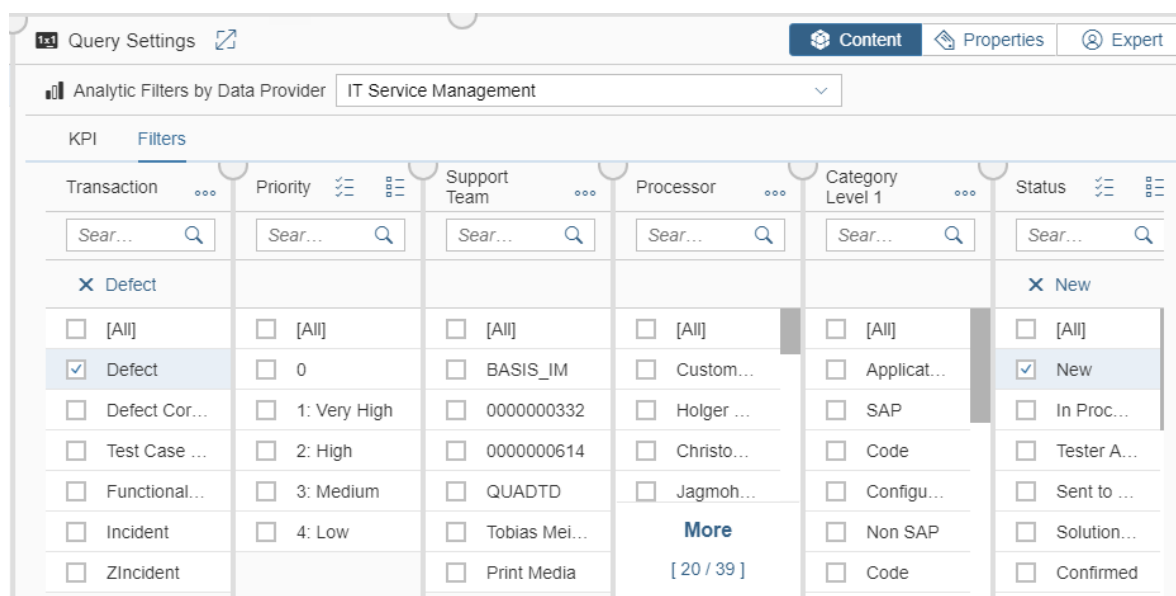


Figure 131. Gadget configuration (2)

PS: When selecting a transaction type from the filters Tab, the appropriate lists of category and status are displayed automatically for the specified transaction.

The generated query is:

Legend	Query
New defects	/STDF/DP_ITSM:COLOR=#1f77b4 legend=New defects OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true TYPE=Incidents KPI=Number of Tickets For ITSM Transactions Transaction=S1DM Priority= Support_Team= Processor= Category_Level_1= Status=S1DM0001E0001

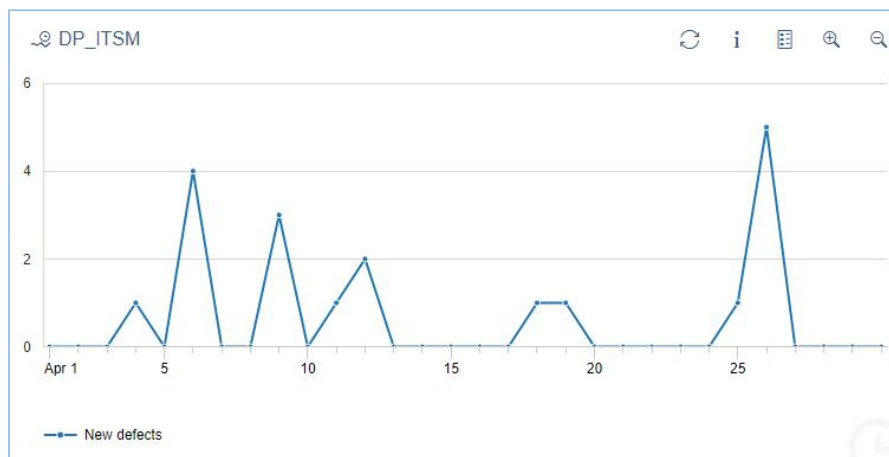


Figure 132. Detail View

.12 Data Provider /STDF/DP_CCM

The Custom Code Data Provider provides access to a set of pre-defined CCM KPIs that need to be configured in the DF Metric Instance editor.

As a Pre-requisites: Metrics have to be created with a webdynpro Wizard to extract the data from the CCLM ad-hoc reporting tables.

Schedule CCM job (Focused Insights GP setup).

The metric instances can be configured via webdynpro application:

Metric Instance Builder application link:

https://host:port/sap/bc/webdynpro/stdf/wd_mi#

The following screenshots show an example of the gadget configuration for the DP_CCM:

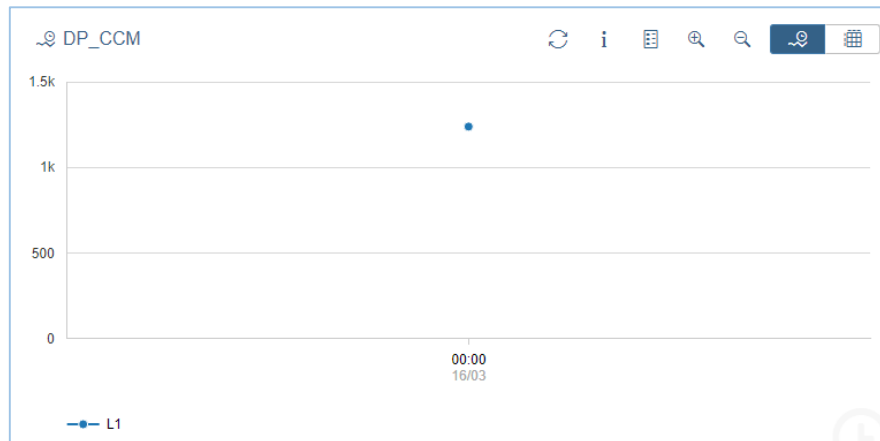


Figure 133. Gadget configuration

The generated query is:

Legend	Query
L1	/STDF/DP_CCM:legend=L1 COLOR=#1f77b4 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATI NG= DISPLAY_ATTRIBUTES= visible=true Metric_Instances=7 LIVE_COLLECT=TRUE

Figure 134. CCM DP detail view

.13 Data Provider /STDF/DP_CRM

The data provider returns the number of objects found on CRM using a chosen saved search created in CRM. It traits all types of saved searches (i.e. incidents, normal change) and support daily, weekly and monthly aggregation.

P.S:

The saved search needs to provide the 'Transaction Type' to get a correct result. Otherwise, the message 'No transaction Type specified' appears.

When using the DYNAMIC TABLE renderer, there is a possibility of jump-in to the CRM UI from the link existing in the OBJECT_ID field showing the result of the query.

The user may affect a drilldown operation on the displayed data using the "Drilldown" tab.

To use the STACK_COLUMN_CHART_2LABEL, we should choose the period and resolution in the way that the gadget returns one value. (Examples: Today/Day, Last_Month/Month...).

Also, we need to specify a legend like shown below:

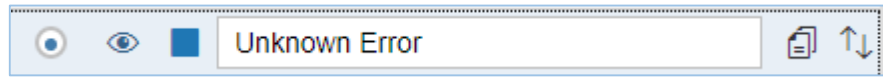


Figure 135. Legend

The '/' is required to get a correct display.

We must be sure that the selected drilldown can be applied on the selected saved search.

The following screenshots show an example of the gadget configuration for CRM DP:

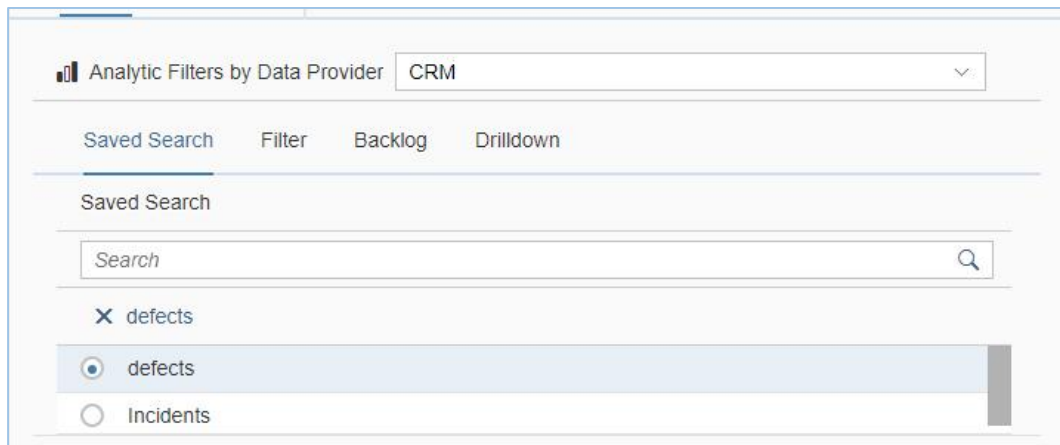


Figure 136. Gadget configuration (1)

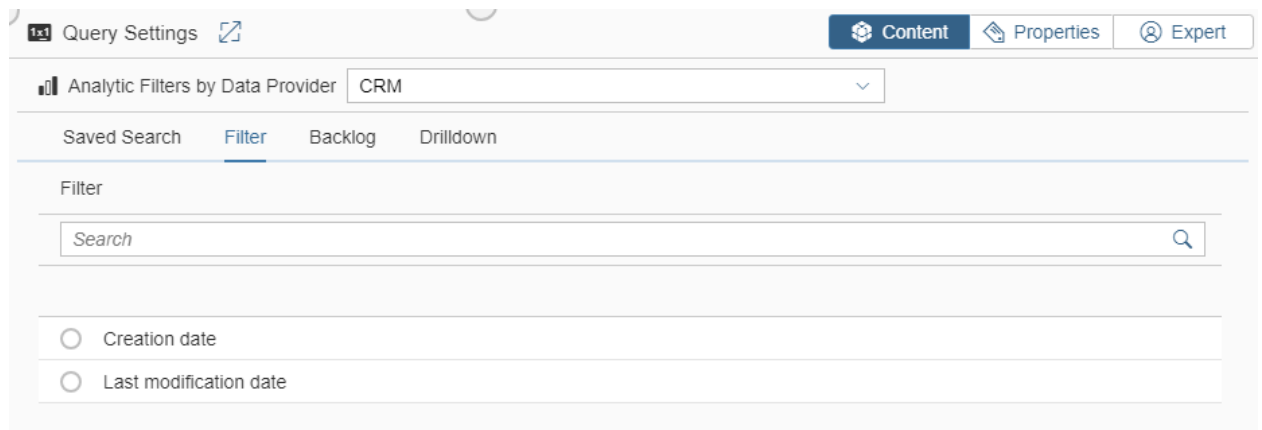


Figure 137. Gadget configuration (2)

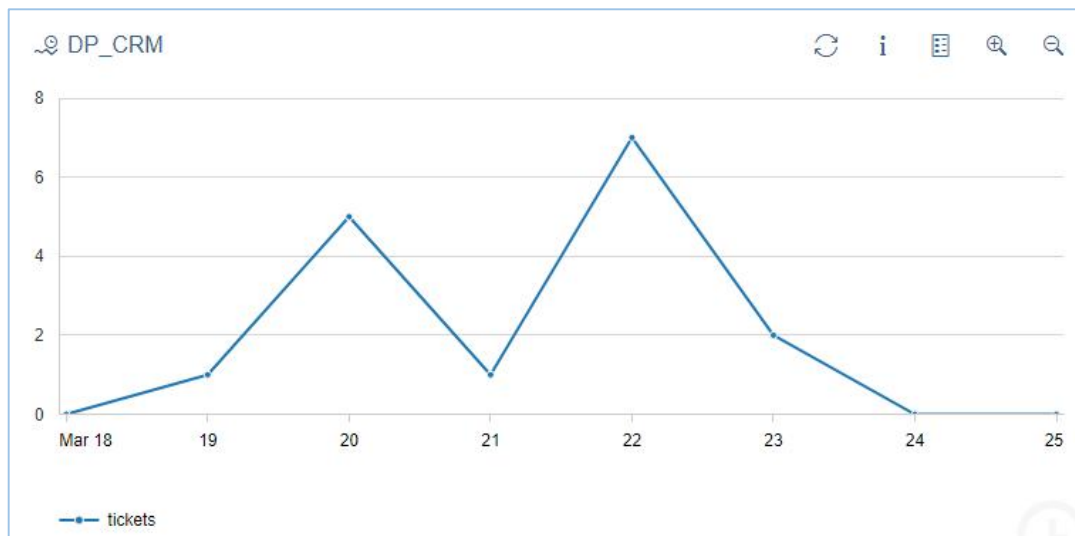


Figure 138. Detail view

Starting with SP06, there are two new options in the Backlog tab:

Query Settings | Content | Properties | Expert

Analytic Filters by Data Provider: CRM

Saved Search | Filter | **Backlog** | Drilldown | HTML Content

Backlog

Search

☐ Yes

☐ No

☐ Cumulation

☐ Burndown

Figure 139. Backlog Tab

- Cumulation:
 - Sum up each granularity value from the previous value.
- Burndown:
 - Sum up all the documents from each granularity
 - assign the result to the first occurrence
 - For each granularity we subtract the value from the previous granularity: previous value – current value

With the current release SP08, a new tab named 'Saved View' is available, it allows the display of a preconfigured views based on the saved search from the CRM application.

Note that This Tab is only displayed if the user had already configured one or more saved views.

Below a step by step example of the configuration and the use of a saved view:

1. Navigate to the CRM application
2. Create your saved search and enter the wanted filter

Search Criteria

Transaction Type	is	Requirement (S1...	+ -
Priority	is	1: Very High	+ -
Status	is	Approved	+ -
Description	contains		+ -
Time Frame	is	Last year	+ -
Status	is		+ -

Maximum Number of Results: 100

Search **Clear** Save Search As: ☒ Include View **Save**

Result List: 54 Business Requirements Found

Figure 140. Configuration of a saved search

3. Enter the name of the saved search and check the option include view then click on Save button
4. Check that a view with the same name as the saved search is saved

Result List: 54 Business Requirements Found

View: **New** **Create Follow-Up** **Refresh** Filter:

Business Requi...	Description	Priority	User Status	Posting Date	Category	Changed on	Last Changed By	Transaction Type
8000016234	test new	1: Very High	Approved	29.01.2020		28.10.2020		S1BR
8000016313	WP creation	1: Very High	Approved	06.02.2020		06.02.2020		S1BR
8000016723	HZ Scope 20 ...	1: Very High	Approved	20.03.2020		19.08.2020		S1BR
8000016871	tttt	1: Very High	Approved	27.03.2020		20.08.2020		S1BR
8000016872	test send for a...	1: Very High	Approved	27.03.2020		21.08.2020		S1BR

Figure 141. Personalization button

5. Go to the saved view and Personalize your view by adding and removing column from it

Default View: Test_View Save As Delete

Table Navigation

Table Navigation: ☐ Scrolling ☐ Paging ☒ Both

Number of Visible Rows Before Scrolling:

Number of Rows Before Paging:

Available Columns

Name
Sold-To Party
Business Proce...
Business Manager
Owner
Requirements T...
Current Processor
Current Processor
Sold-To Party

Displayed Columns

Name	Width	Fi...	Fi...
Business Require...		🔒	
Description			
Priority		🔒	

Figure 142. View Personalization

- Click on Save As button and keep the same name or rename your personalized view then click save

New View Name: Test_View_Perso

Save Cancel

Figure 143. Renaming view

- Now let's go to the OCC dashboard and configure a new gadget using the preconfigured saved view
- Select the Dynamic Table renderer
- Select CRM data provider
- Select the wanted saved search

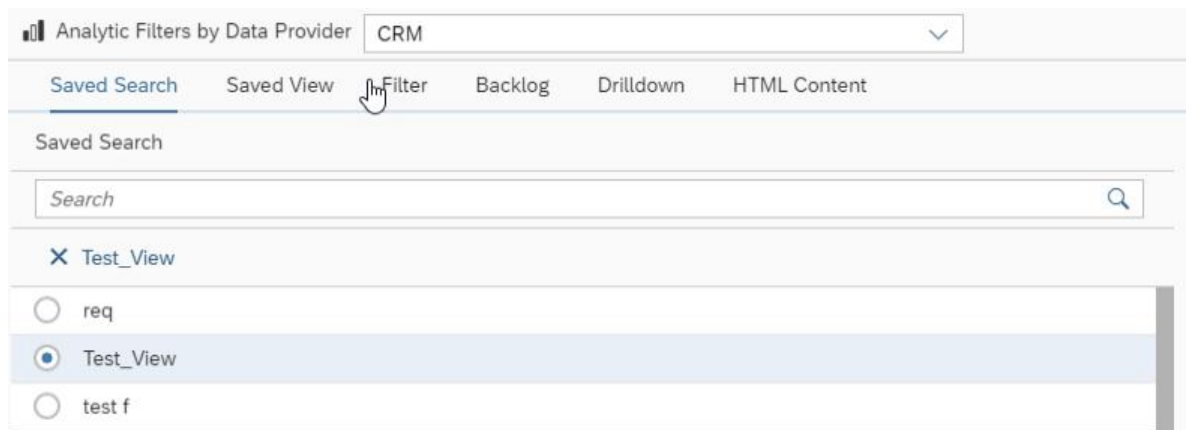


Figure 144. Saved Search

11. Select the wanted saved view

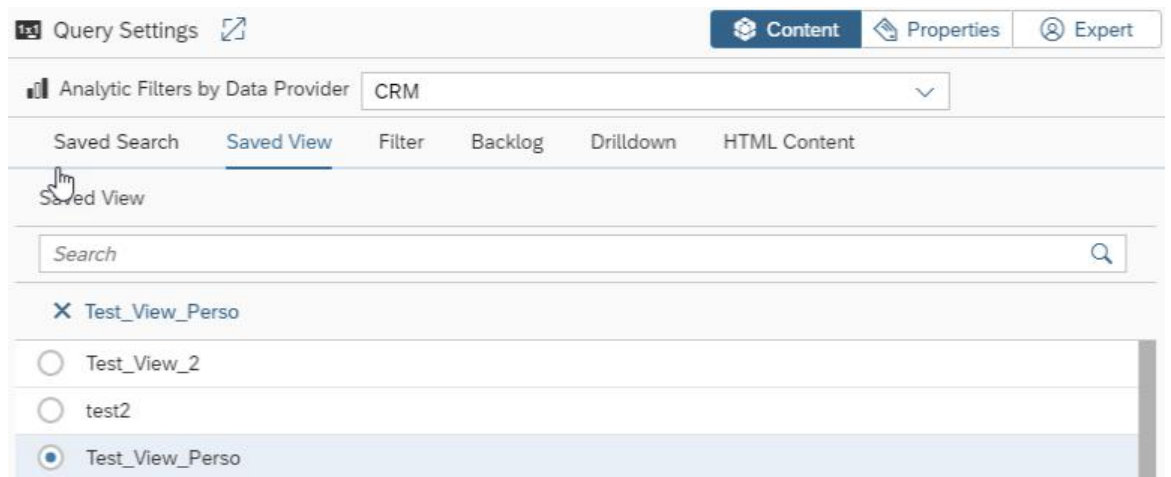


Figure 145. Saved View

12. Click on preview and check that data is there

.14 Data Provider /STDF/DP_CALCULATION

This data provider enables the user to affect mathematical operations on the different metrics. These operations are multiplication, addition, division, and subtraction.

To use the /STDF/DP_CALCULATION data provider, we must proceed like shown below:

1. Create two queries. (Select a metric from any Data provider: In this case, we have select /STDF/DP_DF_TAC and the selected metric is availability)

Legend	Query
--------	-------

ABAP	/STDF/DP_DF_TAC:COLOR=#1f77b4 legend=ABAP OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true calcQuery=377 Metric_Instances=200003352 M=AVAILABILITY:AVAILABILITY T=YESTERDAY:DAY D=TECH_SYSTEM:A4H F=SYS_TYPE:ABAP P=
J2E	/STDF/DP_DF_TAC:COLOR=#aec7e8 legend=J2E OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Metric_Instances=200003352 M=AVAILABILITY:AVAILABILITY T=YESTERDAY:DAY D=TECH_SYSTEM:J2E F=SYS_TYPE:JAVA P=

2. Save the created gadget

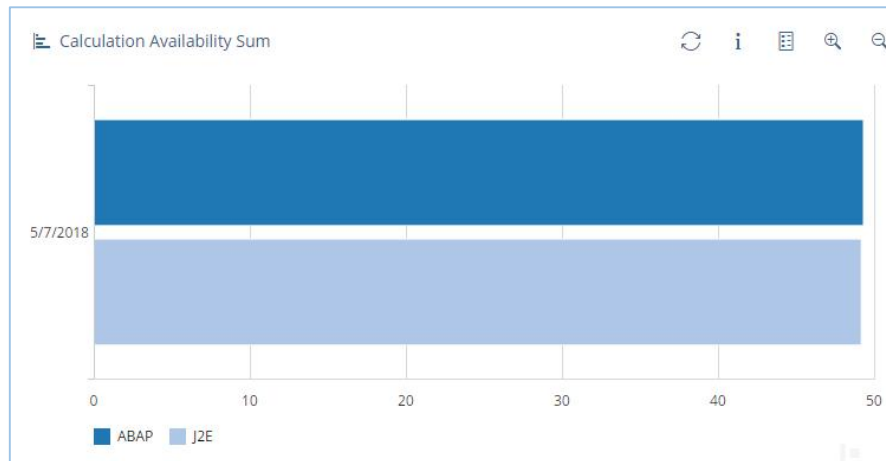


Figure 146. Detail view (ABAP and J2E availability)

3. Select the /STDF/DP_CALCULATION data provider

4. Select an Operand1 (Example: ABAP)

5. Select an operator (Example: Add)

5. Select an Operand2 (Example: J2E)

The generated query is:

Legend	Query
SUM	/STDF/DP_CALCULATION:COLOR=#ff7f0e legend=SUM OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=false calcQuery=377 Operand1=ABAP Operator=Add Operand2=J2E calcQuery=377

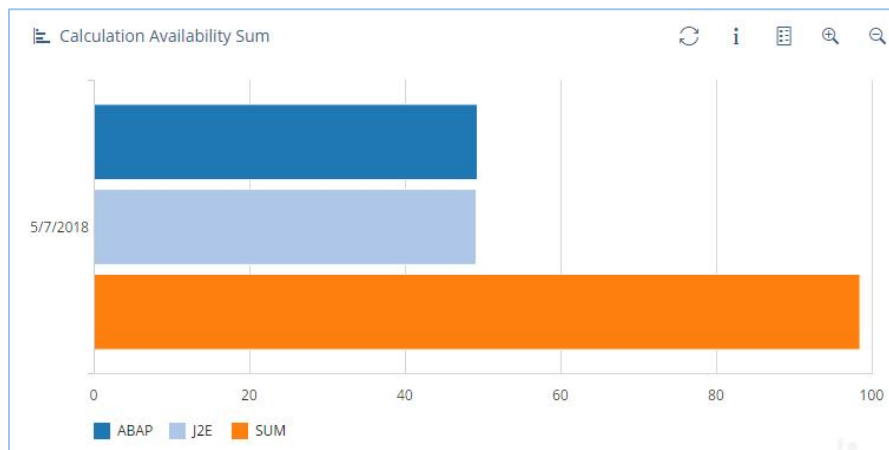


Figure 147. Detail view (ABAP, J2E availability and the sum)

.15 Data Provider /STDF/DP_DCM

This data provider gives you an access to calculate the KPIs using these filters:

- 1- Model Name
- 2- Comparison Name
- 3- Metrics

For this data provider we must select one metric in the list below:

- 4- Indicator
 - Number of objects existing only in system 1
 - Number of objects existing only in system 2
 - Number of common objects with differences
 - Number of identical objects
- 5- Quality
 - Number of run
 - Number of successful run
- 6- Summary
 - Number of compared objects
 - Number of inconsistencies

Query Settings
Content
Properties
Expert

Analytic Filters by Data Provider
Data Consistency Management

KPI

Model Name	Comparison Name	Metrics
Search	Search	Search
<input checked="" type="radio"/> CDC_DEMO_BUSINESS_PARTNER <input type="radio"/> <input checked="" type="radio"/> CDC_DEMO_BUSINESS_PARTN... <input type="radio"/> ZDC_DASHBOA <input type="radio"/> ZODATA_TAC	<input checked="" type="radio"/> DEMO2 <input type="radio"/> DEMO <input checked="" type="radio"/> DEMO2	<input checked="" type="radio"/> Number of common objects with differences <input type="radio"/> Number of objects existing only in system 1 <input type="radio"/> Number of objects existing only in system 2 <input checked="" type="radio"/> Number of common objects with differences <input type="radio"/> Number of identical objects <input type="radio"/> Number of runs <input type="radio"/> Number of successful run <input type="radio"/> Number of compared objects

Figure 148. Configuration Gadget

The generated query is:

Legend	Query
DP_DCM	/STDF/DP_DCM:COLOR=#1f77b4 legend=Query 0 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true C OMP_OBJ=CDC_DEMO_BUSINESS_PARTNER COMP_INST=DEMO2 METRICS=3

DP_DCM			
	INCON_TYPE	OBJ_KEY_1	OBJ_KEY_2
1	3	134E3749149F4B11E10000000A42442C	
2	3	194E3749149F4B11E10000000A42442C	
3	3	72503749149F4B11E10000000A42442C	
4	3	73503749149F4B11E10000000A42442C	
5	3	9EEE9B4920D8383BE10000000A42442C	
6	3	9EEE9B4920D8383BE10000000A42442C	
7	3	F5513749149F4B11E10000000A42442C	

Figure 149. Detail View

An export button is available to have results displayed in CVS format.

.16 Data provider /STF/DF/DP_ICM

This Data Provider supports the Interface Channel Monitoring scenario.

The following screenshots show an example of configuration for the DP_ICM gadget:

Figure 150. Configuration gadget (1)

Figure 151. Configuration gadget (2)

The generated query is:

Legend	Query
Average RFC Response Time	/STDF/DP_ICM:COLOR=#1f77b4 legend=Response time OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true scenario=SELF

	MONITORING-INTER_MON channel=1255A578FFF21ED78CB415AD92C7BB38 interface= metric=ICM ON_IFCHANNEL_RFC_RESPONSE_TIME parameter= Fill_gaps= aggregation=
--	--

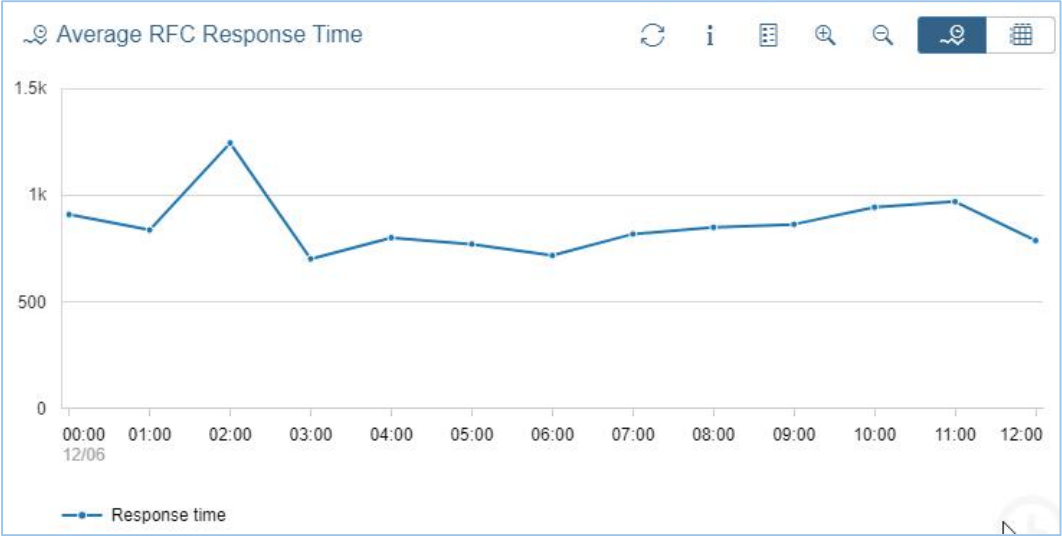


Figure 152. Detail view

.17 Data Provider /STDF/DP_EWA

This data provider gives access to the history of EWA data.
In the following example we will use the DYNAMIC_TABLE_RENDERER as a renderer for a better display.

Analytic Filters by Data Provider

Early Watch Alert

General

Systems

Search

APE~JAVA

A32~HANADB

A33~HANADB

A75~JAVA

A87~IAVA

More

[20 / 495]

Chapters

Search

EarlyWatch Alert Session

EarlyWatch Alert Session

Define Session Scope

Detailed Session Scope for Syste...

Landscape

More

[20 / 106]

Tables

Search

No data

Figure 153. Gadget configuration

The generated query is:

Legend	Query
S4 HANA	/STDF/DP_EWA:COLOR=#1f77b4 legend=S4 HANA OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=tr

OCC Dashboard 7.2 SP08
Data Provider

PUBLIC

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83

ue Systems=S4H-ABAP Chapters=00001,SESSION,,EW_ROOT,EA0010000002555 TABLE= display_value=false							
EWA all chapters							
	SESSION_ID	CHAPTER_NAME	INCLUDED_IN_REPORT	INSTALLATION_NUMBER	SYSTEM_ID	DATE	RATING
192	0010000002555	Additional download information	No	0020624476	S4H	07.05.2018	undefined
193	0010000002555	SAP HANA Database HDB	Yes	0020624476	S4H	07.05.2018	Error
194	0010000002555	SAP HANA HDB	No	0020624476	S4H	07.05.2018	Error
195	0010000002555	HANA Download Function Module	No	0020624476	S4H	07.05.2018	Warning
196	0010000002555	Overview	Yes	0020624476	S4H	07.05.2018	Green
197	0010000002555	SAP HANA Critical Revisions	No	0020624476	S4H	07.05.2018	Green
198	0010000002555	SAP HANA Critical Operating System	No	0020624476	S4H	07.05.2018	Green
199	0010000002555	SAP HANA Stability and Alerts	Yes	0020624476	S4H	07.05.2018	Warning

Figure 154. Detail view

Rating Mapping: Each color has a specified indication:

Very critical → Red

Critical → Yellow

OK → Green

No rating → Green

Other → Grey

18 Data Provider /STDF/DP_BPO

This data provider is used to monitor critical SAP business processes.

In order to use the /STDF/DP_BPO data provider, we have to proceed like shown below:

1. Click on "Add query" button
2. Select the data provider '/STDF/DP_BPO'
3. Add the 'Solution'
4. Add the 'System Role'
5. Add the 'Site'
6. Add the 'Scenario'
7. Add the 'Process'
8. Add the 'Step'
9. Add the 'Monitoring Object'
10. Add the 'Metric'
11. Choose the right time Range
12. Click on "Save" button

Analytic Filters by Data Provider		
DataProvider For BP monitoring		
Context	Business Process	Metric
Solution	System Role	Site
Search	Search	Search
<input checked="" type="checkbox"/> Corporate Solution - Operations() <input checked="" type="radio"/> Corporate Solution - Operations() <input type="radio"/> Corporate Solution - Production()	<input checked="" type="checkbox"/> Production System <input checked="" type="radio"/> Production System	<input checked="" type="checkbox"/> Global <input checked="" type="radio"/> Global

Figure 155. Configuration gadget (1)

Analytic Filters by Data Provider		
DataProvider For BP monitoring		
Context	Business Process	Metric
Scenario	Process	Step
Search	Search	Search
<input checked="" type="checkbox"/> E2E_Order-to-Cash <input checked="" type="radio"/> E2E_Order-to-Cash <input type="radio"/> E2E_Procure-to-Pay	<input checked="" type="checkbox"/> E2E_OTC_Sale-from-Stock Direct Sales <input checked="" type="radio"/> E2E_OTC_Sale-from-Stock Direct...	<input checked="" type="checkbox"/> Sales Order Entry <input type="radio"/> Create Sales Order <input type="radio"/> Sales Order IDocs Inbound <input checked="" type="radio"/> Sales Order Entry <input type="radio"/> Review Sales Orders

Figure 156. Configuration gadget (2)

Analytic Filters by Data Provider	
DataProvider For BP monitoring	
Context	Business Process
Monitoring Object	Metric
Search	Search
<input checked="" type="checkbox"/> Sales Documents Open - Test Object <input type="radio"/> BPCC: Order to Cash - Create Sales Order <input type="radio"/> ABAP Dumps Every Hour <input checked="" type="radio"/> Sales Documents Open - Test Object	<input checked="" type="checkbox"/> Open sales orders-001 <input checked="" type="radio"/> Open sales orders-001

Figure 157. Configuration gadget (3)

The generated query is:

Legend	Query
Sales_doc	/STDF/DP_BPO:legend=Sales_doc COLOR=#1f77b4 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Solution=2aaVgTjN7jQRkBzcgxZ8hG_2aaVgTjN7jQRkB

	zcgxZ8hG System_Role=2aaVgTjN7jQRkBzcgxZ8hG_2aaVgTjN7jQRkBzcgxZ8hGP Site=2aaVgTjN7jQRkBzcgxZ8hG_2aaVgTjN7jQRkBzcgxZ8hGPSITE Scenario=2aaVgTjN7jQRkBzcgxZ8hG2aaVgTjN7jQRkBzcgxZ8hGP_02CcdQFd7kMDrA1N4pldDW2aaVgTjN7jQRkBzcgxZ8hGPSITE Process=2aaVgTjN7jQRkBzcgxZ8hG2aaVgTjN7jQRkBzcgxZ8hGP_2aaVgTjN7jQRkIjvbEdBVW2aaVgTjN7jQRkBzcgxZ8hGPSITE Step=2aaVgTjN7jQRkBzcgxZ8hG2aaVgTjN7jQRkBzcgxZ8hGP_2aaVgTjN7jQRkIjvbEdBVW2aaVgTjN7jQRkBzcgxZ8hGPSITE Context_id=1255A578FFF21EE7918D4048EDCC4DE6 Metric=Open sales orders_001-001
--	--



Figure 158. Detail view

.19 Data Provider /STDF/DP_SOLDOC

This Data Provider supports the Solution Documentation application.

The following screenshots show an example of configuration for the DP_SOLDOC gadget:

Indicator	Solution	Branch
<input checked="" type="radio"/> Documents	<input checked="" type="radio"/> Acceptance Test Solution	<input checked="" type="radio"/> Design
<input type="radio"/> Documents By Creation date	<input type="radio"/> Corporate Solution_TO BE DELE...	<input type="radio"/> Production
<input type="radio"/> Documents by Last Changed date	<input type="radio"/> Release Dashbaord	<input type="radio"/> Maintenance
	<input type="radio"/> BatchImp	<input type="radio"/> Development
	More	<input checked="" type="radio"/> Design
	[20 / 42]	<input type="radio"/> Import
		<input type="radio"/> Operation

Figure 159. Gadget Configuration (1)

Query Settings [🔗](#) Content Properties Expert

Analytic Filters by Data Provider Process Management

Indicator **Attributes** Visibility Location

Types	Attribute	Object Types	Status	User
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input type="radio"/> Functional Sp... <input type="radio"/> Functional Sp... <input type="radio"/> Functional Sp... <input type="radio"/> Use Case <input type="radio"/> Technical Des... <input type="radio"/> Configuration ... <input type="radio"/> Single Functio...	<input type="radio"/> COUNTRY <input type="radio"/> LANGUAGE	<input type="radio"/> Test Steps <R... <input type="radio"/> Test Steps <O... <input type="radio"/> Operations <input type="radio"/> BC-Set <Conf.> <input type="radio"/> Document (B... More [20 / 189]	<input type="checkbox"/> Copy Editing <input type="checkbox"/> In Progress <input type="checkbox"/> Released <input type="checkbox"/> Review	<input type="radio"/> New organiza... <input type="radio"/> MTE Organiz... <input type="radio"/> MTE Organiz... <input type="radio"/> Org Unit 1 <input type="radio"/> Org Unit 2 More [20 / 3,073]

Figure 160. Gadget Configuration (2)

Query Settings [🔗](#) Content Properties Expert

Analytic Filters by Data Provider Process Management

Indicator Attributes **Visibility** Location

Type	Scope	Sites	Role
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input type="radio"/> End-to-End Processes <input type="radio"/> Modular Processes <input type="radio"/> SAP Best Practices I... <input type="radio"/> SAP Model Company... <input type="radio"/> DG Test <input type="radio"/> Nicolas <input type="radio"/> AJ	<input type="radio"/> Show All <input type="radio"/> BRAEMERH <input type="radio"/> DE_Processes <input type="radio"/> dropDocs structures <input type="radio"/> ERP FIT Round1 <input type="radio"/> Holger's View <input type="radio"/> Logistics DE	<input type="radio"/> Global	<input type="radio"/> Organizational unit <input type="radio"/> User

Figure 161. Gadget Configuration (3)

Query Settings
Content
Properties
Expert

Analytic Filters by Data Provider
Process Management

Indicator
Attributes
Visibility
Location

Libraries
Search

☐ <PACKAGES>
☐ BC-MID-RFC
☐ SV
☐ BC-MID-ICF
☐ BC-XI

More
[20 / 108]

Process
Search

☐ Order-to-Cash - Standard
☐ Order-to-Cash - Rush Order
☐ Procure-to-Pay - Standard
☐ Procure-to-Pay - Short
☐ Cause-based Time Recording

More
[20 / 59]

Figure 162. Gadget Configuration (4)

The generated query is:

Legend	Query
nbr doc	/STDF/DP_SOLDLOC:COLOR=#1f77b4 legend=nbr doc OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true INDICATOR=2 SOLUTION=051MZfr17jQGr3ihYVhm0W BRANCH=051MZfr17jQGr3ihYVhm0W OBJECT_ TYPES= TYPES= STATUS= USER= ATTRIBUTE= ATTRIBUTE_V= SCOPE= ROLE= SITES= TYPE= LIBRARI ES= PROCESS=

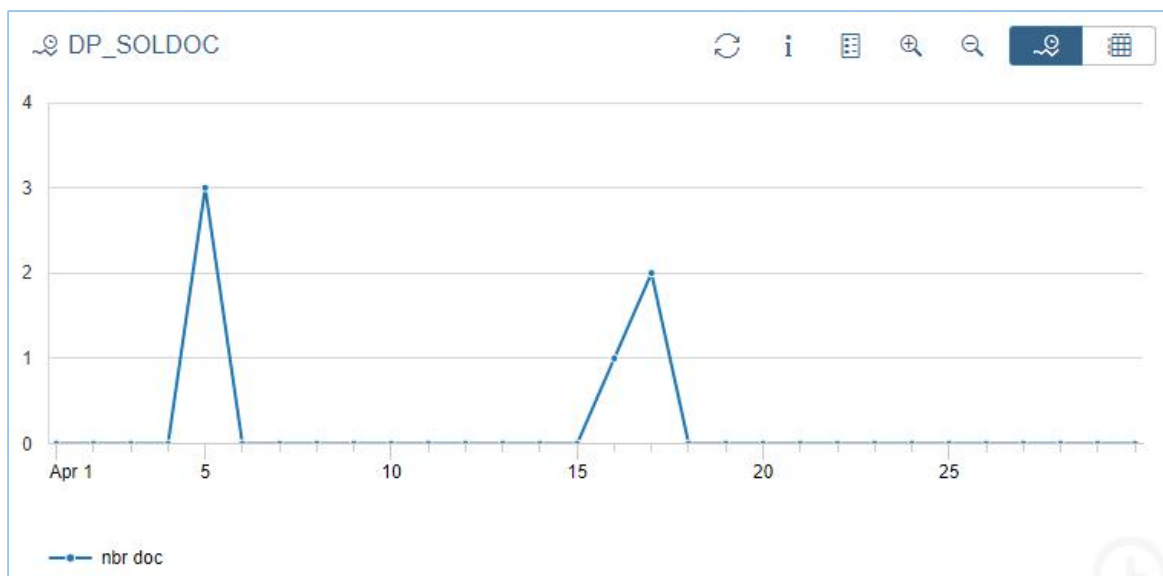


Figure 163. Detail View

.20 Data Provider /STDF/DP_BUILD

This data provider is designated to users using both Focused Insights and Focused Build Applications.

It provides real-time insight on the most used documents of focused build based on a set of standard indicators for Velocity, Reliability Efficiency and Quality.

For this data provider we must select one metric in the list below:

- 1- Number: number of documents changing to the selected status (created, in dev, ...) for the given resolution (day, week, ...).
- 2- Lead time: number of days for a document to reach a target status from a source status for the given resolution.
- 3- Snapshot: number of documents having the selected status (created, in dev, ...) for the given resolution (day, week, ...).
- 4- Progress This indicator analyses the status of a document of a project for a specific wave.

It returns a set of measurements to track the progress of wave completion between the start date of the Wave and the end date of the wave or the current date if the wave is not finished.

For this metric we use a new Renderer: Waterfall Chart

These metrics are used with the following parameters:

- 1- Document
- 2- Status
- 3- Target status
- 4- Classification
- 5- Projects
- 6- Sub projects
- 7- Wave
- 8- Sprint

And you can use the category levels:

- 1- Level 1
- 2- Level 2
- 3- Level 3
- 4- Level 4

The following screenshots show an example of the gadget configuration for the Number of Work Packages:

Query Settings [🔗](#) Content Properties Expert

Analytic Filters by Data Provider Build

Parameters Metric Category

Document	Status	Target Status	Classification	Projects	Sub Projects	Wave	Sprint
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Sea..."/>	<input type="text" value="..."/>	<input type="text" value="..."/>	<input type="text" value="..."/>	<input type="text" value="..."/>	<input type="text" value="..."/>
<input checked="" type="radio"/> Work Packages <input type="radio"/> Work Items <input type="radio"/> Business Re...	<input checked="" type="checkbox"/> Created <input type="checkbox"/> Scoping <input type="checkbox"/> Scope Finali... <input type="checkbox"/> Scope Exten... <input type="checkbox"/> Rejected <input type="checkbox"/> Postponed <input type="checkbox"/> To Be Devel...	<input type="radio"/> Created <input type="radio"/> Scoping <input type="radio"/> Scope ... <input type="radio"/> Scope ... <input type="radio"/> Rejected <input type="radio"/> Postpo... <input type="radio"/> To Be ...	<input type="radio"/> WRIC... <input type="radio"/> Fit <input type="radio"/> GAP <input type="radio"/> Non-F...	<input type="radio"/> ... <input type="radio"/> ... <input type="radio"/> ... <input type="radio"/> ... M... [2...	No data	No data	No data

Figure 164. Gadget Configuration (1)

Query Settings [🔗](#) Content Properties Expert

Analytic Filters by Data Provider Build

Parameters Metric Category

Metric	Open	Closed
<input type="text" value="Search"/>	<input type="text" value="Search"/>	<input type="text" value="Search"/>
<input checked="" type="radio"/> Number <input type="radio"/> Lead Time <input type="radio"/> Snapshot <input type="radio"/> Progress	<input type="checkbox"/> Created <input type="checkbox"/> Scoping <input type="checkbox"/> Scope Finalized <input type="checkbox"/> Scope Extension <input type="checkbox"/> Rejected <input type="checkbox"/> Postponed <input type="checkbox"/> To Be Developed	<input type="checkbox"/> Created <input type="checkbox"/> Scoping <input type="checkbox"/> Scope Finalized <input type="checkbox"/> Scope Extension <input type="checkbox"/> Rejected <input type="checkbox"/> Postponed <input type="checkbox"/> To Be Developed

Figure 165. Gadget Configuration (2)

Query Settings

Content Properties Expert

Analytic Filters by Data Provider

Build

Parameters

Metric

Category

Level 1	Level 2	Level 3	Level 4
<div>Search</div>	<div>Search</div>	<div>Search</div>	<div>Search</div>
<div> <div>Applications</div> <div>IT Infrastructure</div> <div>Project</div> <div>End User Workspace</div> <div>Functional Integration Te...</div> </div> <div>More</div> <div>[20 / 29]</div>	No data	No data	No data

Figure 166. Gadget Configuration (3)

The generated query is:

Legend	Query
CREATED	/STDF/DP_BUILD:OBJECT=S1IT STATUS=E0001 TARGET=E0017 CLASSIFICATION= PROJECTS= SUBPRO JECTS= WAVE= METRIC=NUMBER legend=CREATED%20 visible=true COLOR=#dd2f04 OCC_JUMP_I N= display_value=false SPRINT= OPEN= CLOSED= LEVEL_1= LEVEL_2= LEVEL_3= LEVEL_4=

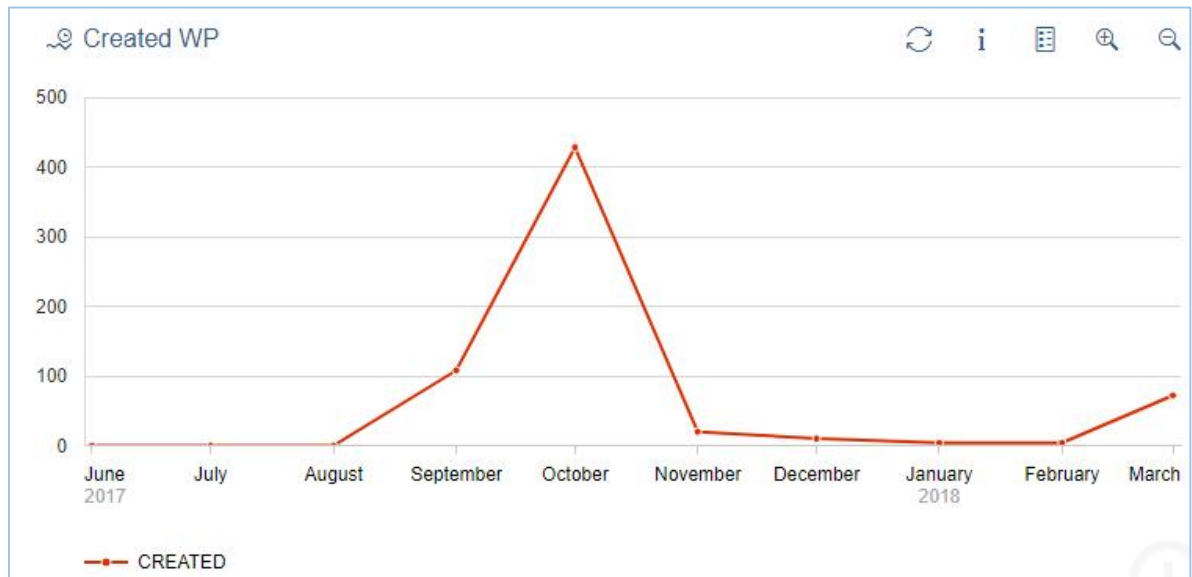


Figure 167. Detail View

.21 Data Provider /STDF/DP_SECURITY

The following screenshots show an example of configuration for the DP_SECURITY gadget.

We choose as renderer the SLR_TABLE_RENDERER:

Figure 168. Gadget Configuration (1)

Figure 169. Gadget Configuration (2)

The generated query is:

Legend	Query
O-4 / PC4	/STDF/DP_SECURITY:legend=O-4 / PC4 COLOR=#aec7e8 OCC_JUMP_IN=DYNAMIC_TABLE SLA= TREND= g2y=100 y2r=200 color_rating =ONLY DISPLAY_ATTRIBUTES= CV_Report=Critical Basis Authorizations Metrics=USERS Selection=VALUE Target_Value= Compliance=NO visible=true display _value=false
O-4 / PQ6	/STDF/DP_SECURITY:legend=O-4 / PQ6 COLOR=#2ca02c OCC_JUMP_IN=DYNAMIC_TABLE SLA= TREND= g2y=3 y2r=4 color_rating=ON LY DISPLAY_ATTRIBUTES= CV_Report=ABAP Profile

	Parameters Metrics=PAHI Selection= Target_Value= Compliance=YES visible=true display_value=false	
--	--	--

DS Finance GPMR			↺	i
	PC4	PQ6		
O-4	186.00	29.00		

Figure 170. Detail View

.22 Data Provider /STDF/DP_FRUN

When using this data provider, you can consume FRUN services. You need first to configure system alias to consume Odata services.

The following screenshots show an example of configuration for the DP_FRUN gadget.

Figure 171. Gadget Configuration (1)

Figure 172. Gadget Configuration (2)

Query Settings

Content Properties Expert

Analytic Filters by Data Provider

FRUN

Configuration Alerts Filters

Customer	Data Center	System Type	IT Admin Role	EXT System ID	Lifecycle Status
Search	Search	Search	Search		Search
<input type="checkbox"/> [All] <input type="checkbox"/> 789 <input type="checkbox"/> ABC <input type="checkbox"/> ADM <input type="checkbox"/> CID <div>More</div> <div>[20 / 41]</div>	<input type="checkbox"/> [All] <input type="checkbox"/> 123456781... <input type="checkbox"/> AMS <input type="checkbox"/> BER <input type="checkbox"/> BLN <div>More</div> <div>[20 / 27]</div>	<input type="checkbox"/> [All] <input type="checkbox"/> .NET System <input type="checkbox"/> Apache To... <input type="checkbox"/> Application ... <input type="checkbox"/> Application ... <div>More</div> <div>[20 / 23]</div>	<div>Undefined</div> <input checked="" type="checkbox"/> [All] <input checked="" type="checkbox"/> Undefined <input type="checkbox"/> Production ... <input type="checkbox"/> Quality Ass... <input type="checkbox"/> Developme... <input type="checkbox"/> Maintenan... <input type="checkbox"/> Demo System		<div>Undefined</div> <input checked="" type="checkbox"/> [All] <input checked="" type="checkbox"/> Undefined <input type="checkbox"/> Planned <input type="checkbox"/> Ordered <input type="checkbox"/> Installed <input type="checkbox"/> Active <input type="checkbox"/> Inactive

Figure 173. Gadget Configuration (3)

The generated query is:

Legend	Query
Alerts by category	/STDF/DP_FRUN:COLOR=#1f77b4 legend=Alerts by category OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true SYSTEM_ALIAS=FRUNLMDBFQ4-FRUNACCFQ4 ALERTS=AlertsByCategory Category=Configuration,Availability,Exceptions Rating= CUSTOMER= DATACENTER= STYPE= ITADROLE= EXTSID= LCStatus=,0 display_value=false

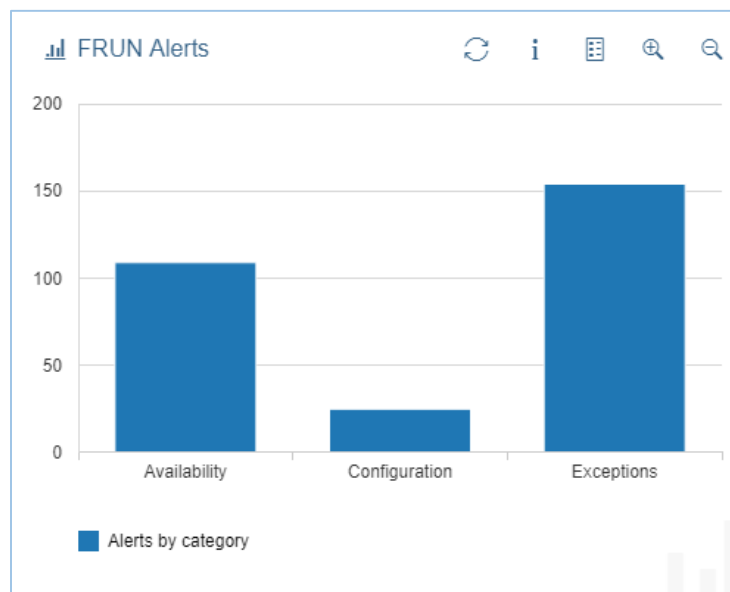


Figure 174. Detailed View

.23 Data Provider /STDF/DP_BPA

With this data provider, you can display any metric available from Business Process Operation Dashboards.

BPO Dashboards provide a graphical display for application specific and technical key figures in order to give the end user an overview of the most important information for a certain business topic, area or process. This information can be retrieved from various SAP and non-SAP data sources and is displayed in panels. All information needed by the end user is provided at a glance on a single screen: a Dashboard.

The BPO Dashboards must be setup properly in order to use data provider /STDF/DP_BPA. For more information, check related documentation.

In order to reuse BPO dashboards AKFIs (analytical key figure instances), you need to create a panel which includes the AKFIs. It is not necessary to setup a BPO Dashboard.

The following screenshots show an example of configuration for the DP_BPA gadget.

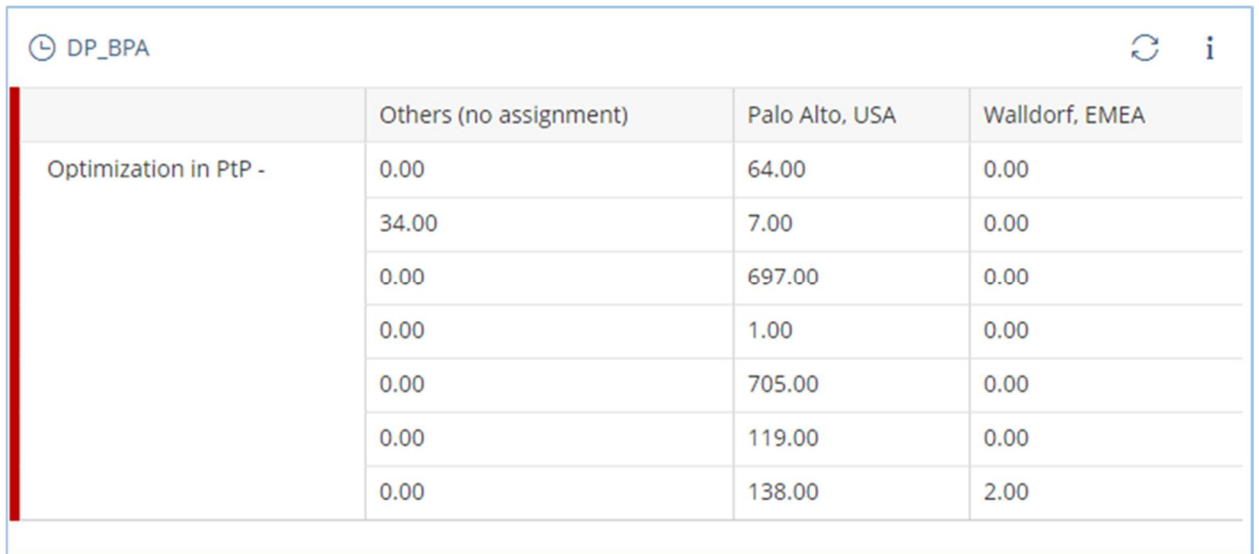
The screenshot displays the 'Query Settings' window for the 'Business Process Analytics' data provider. The 'General' tab is selected, showing a search bar and a list of AKFI instances. The instance 'VC_Optimization in PtP' is selected.

Legend	Query
Optimization in PtP	/STDF/DP_BPA:COLOR=#1f77b4 legend=Optimization in PtP OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true panel=VC_Optimization in PtP display_value=false

Figure 175. Gadget Configuration (1)

The generated query is:

Legend	Query
Optimization in PtP	/STDF/DP_BPA:COLOR=#1f77b4 legend=Optimization in PtP OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true panel=VC_Optimization in PtP display_value=false



	Others (no assignment)	Palo Alto, USA	Walldorf, EMEA
Optimization in PtP -	0.00	64.00	0.00
	34.00	7.00	0.00
	0.00	697.00	0.00
	0.00	1.00	0.00
	0.00	705.00	0.00
	0.00	119.00	0.00
	0.00	138.00	2.00

Figure 176. Detailed View

.24 Data Provider /STDF/DP_TEST

With DP_TEST we are able to answer the following questions

- How many test are executed?
- How many tests are executed automatically?
- What is the test coverage of the test execution?

For a selected project and wave we get the related test plans.

For those Test plans we calculated the following metrics:

Automation Rate : Number of automatic tests/ total number of tests.

Test Coverage : Number of tests with status "tested ok" / total number of testes.

Test Execution : Number of test executions

Automatic Test Execution : Number of automatic test executions

Number of test cases : Number of test cases

The following screenshots show an example of configuration for the DP_TEST gadget.

1x1

Query Settings

Content

Properties

Expert

Analytic Filters by Data Provider

Test

Parameters

Metric

Project	Wave	Test Plans
<div>Search</div> <div> <div>×</div> Build 2 AT </div> <div> <div></div> Build 1 AT </div> <div> <div></div> Build 2 AT </div> <div> <div></div> Master AT </div> <div> <div>More</div> <div>[20 / 21]</div> </div>	<div>Search</div> <div> <div>×</div> Wave 1 </div> <div> <div></div> Wave 1 </div> <div> <div></div> Wave 2 </div>	<div>Search</div> <div> <div></div> E_TP_1 </div> <div> <div></div> TP_OST200_WILLIAMS </div>

Figure 177. Configuration Gadget (1)

1x1

Query Settings

Content

Properties

Expert

Analytic Filters by Data Provider

Test

Parameters

Metric

Metric

Search

×

 Number of test cases

Automation Rate

Test Coverage

Test Execution

Automatic Test Execution

Number of test cases

Figure 178. Configuration Gadget (2)

The generated query is:

Legend	Query
Test Cases	/STDF/DP_TEST:COLOR=#1f77b4 legend=Test Cases OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Project=0050568E9D6F1ED69185FADEC4D26479 Wave=0050568E9D6F1ED69185FADEC4D7E479 TEST_PLAN=TP_OST200_WILLIAMS Metric=TEST_CASE visible=true legend= COLOR=#1f77b4 OCC_JUMP_IN= display_value=false

Test cases result for TP_OST200_WILLIAMS Test Plan			
	KEY	PARENT_KEY	ROOT_KEY
1	0050568E9D6F1ED69AA0457DE	0050568E9D6F1ED69AA0457DE	0050568E9D6F1ED69AA0457DE
2	0050568E9D6F1ED69AA04A08B	0050568E9D6F1ED69AA04A08B	0050568E9D6F1ED69AA04A08B
3	0050568E9D6F1ED69AA04BD97	0050568E9D6F1ED69AA04BD97	0050568E9D6F1ED69AA04BD97
4	0050568E9D6F1ED69AA075C06	0050568E9D6F1ED69AA075C06	0050568E9D6F1ED69AA075C06

Figure 179. Detailed View

.25 Data Provider /STDF/DP_SQLSCRIPTS

This data provider gives the user the possibility to execute SQL queries.

In the following example we will use the DYNAMIC_TABLE_RENDERER as a renderer for a better display.

The user of this data provider need an SQL query and DBCON

1:1

Query Settings

Content

Properties

Expert

Analytic Filters by Data Provider

Data Provider to execute SQL scripts

Query_Instances

Query

DBCON

Search

X

HANA_Memory_TopConsumers

○

ITCALENDAR_NEXT_50_EVENTS

○

HANA_Memory_Overview_1.00.90+

○

HANA_Memory_Overview_HANA2

○

HANA_Threads_CurrentThreads

○

HANA_Tables_DiskSize

●

HANA_Memory_TopConsumers

X

HDB

○

ESH

○

J2E

○

HDBSYS_S

○

HDB00001

○

HDB00002

○

HDBSYS_A

○

SAP_BPA

●

HDB

Figure 180. Configuration Gadget

Legend	Query
Top Consumers HANA Memory	/STDF/DP_SQLSCRIPTS:COLOR=#1f77b4 legend= Top Consumers HANA Memory OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Query=HANA_Memory_TopConsumers DBCON=HDB

Top Consumers HANA Memory									
	HOST	PORT	AREA	SUBAREA	DETAIL	COUNT	GAL_GB		
1	any	any	COLUMN	Column Store (Main)	any	119205	256.00	80.1	
2	any	any	HEAP	Heap (System)	any	1704	256.00	27.7	
3	any	any	HEAP	Heap (System - Page Cache)	any	2	256.00	13.7	
4	any	any	HEAP	Heap (Column Store Tables)	any	8	256.00	11.2	
5	any	any	HEAP	Heap (Statement Execution & Intermediate Results)	any	1384	256.00	9.44	
6	any	any	COLUMN	Column Store (Delta)	any	119205	256.00	4.47	
7	any	any	ROW	Row Store (Tables)	any	6681	256.00	3.31	
8	any	any	HEAP	Heap (Caches)	any	72	256.00	3.25	
9	any	any	HEAP	Heap (Monitoring & Statistical Data)	any	213	256.00	2.95	

Figure 181. Detailed View

.26 Data Provider /STDF/DP_TRANSACTION

This data provider gives the user the possibility to monitor different metrics for different SAP transactions.

- 1- Total Response Time
- 2- Average Response Time
- 3- Average CPU Time
- 4- Average DB Time
- 5- Average Wait Time
- 6- Average roll Wait Time
- 7- Number of Dialogue Steps

For all the metrics we can do a drilldown on:

Transaction

Task

Report

In the following example we will use the BAR_CHART_RENDERER as a renderer Type

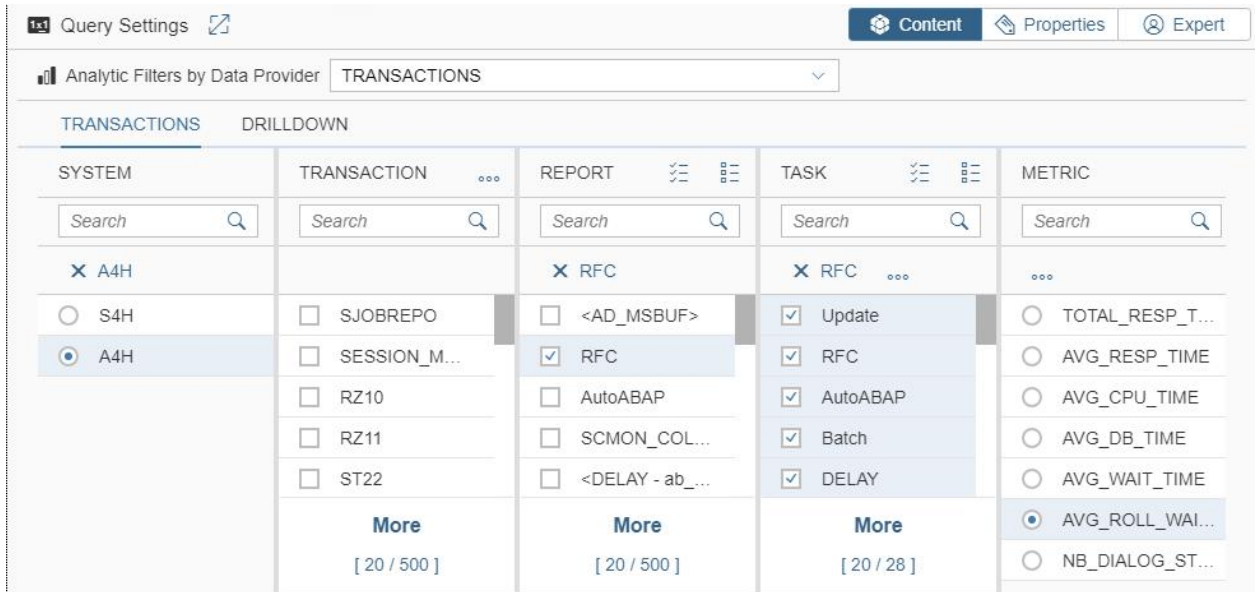


Figure 182. Configuration Gadget

Legend	Query
Transaction Performance	/STDF/DP_TRANSACTION:COLOR=#1f77b4 legend=Transaction Performance OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true SYSTEM=A4H TRANSACTION= REPORT=RFC TASK=RFC,Update,Batch,DELAY,HTTP,AutoABAP,HTTPS,Dialog METRIC=AVG_ROLL_WAIT_TIME DRILLDOWN=TRANSACTION display_value=false

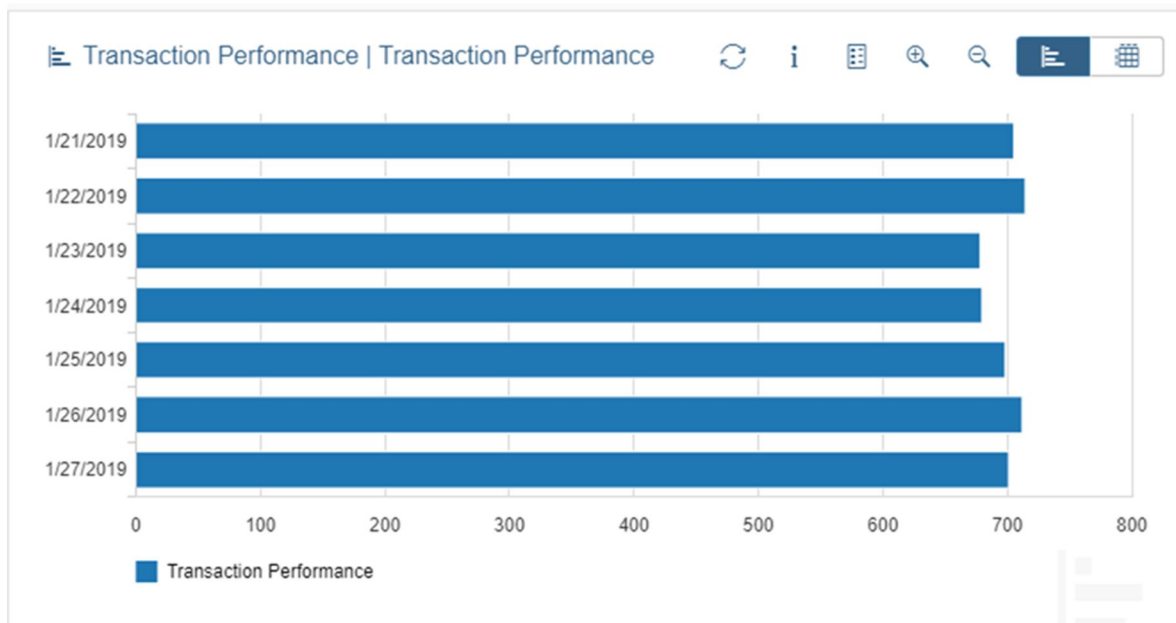


Figure 183. Detailed View

.27 Data Provider /STDF/BEX_VIEW

The Bex_View data provider give the user the possibility to display the saved BEX views he has created.

The displayed views can be configured as follow:

1. Execute RSRT1 Transaction code in the SAP Logon.
2. Enter the Bex query name that the view will be created for. (For example, OCCMPDATA//STDF/QD_AVAILABILITY_D)
3. Execute the query

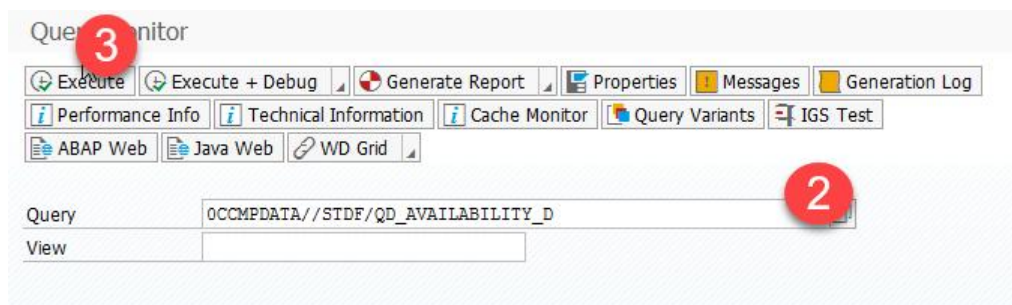


Figure 184. Configuration Steps 1 and 2

4. Enter the appropriate filters.
5. Save the view

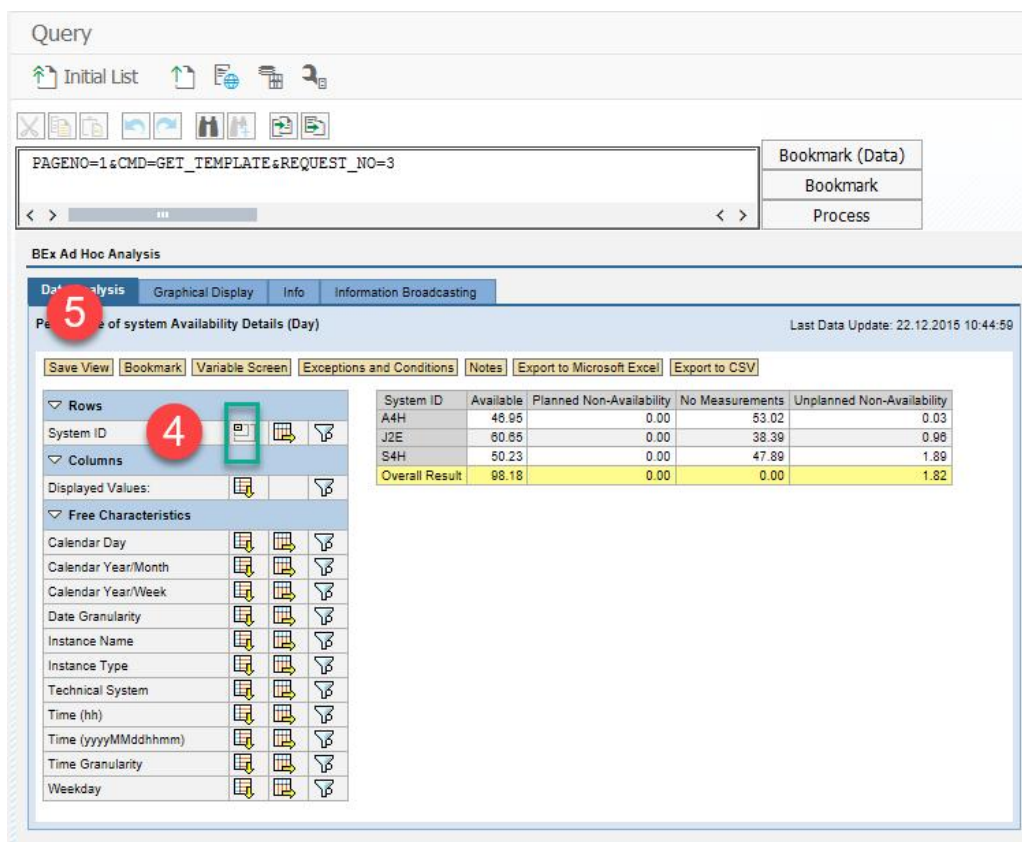


Figure 185. Configuration Steps 3 and 4

6. Enter the view description
7. Enter the view technical name
8. Click on save button

The image shows a 'Save View' dialog box. It has two text input fields: 'Description' and 'Technical Name', both containing the text 'System_Availability'. Below these fields is a checkbox labeled 'Write Existing View' which is currently unchecked. At the bottom are 'Save' and 'Cancel' buttons. Red circles with numbers are overlaid on the image: circle 6 is over the 'Description' field, circle 7 is over the 'Technical Name' field, and circle 8 is over the 'Save' button.

Figure 186. Configuration Step 6,7 and 8

In this example we will use the DYNAMIC_TABLE_RENDERER as a renderer type and as we can see the views created are displayed within the DP Bex_View in the OCC Dashboard

The image shows a configuration gadget in the OCC Dashboard. At the top, there are tabs for 'Query Settings', 'Content', 'Properties', and 'Expert'. Below the tabs, there is a section titled 'Analytic Filters by Data Provider' with a dropdown menu set to 'BEX VIEWS'. Underneath, there is a 'Views' section with a search bar. Below the search bar, there is a list of views. The first view is 'SYSTEM_AVAIBILITY' with a red 'X' icon. The second view is 'SYSTEM_AVAIBILITY' with a radio button icon. The second view is highlighted with a red box.

Figure 187. Configuration Gadget

Availability

	System ID	Available	Planned Non-Availability	No Measurements	Unplanned Non-Availability
1	A4H	46.95	0.00	53.02	0.03
2	J2E	60.65	0.00	38.39	0.96
3	S4H	50.23	0.00	47.89	1.89
4	SUMME	51.08	0.00	47.97	0.95

Figure 188. Detail View

.28 Data Provider /STDF/DP_TABLE

The Table data provider give the user the possibility to display the content of multiple systems table.

This DP is used with the following parameters (select options) and they are built according to the customer's entries in the Database table **/STDF/DP_TAB_SRC**.

- Alias
- Dimensions
- Key Figure
- Options (Aggregation, Drilldown)

The user should create a table entry in the Database table **/STDF/DP_TAB_SRC** as follow

1. Execute SE11 Transaction code in the SAP Logon and tape **/STDF/DP_TAB_SRC** in the database table.
2. Click on the button change

Figure 189. Configuration Step 1 and 2

3. Click on the buttons contents.

Field	Key	Ini...	Data element	Data Type	Length	Deci...	Short Description	Group
ALIAS_NAME	✓	✓		CHAR	32	0		
RFC				STRING	0	0		
TABLE_NAME				STRING	0	0		
TIMESTAMP_FIELD				STRING	0	0		
DIMENSIONS_FIEL...				STRING	0	0		
KEYFIGURES_FIEL...				STRING	0	0		
TIMESTAMP_FORMAT				STRING	0	0		

Figure 190. Configuration Step 3

4. Click on the button Execute.

4 Data Browser: Table /STDF/DP_TAB_SRC: Selection Screen

Number of Entries

ALIAS_NAME to

Width of Output List

Maximum No. of Hits

Figure 191. Configuration Step 4

- Click on the button create.

5 Data Browser: Table /STDF/DP_TAB_SRC Select Entries 4

Table: /STDF/DP_TAB_SRC
Displayed Fields: 1 of 7 Fixed Columns: [1] List Width 0250

<input checked="" type="checkbox"/>	ALIAS_NAME
<input type="checkbox"/>	DEMO_APP_TICKETS
<input type="checkbox"/>	OFT_UCONRFMCALLERATT
<input type="checkbox"/>	OTO_UCONRFMCALLERATT
<input type="checkbox"/>	S4H277_UCONRFMCALLERATT

Figure 192. Configuration Step 5

- The user should specify an ALIAS NAME, a RFC if the table is located in a distant system, TIMESTAMP FIELD, DIMENSIONS FIELDS, KEYFIGURES FIELDS, TIMES STAMP FORMAT

Table /STDF/DP_TAB_SRC Insert

Reset

6 ALIAS NAME

RFC

TABLE NAME

TIMESTAMP FIELD

DIMENSIONS FIELDS

KEYFIGURES FIELDS

TIMESTAMP FORMAT

Figure 193. Configuration Step 6

The user at end should click on the button save.

In the following, an example of an entry in the table

Table /STDF/DP_TAB_SRC Display	
ALIAS NAME	DEMO_APP_TICKETS
RFC	
TABLE NAME	ZOCC_APP_TICKTS
TIMESTAMP FIELD	CALDAY
DIMENSIONS FIELDS	APPLICATION, SEVERITY
KEYFIGURES FIELDS	COUNTER
TIMESTAMP FORMAT	YYYYMMDDHHMMSS

Figure 194. Entry table example

Now, we will use the COLUMN_CHART_RENDERER as a renderer Type to display of the already created table DEMO_APP_TICKETS.

Query Settings

Analytic Filters by Data Provider: Table Data Provider

Alias Dimensions Key figure Options

Alias name

Search

DEMO_APP_TICKETS

DEMO_APP_TICKETS

OFT_UCONRFMCALLERATT

OTO_UCONRFMCALLERATT

S4H277_UCONRFMCALLERATT

Figure 195. Configuration Gadget (1)

Query Settings

Analytic Filters by Data Provider: Table Data Provider

Alias Dimensions Key figure Options

DIMENSIONS	APPLICATION	SEVERITY
Search	Search	Search
No data	<input type="checkbox"/> CRM <input type="checkbox"/> ERP <input type="checkbox"/> HR	<input type="checkbox"/> HIGH <input type="checkbox"/> MEDIUM <input type="checkbox"/> VERY HIGH

Figure 196. Configuration Gadget (2)

1x1
Query Settings

Content
Properties
Expert

Analytic Filters by Data Provider
Table Data Provider

Alias
Dimensions
Key figure
Options

Key figures

Search

COUNTER

Figure 197. Configuration Gadget (3)

1x1
Query Settings

Content
Properties
Expert

Analytic Filters by Data Provider
Table Data Provider

Alias
Dimensions
Key figure
Options

Aggregation
Drilldown

Search
Search

Average
Maximum
Sum
APPLICATION
SEVERITY

Figure 198. Configuration Gadget (4)

Legend	Query
ERP / Very High)	/STDF/DP_TABLE:COLOR=#161af9 legend=ERP / Very High) OCC_JUMP_IN= SLA= TREND= G2Y=3 Y2R=10 COLOR_RATING=YES DISPLAY_ATTRIBUTES= FILTER_VALUE= visible=true ALIAS_NAME=DEMO_APP_TICKETS DIMENSIONS= KEY_FIGURE=COUNTER AGGREGATION=SUM DRILLDOWN= APPLICATION=ERP SEVERITY=VERY HIGH Project= Wave= TEST_PLAN= Metric= display_value=false

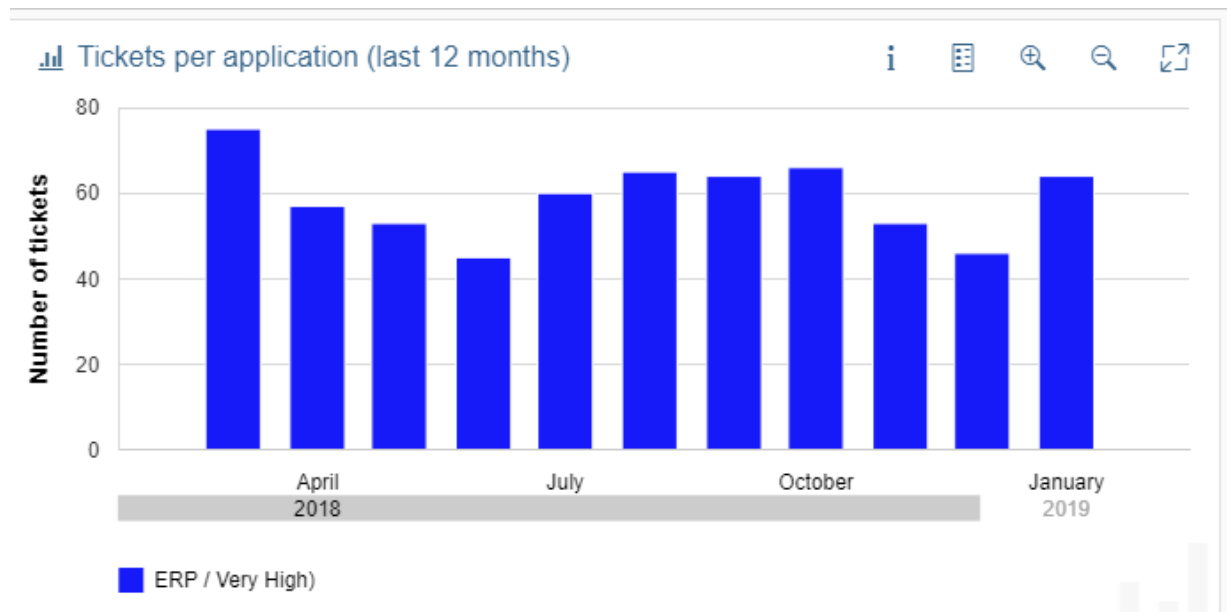


Figure 199. Detailed View

.29 Data Provider /STDF/DP_JSM (Job Scheduling Monitoring)

The Job Scheduling Monitoring Data Provider provides access to 7 keys metrics in the job scheduling monitoring area .

- Number of executions: the number of all execution jobs
- Average duration: the average of duration
- Total duration: the total all job duration
- Minimum duration: minimum duration of jobs (*)
- Maximum duration: maximum duration of jobs (*)
- Average delay: the average of the delay of jobs
- Total delay: all delay jobs
- (*) Key figures not available with resolutions greater than hour; Duration is used instead.

Figure 194. Available Metrics for DP_JSM

The user can filter on:

- System
- Status
- Job Name
- Execution User
- Scheduling User

⇒ All filters are multiple selection.

Figure 195. Filters Tab

The user the drilldown on:

- System: the default is to do the drilldown on all system if there is no system is selected.
- Status: the default is to do the drilldown on all status if there is no status is selected.
- Job name: there is not default drilldown the user should at least select one job.
- Execution user: there is not default drilldown the user should at least select one user.
- Scheduling user: there is not default drilldown the user should at least select one user.

The screenshot shows the 'Options' tab of the 'Drilldown' section. It contains a search bar labeled 'Search' and five radio button options: 'System', 'Status', 'Job Name', 'Execution User', and 'Scheduling User'.

Figure 196. Drilldown Tab

Example of configuration:

This is an example of the usage of the JSM data provider with the key figure : Number of executions .

The screenshot shows the 'Query Settings' window for the 'JSM Job data provider'. The 'Filters' tab is active, displaying five filter columns: 'System', 'Status', 'Job Names', 'Execution User', and 'Scheduling User'. Each column has a search bar and a list of filter options. The 'Status' column has 'Finished' selected. The 'Execution User' column has 'SM_EFWK' selected. The 'Scheduling User' column has 'SOLMAN_ADMIN' selected. The 'System' column has 'A4H' and 'S4H' listed. The 'Job Names' column has a list of job names starting with '/AIF/SAP_AIF_C...' and '/BDL/TASK_PRO...'. The 'Execution User' column has a list of users including 'APPOP_CONFIG', 'BOSCHS', 'BPINST', 'BPOP_CONFIG', 'BWALEREMOTE', 'CAMPO', and 'CCM_CONFIG'. The 'Scheduling User' column has a list of users including 'APPOP_CONFIG', 'BOSCHS', 'BPA_COMM', 'BPINST', 'BPOP_CONFIG', 'BRAEMERH', and 'BWALEREMOTE'. Each column has a 'More' button and a count of items (e.g., [20 / 1,292] for Job Names).

Figure 197. Selected Filters

Legend	Query
Query01111	/STDF/DP_JSM_JOB:COLOR=#1f77b4 legend=Query 011111 OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES=SCHEDULE_USER,EXECUTION_USER,JOB_NAME,STATUS,DURATION,COUNTER,DELAY,DURATION_MIN,DURATION_MAX visible=true KEY_FIGURES=OSM_JSMNO SID= STATUS=Finished JOB_NAMES=EFWK RESOURCE MANAGER EX_USER=SM_EFWK SCH_USER=SOLMAN_ADMIN DRILLDOWN=STATUS display_value=false value_precision=2

The displayed result for the configured query is the following:

Line CHART:

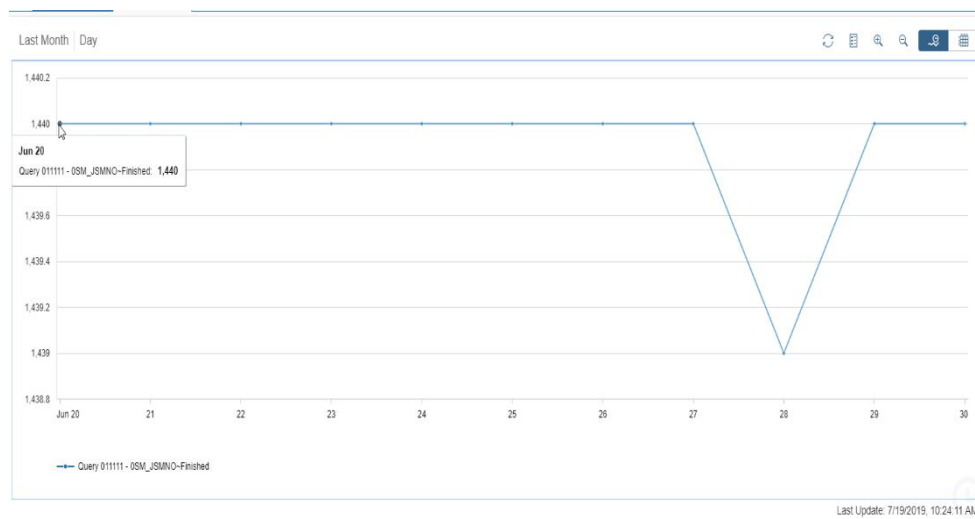


Figure 198. Line Chart-DP_JSM

DYNAMIC TABLE:

The dynamic table contains all information of selected filters in addition of the key figures:

Schedule user , execution user , job name , status , duration , counter , delay , duration min , duration max .

	SCHEDULE_USER	EXECUTION_USER	JOB_NAME	STATUS	DURATION	COUNTER	DELAY	DURATION_MIN
1	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5181.000	1440	20987.000	
2	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5132.000	1440	25152.000	
3	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5393.000	1440	26794.000	
4	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5259.000	1440	27959.000	
5	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	4932.000	1440	29527.000	
6	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5246.000	1440	31014.000	
7	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5319.000	1440	32598.000	
8	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5252.000	1440	34718.000	
9	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5049.000	1439	36566.000	
10	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5055.000	1440	37956.000	
11	SOLMAN ADMIN	SM EFWK	EFWKRESOURCEMANAG	Finished	5116.000	1440	38984.000	

Figure 199. Dynamic Table-DP_JSM

To validate the displayed data we should define:

- Design Time \$ Dimensions values & key figures are retrieved from Info Provider OSM_JSM_H
- Runtime Data \$ For resolutions HOUR / RAW: Info Provider OSM_JSM_H
 \$ For resolution DAY: Info Provider OSM_JSM_D
 \$ For resolutions WEEK or above: Info Provider OSM_JSM_W

Figure 200. Data validation-DP_JSM

For the same period the user should group all values by sum :

"OSM_JSM_D", List output

OSM_JSM...	OSM_JSMJU	JSM Job Name	OSM_JSM EU	Calendar Day	OSM_JS...	JSM Delay	Σ OSM_JSM...
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	4.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	6.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	2.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	2.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	5.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	5.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	0.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	7.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	6.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	11.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	2.000	1.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	3.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	4.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	6.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	6.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	13.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	4.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	7.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	6.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	5.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	4.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	1.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	4.000	14.000	1
Finished	SOLMAN_ADMIN	EFWK RESOURCE MANAGER	SM_EFWK	20.06.2019	5.000	14.000	1
							1,440

Figure 201. Validation Data- DP_JSM

.30 Data provider /STDF/DP_ATC

The ABAP quality check is a data provider allows you to monitor several pre-defined Key product indicators. The DP_ATC fetch data from the custom code management quality cockpit.

To be able to display data using the ATC data provider you should first have tasks that are configured to run on a regular basis in the quality cockpit.

To use the DP_ATC, you should select an ATC Project (regular running task) and a Metric (key product indicator) from the general tab:

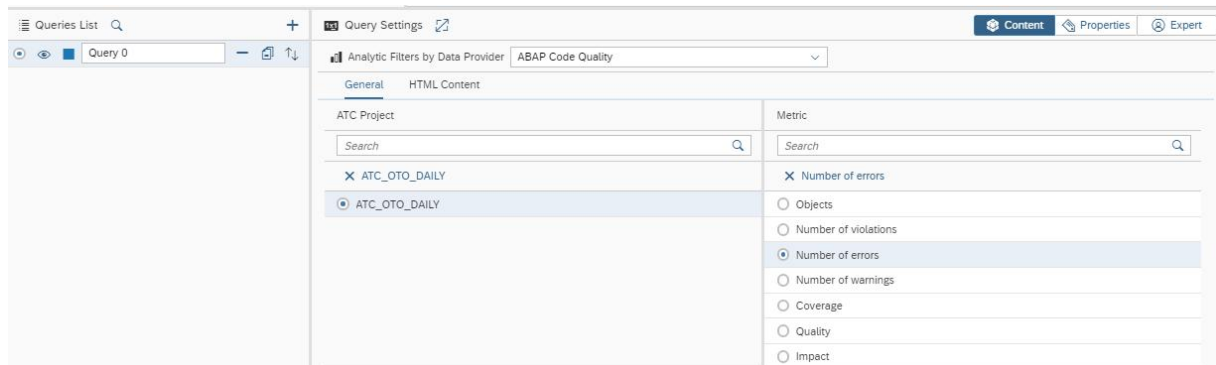


Figure 202. Select Options-DP_ATC

The available metric list is the following:

- Objects: Number of objects that were analyzed.
- Number of violations: Number of errors and warnings together.
- Number of errors: Number of errors.
- Number of warnings: Number of warnings.
- Coverage: represents the number of used and tested objects (objects whose their "last used" column contains a date, if there is no date it means that the object is not used hence not taken into consideration).
- Quality: It is a float number (X.Y) which can between 0.0 and 3.5 which can be considered as an overall quality indicator of the analysis. This metric must be displayed using the SLR renderer.
- Impact: number of used objects with issues divided by the total number of objects then multiplied by 100.

Data Validation:

The user can validate the displayed data through the custom code improvement or just the quality cockpit by following the steps below:

1. Display first the projects list



Figure 203. quality cockpit landing page

2. Select the project name

Project List

[Edit](#) [Delete](#) [Start New Analysis](#) [Job Details](#) [Notify Project Owner](#) [Refresh](#) [Activate/Deactivate](#)

Project	Description	Quality
<input checked="" type="radio"/> ATC_OTO_DAILY	ATC_OTO_DAILY	◇
<input type="radio"/>		
<input type="radio"/>		
<input type="radio"/>		
<input type="radio"/>		
<input type="radio"/>		

● Critical ▲ To Be Improved ■ Information

Figure 204: project list

3. Select a time range, click on apply button then select a job

Analysis History

From: 23.12.2019 1 To: 27.12.2019 2 [Apply](#) 3

[Object List](#)

Date	Status	Quality	Total Objects	Started By
<input checked="" type="radio"/> 25.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/> 24.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/> 23.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/> 23.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/>				
<input type="radio"/>				
<input type="radio"/>				
<input type="radio"/>				

● Critical ▲ To Be Improved ■ Information

Figure205. selecting a run

Now you use the following information to figure out the value of the selected metric

Object Statistics		
Total Number of Objects	2.200	
Number of Critical Objects -goal	1.320	100 %
Number of Objects to be Improved -goal	382	100 %
Total Number of ATC Results	9.246	
Number of ATC Errors	5.940	
Number of ATC Warnings	1.875	
Objects with no Results	0	

Figure 206. objects statistics

To calculate the value of the coverage metric you should access the object list:

Analysis History

From: 23.12.2019

To: 27.12.2019

Apply

Object List

	Date	Status	Quality	Total Objects	Started By
<input checked="" type="radio"/>	25.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/>	24.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/>	23.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/>	23.12.2019	Finished	◇	0	FI_CONFIG
<input type="radio"/>					
<input type="radio"/>					
<input type="radio"/>					
<input type="radio"/>					

☒ Critical

☐ To Be Improved

☐ Information

Figure 207. objects list

.31 Data provider /STDF/DP_GADGET_CALCULATION

The gadget calculation data provider is used to perform operations on data series using the SLA property of the query and it can also perform operations on more than one gadget using arithmetic operators (+, -, *, /).

In a multi series chart the DP applies the SLA to each series then it sum them , for example if you have two gadgets with one of those using a multi-series line chart, say, three series, the equation form will be as follow :
[SLA(serie1)+SLA(serie2)+SLA(serie3)](Gadget1) "operator(+, -, x, /)" [SLA(Serie)](gadget2),
or you can simply display the Gdget1 without using the operators.

The following figure illustrate the calculation pad you will use to compose your equation:



Figure 208. Calculation pad

- 1- Available arithmetic operators
- 2- Brackets
- 3- Identify the gadget by its ID
- 4- Used to add numerical operators
- 5- Delete the selected element
- 6- Erase button

Below an illustrated example of the gadget calculation data provider usage:

1. Configure the first operand:

- Select the column chart as a renderer.
- In the "query list" click on the "Add query" button.
- Add ATC (ABAP code quality) as a data provider
- Select an ATC object and a metric
- Click on save button to save the first Operand.

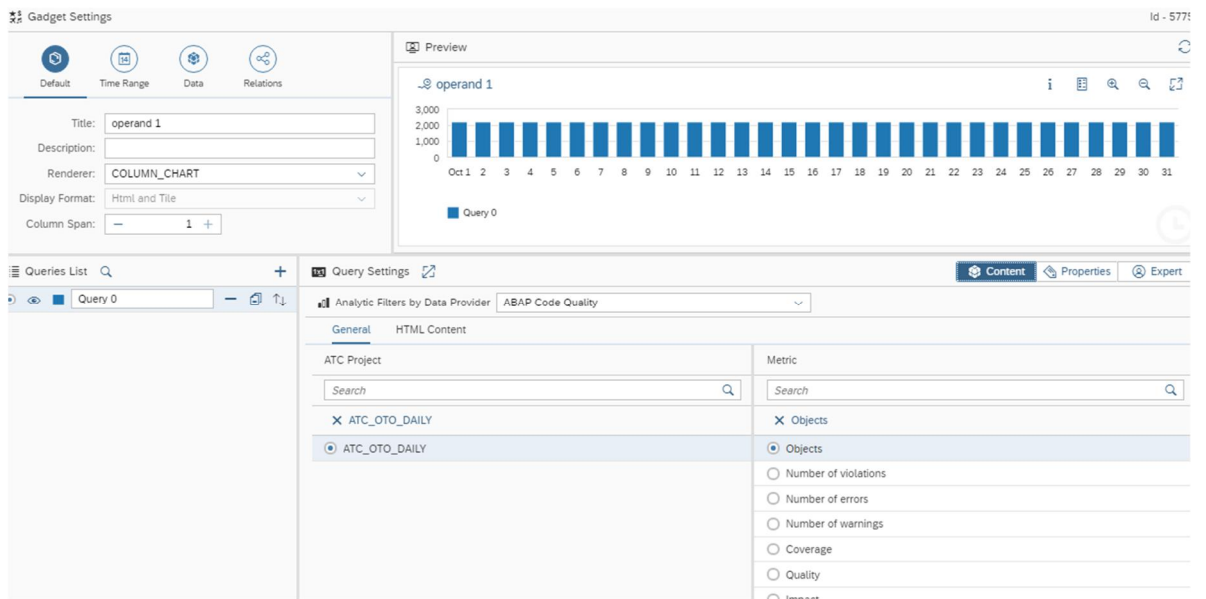


Figure 209. Operand1 configuration

2. Configure the second operand:

- Select the column chart as a renderer.
- In the "query list" click on the "Add query" button.
- Check the query's radio box
- Add ATC (ABAP code quality) as a data provider
- Select ATC_AUTO_DAILY as ATC object and number of violations as metric
- Click on save button

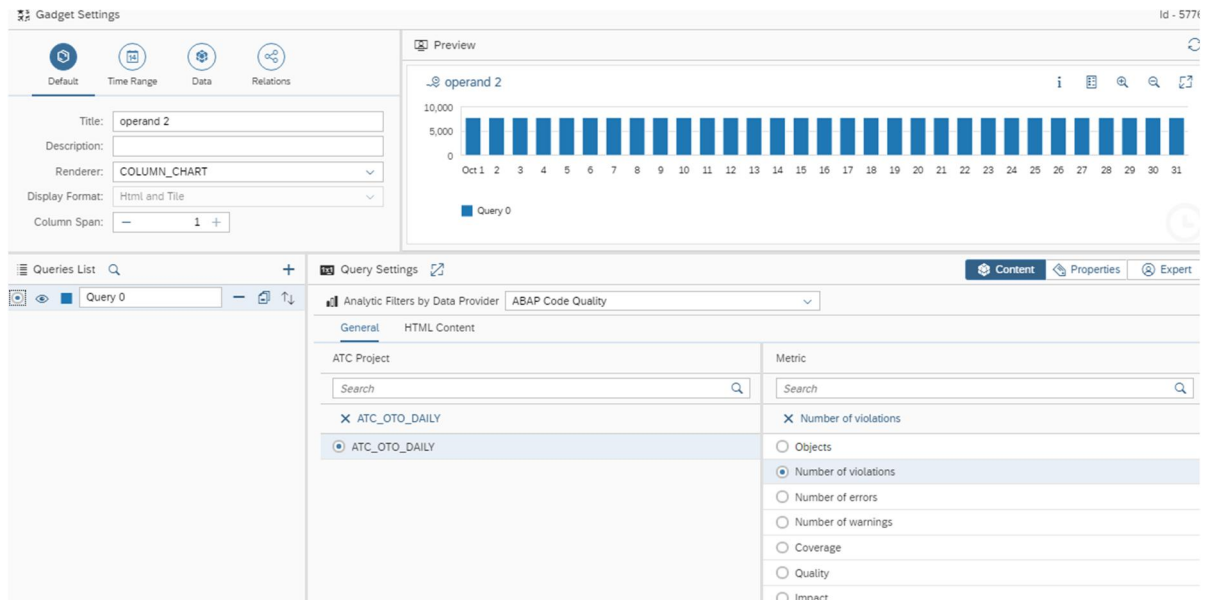


Figure 210. Operand2 configuration

3. Configure the result gadget:

- Select the column chart as a renderer.
- In the "Queries list" click on add a query button.
- In the query settings add the "DP_Gadget_Calculation" data provider.
- Click on GSUM button.
- Enter the ID of the Operand1 Gadget then click on "Add" button

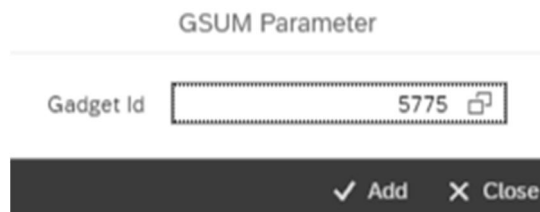


Figure 211. Add button

- Select the "+" operator
- Click again on GSUM
- Enter the ID of the gadget "Operand2"
- Refresh the chart, the result should be the sum of the average value (as the SLA property is by default on average)

Note that you can change the SLA value by:

1. Select the first query
2. Go to "properties" Tab
3. Change the SLA to "Maximum", "Minimum", "SUM" ... for each one of the two operands to get a different result

.32 Data Provider /STDF/DP_SAM

The Data provider SAM gives you access to the service availability management application.

Data is read from the database tables of the service availability management application. This data is collected after configuring reports in there.

Here is a table explaining all possible attributes for the available metrics:

Attributes	Description	Default Value
Key figure	List of key figures	No value
Systems	List of systems	No value

The filters of the SAM data provider are all grouped into 1 tab which is the General Tab.

To use SAM data provider:

- Select data provider SAM: The selection of this data provider will display the group General along with its filters and filters values.
- Select Key figure.
- Select a System.

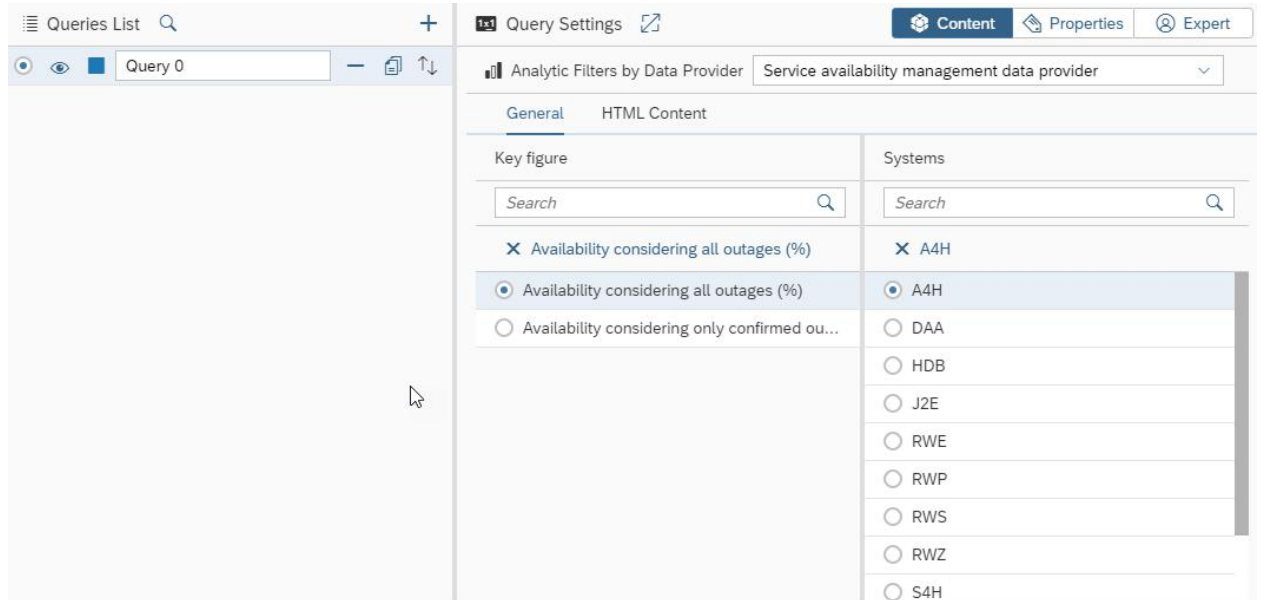


Figure 212. SAM data Provider General Tab

Here is the corresponding selection in the System Analysis application:

First select the system needed. The system selection is in the scope selection of the Service availability management application.

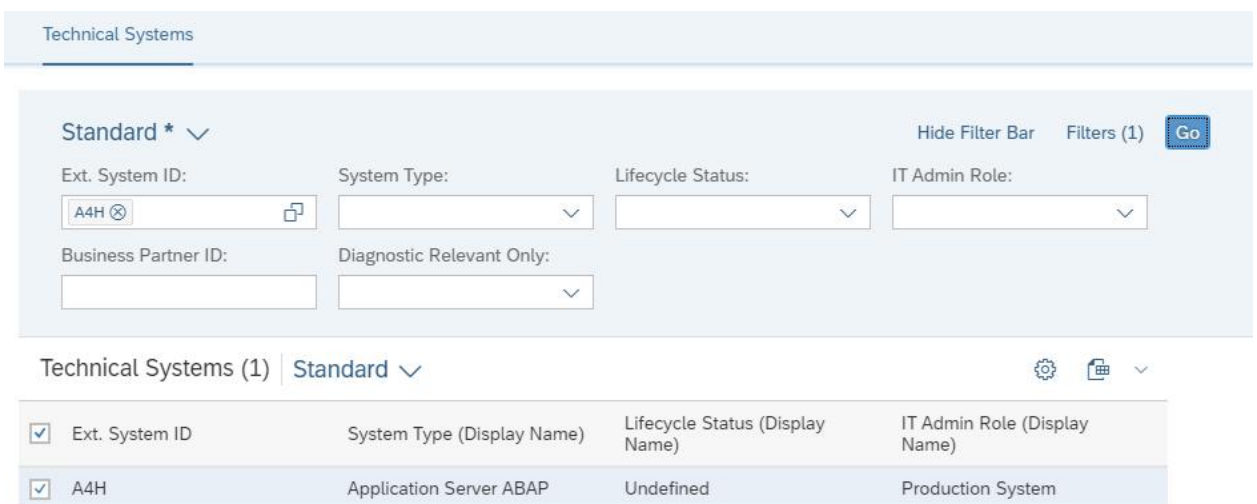


Figure 213. System Analysis application

Second select the key figure needed. This is done through the availability settings section.

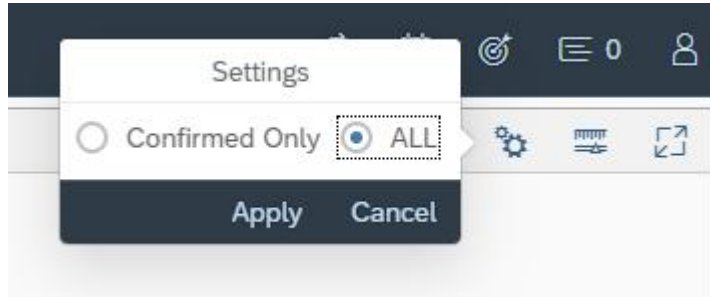


Figure 214. Settings icon

In order to be able to display data related to the service availability management, a report is to be created in the section “service availability definition” trough the add button.

Service Availability Definition							
List							
<input type="checkbox"/> Status	Title	Ext. System ID	System Type	Valid From	Valid To	Time Zone	
<input type="checkbox"/> <input checked="" type="checkbox"/>	A4H Availability	A4H	ABAP	Nov 7, 2018	Nov 7, 2020	CET	>

Figure 215. report configuration (1)

In order to configure a report, the below steps need to be made.

Specify the title, validity and the entity (a system)

New Service Availability Definition

Title: new def

Validity Period: April 22, 2020

December 31, 2020

Time Zone: Central Europe

Entities

Availability

Contractual Maintenance

+

<input type="checkbox"/> Entity	Entity Type	IT Admin Role	Lifecycle Status
<input type="checkbox"/> JYM	ABAP	Production System	Active

Figure 216. report configuration (2)

Specify the threshold, the reporting period (Monthly or yearly) and the pattern (Daily or weekly) and the start time of the report

New Service Availability Definition

Title: new def

Validity Period: April 22, 2020 to December 31, 2020

Time Zone: Central Europe

Entities Availability Contractual Maintenance

SLA Threshold (%): 80

Reporting Period: Monthly

Pattern: Daily

Start Time: 00:00 00 00

Figure 217. report configuration (3)

Maintain the section contractual maintenance as well and go for the save.

Data Validation:

The behavior of the DP SAM in the OCC depends on the definition of the service availability management report.

The definition has two parameters that can affect the behavior of the DP SAM. These two parameters are the “Reporting period” and the “Pattern” parameters.

If we set the “Reporting period” to “monthly”, no yearly data will be collected. So, if we configure a query with the system used in this definition and use “Year” as a resolution, we will not be able to see this data. So, the data provider sets the resolution automatically to “Month”.

The same thing will happen if we set the “Pattern” parameter to “Week” and ask for daily data. The DP will set the resolution automatically to “Week”.

Also, the definition in the service availability management has a validity period, so in order to have data in the DP SAM for the selected system, the validity has to group the time range selected in dashboard.

Here is an example of a definition for the A4H ABAP:

In here it has a monthly reporting period and a daily pattern which means we cannot have yearly data using the OCC DP SAM.

Service Availability Definition

Details of Service Availability Definition

Title: A4H Availability

Validity: November 7, 2018 to November 7, 2020

Time Zone: Central Europe

Entities Availability Contractual Maintenance

SLA Threshold (%): 90.00

Reporting Period: Monthly

Pattern: Daily

Start Time: 00:00 24 00

Figure 218. report configuration Example

In order to validate the key figure needed, we need to follow the below rules:

- Availability considering all outages: Choose the availability setting “All”
- Availability considering only confirmed outages: Choose the availability setting “Confirmed only”

Here is an example to be validated, with the below selection:

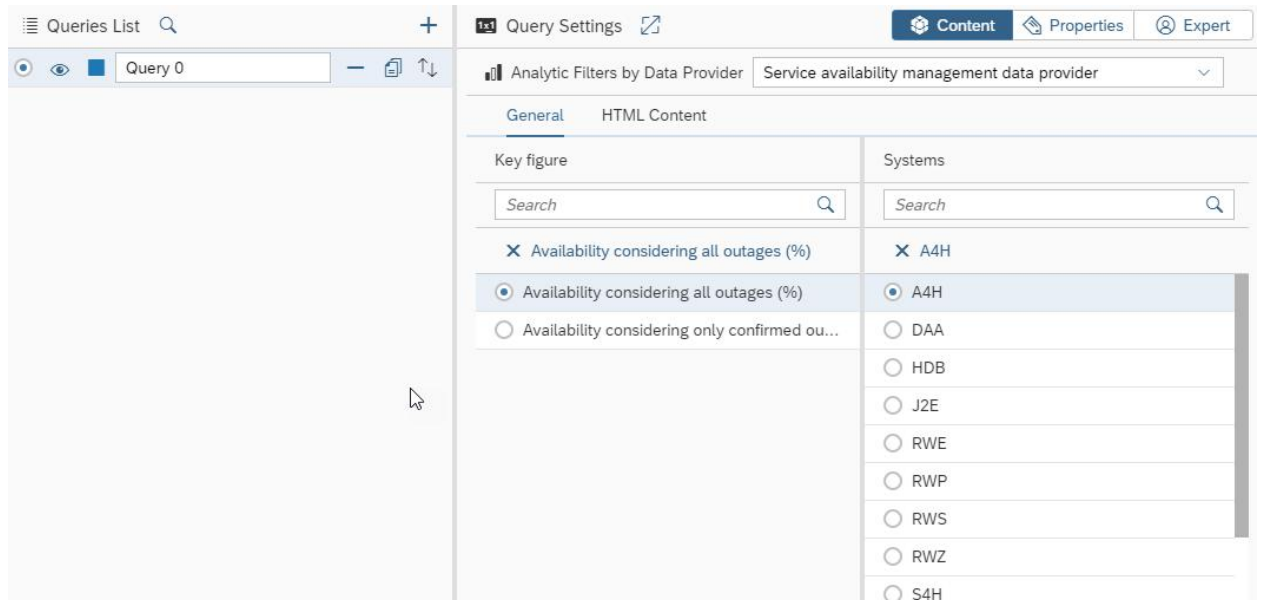


Figure 219. Example configuration (1)

If we choose the period/resolution = LAST_MONTH/day, this is what we will get in the OCC:

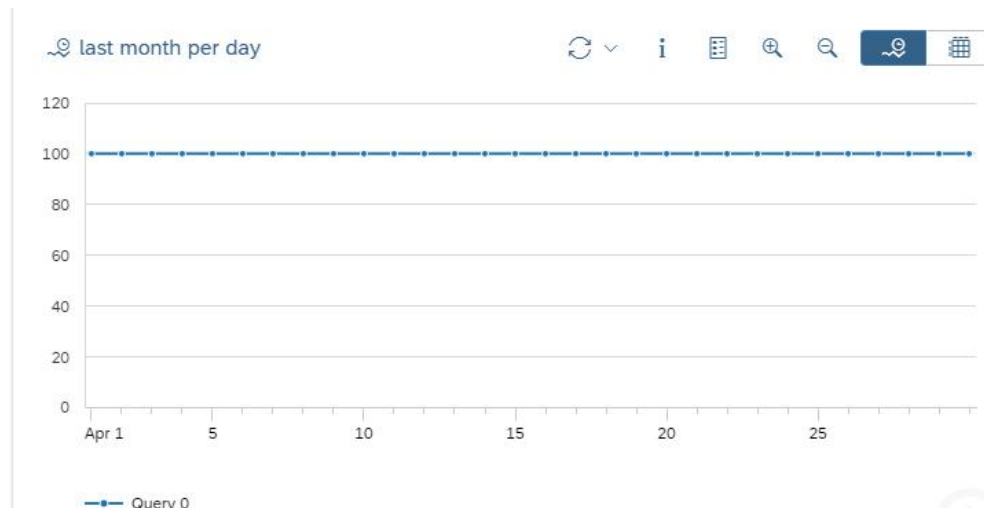


Figure 220. Example configuration (2)

In order to validate this, the parameter availability settings should be set to "All":

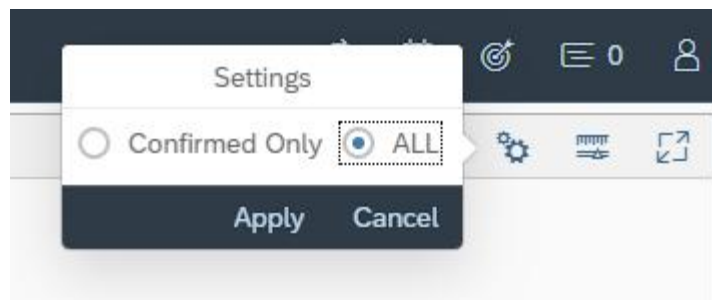


Figure 221. Example configuration (3)

In the scope selection, we should search for the A4H ABAP system.

Then in the overview, we need to navigate to the selected period which is April 2020 in this case.

Service Availability Overview			
Availability Settings: Confirmed Only Scale Switch: On			
Monthly Reporting Yearly Reporting			
Services			
Entity	03.2020	04.2020	05.2020
A4H ABAP	100.00	100.00	100.00

Figure 222. Service Availability Overview (1)



Figure 223. Service Availability Overview (2)

If we went and selected the resolution "Year" with current 2 Year as a period in the OCC, we will get current 2 year per month data since there is no yearly data because the definition of the report is set to "Monthly".

Here is the screenshot for the behavior below:

The granularity is yearly, and the DP is sending back monthly data.

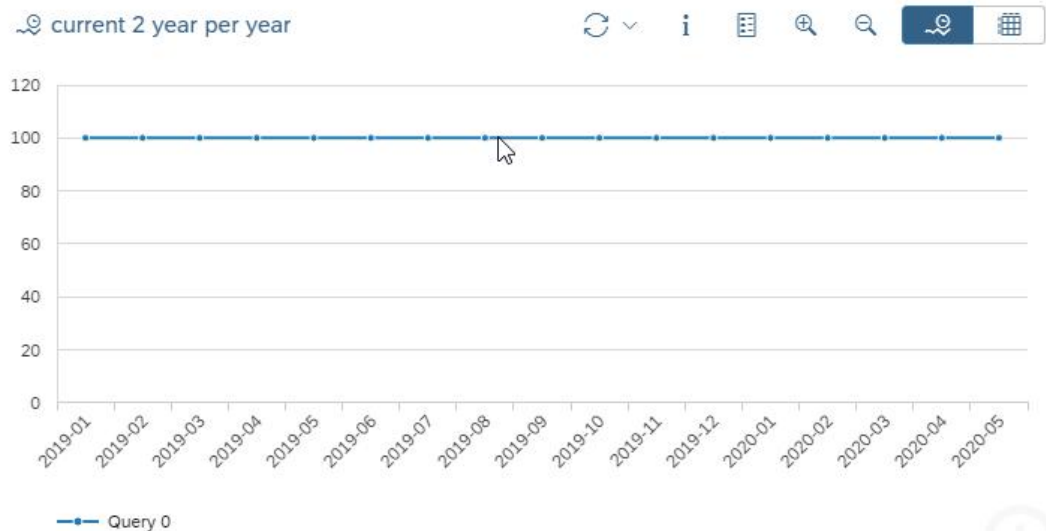


Figure 224. Result

So, the DP will always send back the data with the resolution selected if it exists otherwise it will send back the resolution that exists according to the report definition in the service availability management application.

.33 Data Provider /STDF/DP_ALERT_SEARCH

Data provider /STDF/ALERT_SEARCH gives an overview of critical alerts (number of open alerts and status of alerts) from different monitoring areas such as business process monitoring, data consistency monitoring, job monitoring, etc.

The Alert Search Data Provider has 5 tabs:

a) Metric Tab

To configure an Alert Search Data Provider in a gadget:

- Choose Alert Search Data Provider
- Select a Metric:
 - o Number of alerts created: Number of alerts created during the time period.
 - o Average alert duration in min: Average time (in minutes) of alerts in the alert inbox during the requested time period.

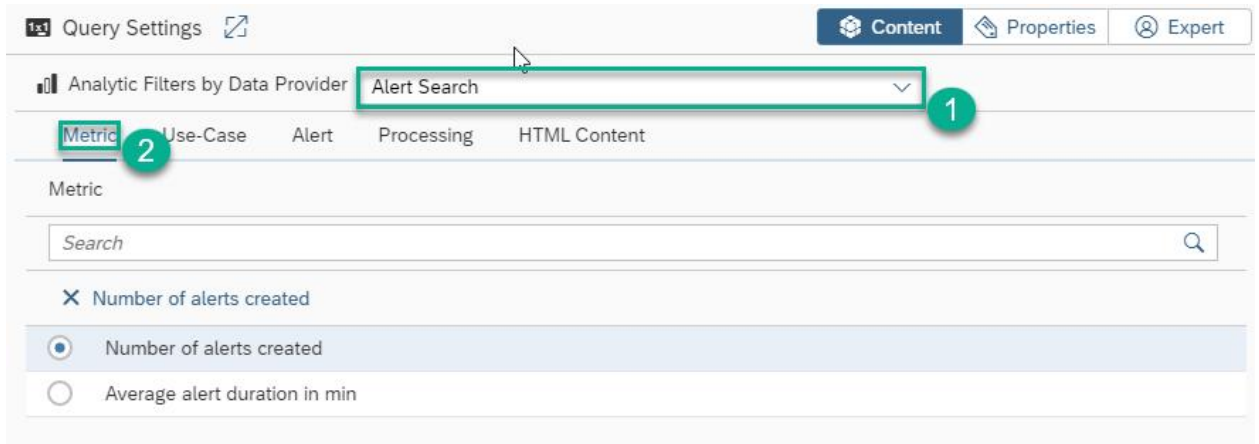


Figure 225. Metric Tab

b) Use-Case Tab

It displays the list of use case as Technical System Monitoring, Job Monitoring, etc.

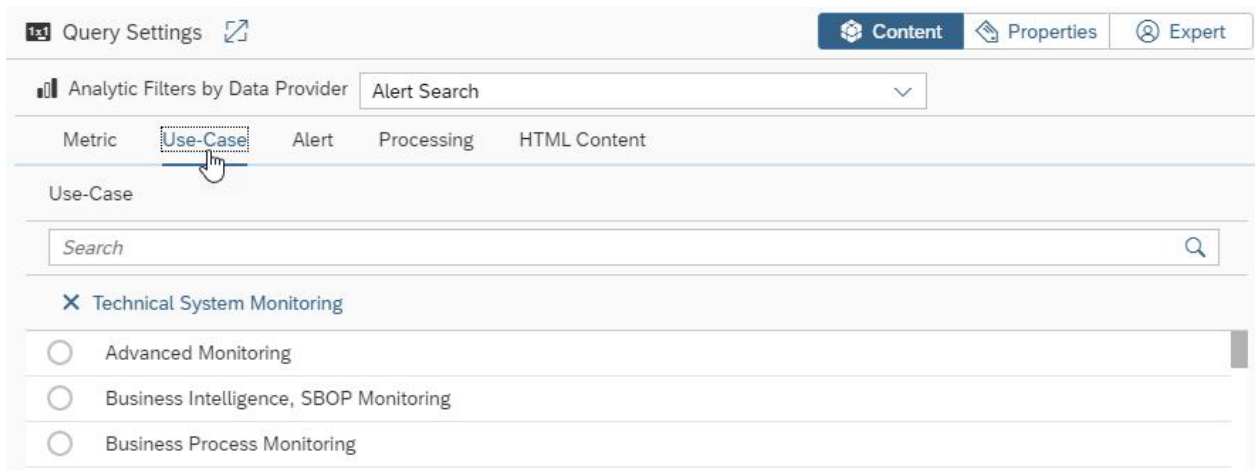


Figure 226. Metric Tab

c) Alert Tab

The alert tab displays 2 columns:

- Alert name: short text that describes the alert
- Rating: it can be yellow or red
- Object Name

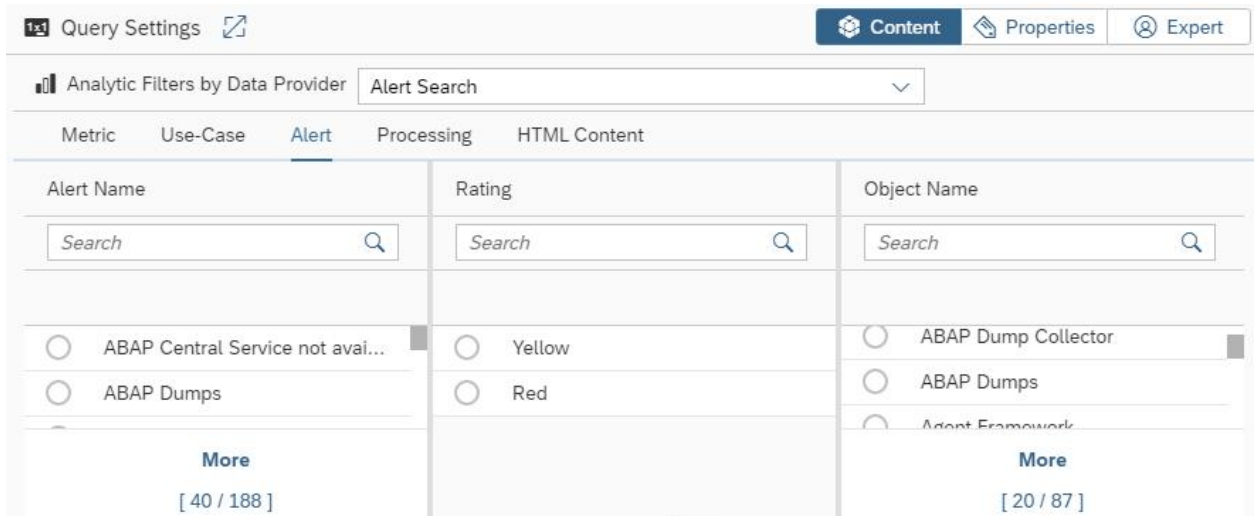


Figure 227. Alert Tab

d) Processing Tab

The processing Tab displays 2 columns:

- Alert Status
- Classification

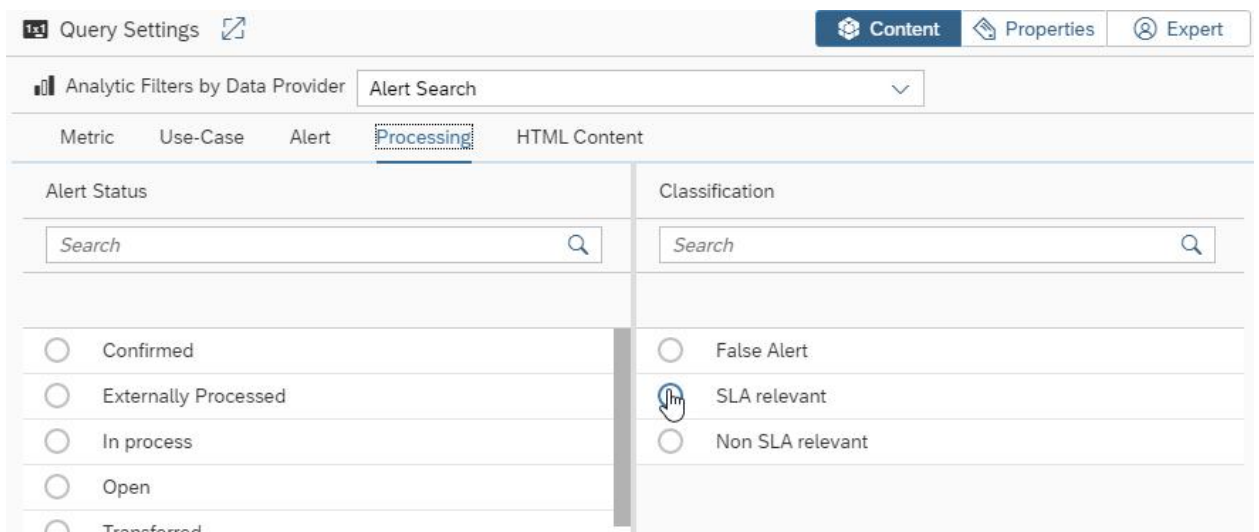


Figure 228. Metric Tab

Data Validation:

The data source for the Alert Search data provider is the Alert Search Application. Data validation is only done from this application.

a) Number of Alerts Created

In this section, we will go step by step how to validate the Number of Alerts Created through Alert Search Application.

- Gadget Configuration

Query	/STDF/DP_ALERT_SEARCH:COLOR=#0cff18 legend=TechMon Alerts OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= FILTER_VALUE= visible=true METRIC=Counter USE-CASE=T_SYS_MON ALERT= ABAP Central Service not available RATING= OBJECT NAME= STATUS= CLASSIFICATION= HTML_CONTENT_ID= display_value=false				
Time Range	Last Month /Week				
Default Settings	Renderer: Dynamic Table				

The Dynamic Table displays 14 Alerts for ABAP Central Service Not Available during the Last Month returned by the Alert Search Data Provider as in the screenshot below:

Last Month | Week 📄 ↺ ⌵

	ALERTNAME	CATEGORY_TEXT	STATUS	MANOBJ	RATING	MOTYPE_TEXT
6	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	3	Technical Instance
7	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	2	Technical Instance
8	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	3	Technical Instance
9	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	2	Technical Instance
10	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	3	Technical Instance
11	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	2	Technical Instance
12	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	3	Technical Instance
13	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	2	Technical Instance
14	ABAP Central Service not available	Availability	Confirmed	SHM110~ABAP~Central Service Instanc	3	Technical Instance

Figure 229. Displayed result

We will check the displayed data by the OCC Dashboard with the Alert Search.

- Type SM_WORKCENTER transaction
- Look for Alert Search Tile
- Choose the corresponding time interval
- Choose the corresponding alert name "ABAP Central Service not available"
- Choose the corresponding Monitoring Use-case "Technical System Monitoring"
- Click on "Search" button

Only alerts that are created and confirmed in the selected period are displayed. In other words, if an alert has been created in the selected period and has not been confirmed in this period. It will not appear in the alert details table.

Figure 230. Metric Tab

- Ø Maximum number of hits: It is mandatory to specify the max number of hits for the dynamic table. It can be added and changed manually in the expert mode. If it is not specified, it will be set to 500.

Figure 231. Expert Tab

b) Average Alert Duration in min

The Average Number Duration in min is calculated as below:

- Get all the alerts created within the selected period
- Calculate the average duration
- Then distribute the value on the resolution

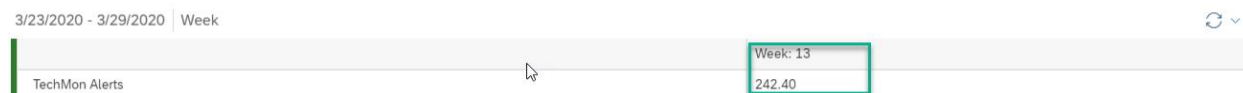


Figure 232. Displayed result

In order to validate the data, follow the following steps:

- Open SAP Solution Manager

- Look for Alert Search Tile
- Apply the corresponding filters as in the screenshot below

Figure 232. Alert Search Application

In week 13 of 2020, the alert search displays 3 alerts that match the selected criteria. In order to calculate the average alert duration in min, please follow those steps:

- Calculate the duration of the 3 alerts: You can use for example this Function Module

Figure 233. Duration

- Convert the duration in minute:

$$Duration (min) = \frac{Difference}{60}$$

$$Duration(min) = \left(\frac{43632}{60} \right) = 7272$$

- Calculate the average of the duration:

$$Average duration (min) = \frac{Duration (min)}{\sum Alerts created in same period} = \frac{7272}{3} = 242.4$$

.34 Data Providers Status

The following table is displaying the data Providers status in SP06:

	In usage	Deprecated
DP_SYSMON	x	
DP_SYSMON_SNAPSHOT	x	
DP_EEM	x	
DP_EEM_BI	x	
DP_BPA_KPI	x	
DP_BEX_QUERIES	x	
DP_DF_TAC	x	
DP_DVM	x	
DP_MAI_ALERTING	x	
DP_DF_KPI	x	
DP_ITSM	x	
DP_CCM	x	
DP_CRM	x	
DP_CALCULATION	x	
DP_DCM	x	
DP_ICM	x	
DP_EWA	x	
DP_BPO	x	
DP_SOLDDOC	x	
DP_BUILD	x	
DP_SECURITY	x	
DP_FRUN	x	
DP_BPA	x	
DP_TEST	x	
DP_SQLSCRIPTS	x	
DP_BEX_VIEW	x	
DP_TRANSACTION	x	
DP_TABLE	x	
DP_JSM	x	
DP_ATC	x	
DP_GADGET_CALCULATION	x	
DP_SAM	x	
DP_ALERT_SEARCH	x	

Renderers

.1 Line Chart

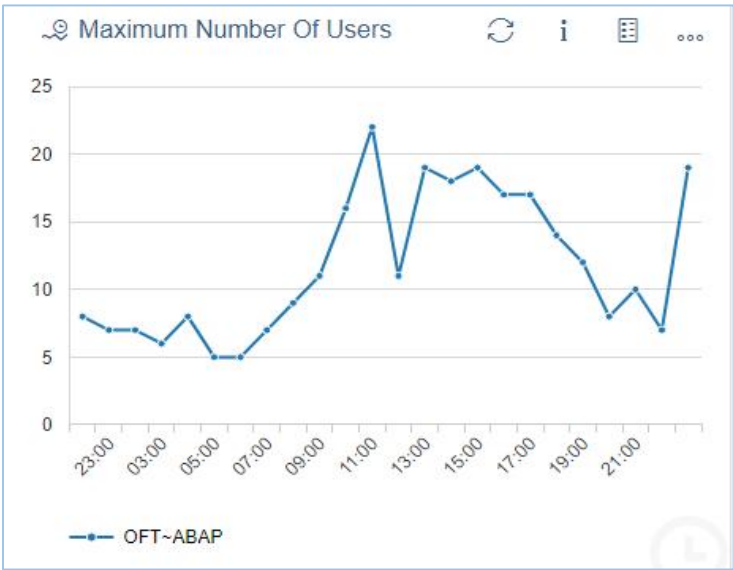


Figure 234. Line Chart

.2 Bar Chart

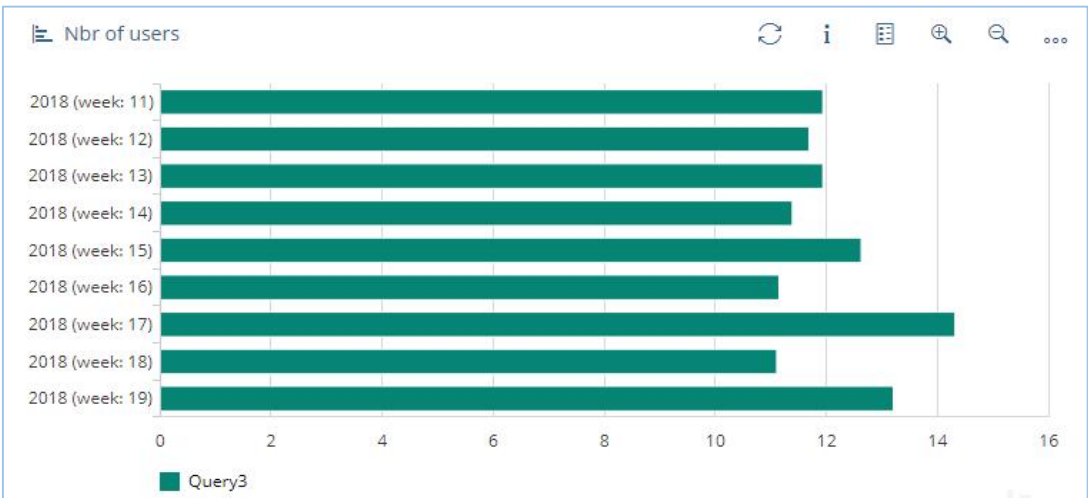


Figure 235. Bar Chart

.3 Column Chart

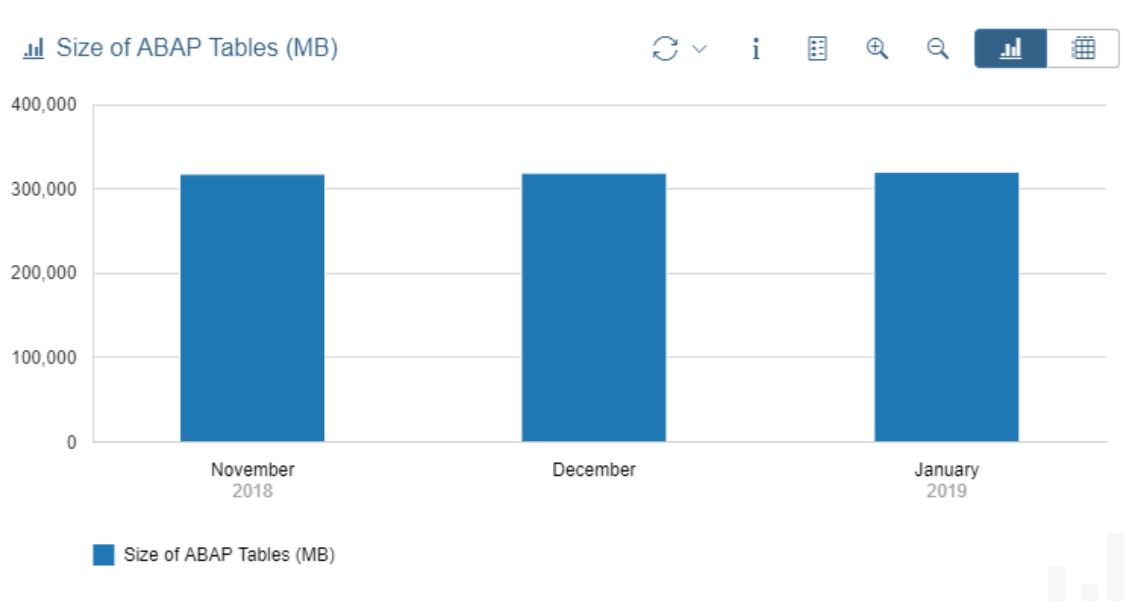


Figure 236. Column Chart

To classify the data displayed in the column chart in different categories we can use the Color Categories parameter
In the following example showing how to configure it.

Figure 237. Color Categories Configuration

Color Categories: January 2019, December 2018:Months 1,#14d140& October 2018,November 2018:Months 2,#fc053e

" ": Delimiter between values

" ": Delimiter between column name and category

"&": Delimiter between different color categories

#14d140 and #fc053e are the color codes related to each category.

Months 1 and Months 2 are the names of each category.

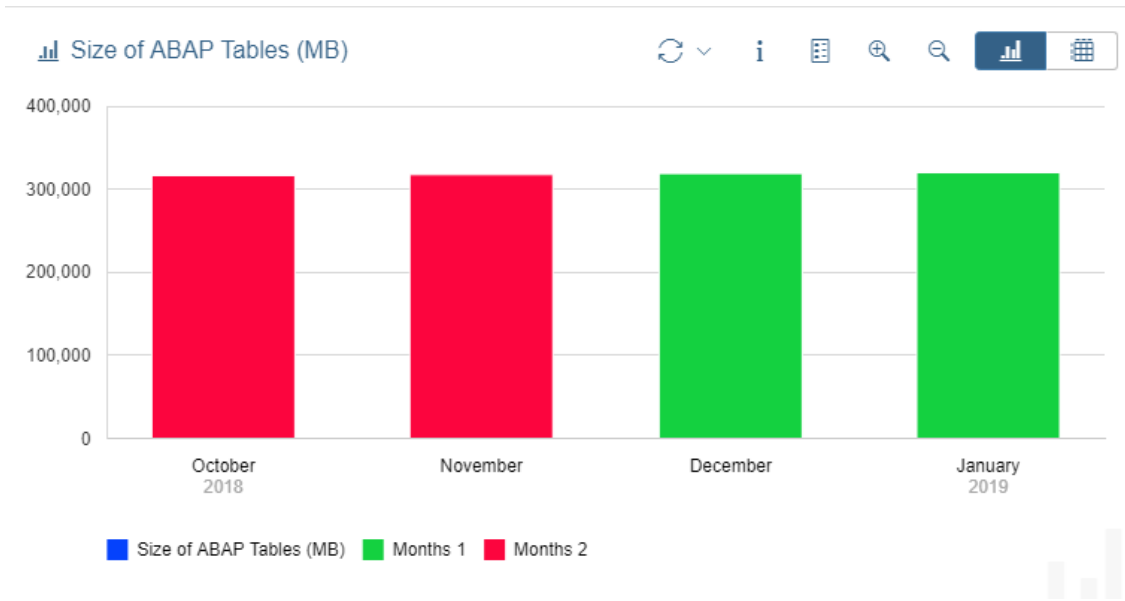


Figure 238. Color Categories Detailed View

.4 Line Column

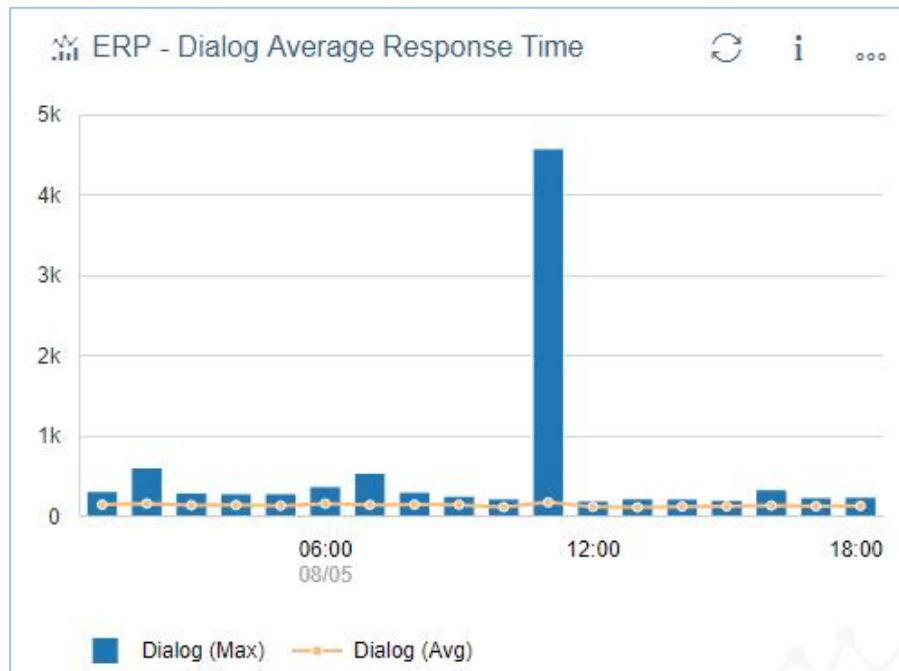


Figure 239. Line Column

.5 Pie Chart

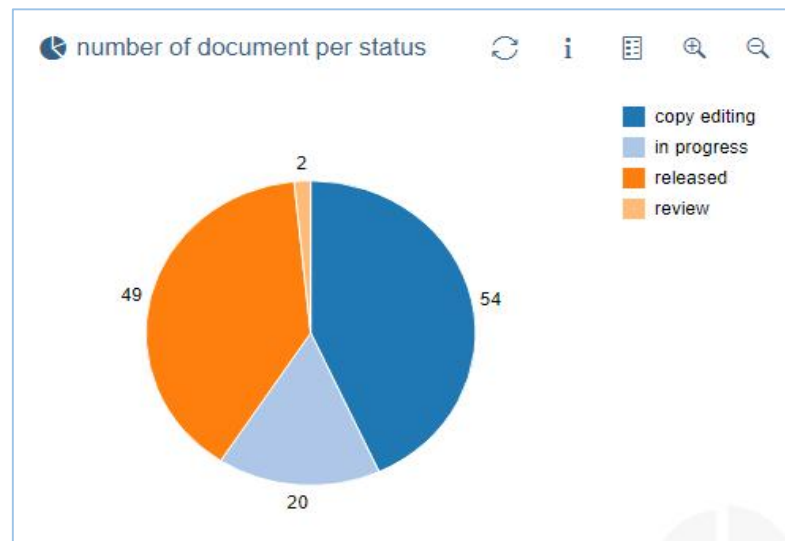


Figure 240. Pie Chart

.6 Donut Chart

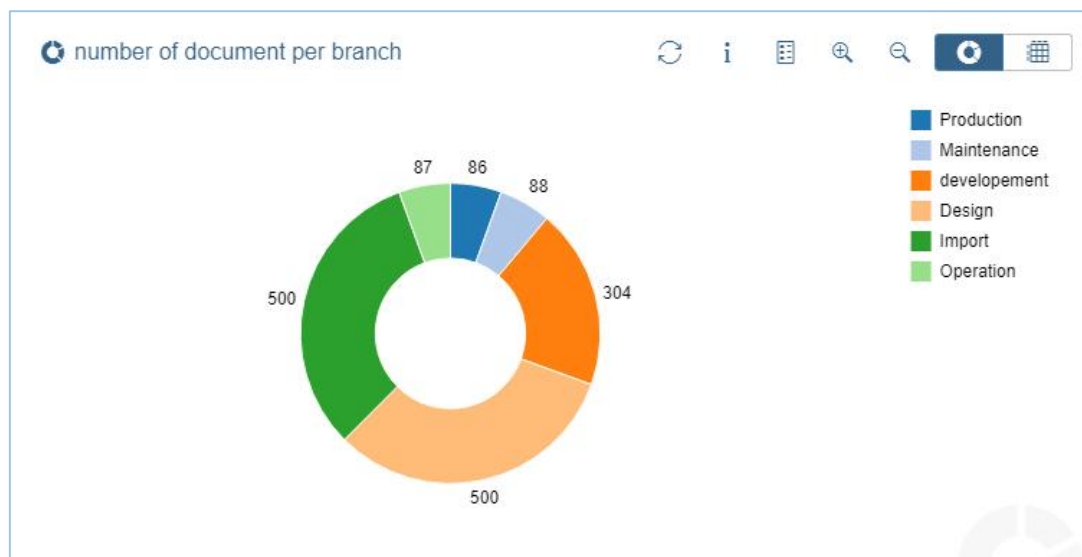


Figure 241. Donut Chart

.7 Dual Bar Chart

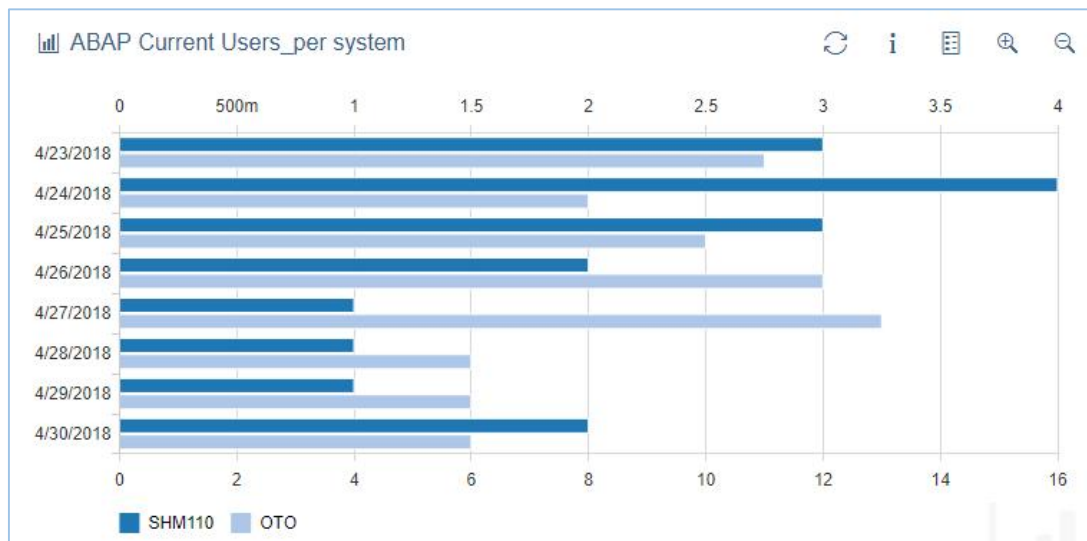


Figure 242. Dual Bar Chart

.8 Dual Line

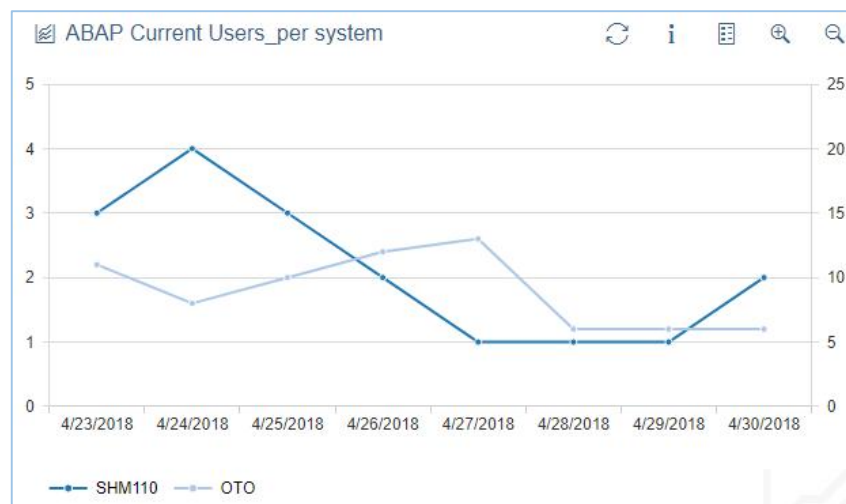


Figure 243. Dual Line Chart

.9 Dual Line-column

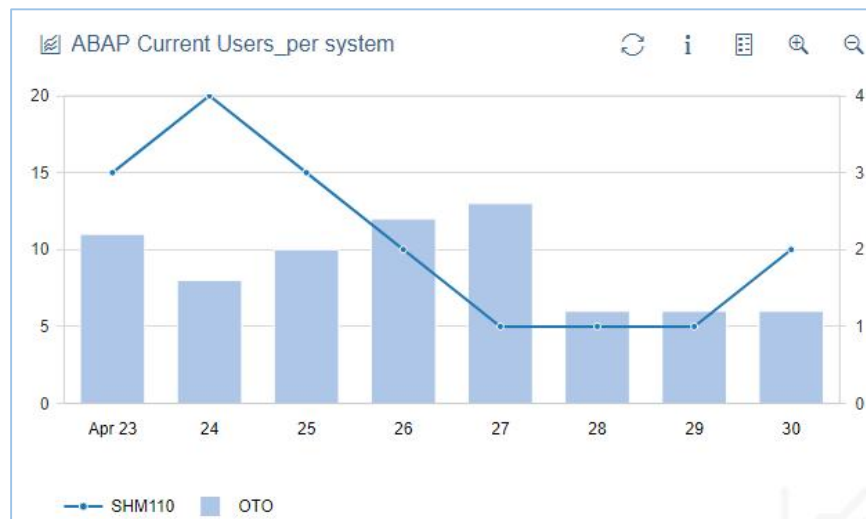


Figure 244. Dual Line-column

.10 Alert Table

SHD110					
System	Avail	Config	Error	Perf	Alerts
SHD110	✓	?	🔥	🔥	18 Alerts

Figure 245. Alert Table renderer

.11 Dynamic Table

Here is an example for the use of Dynamic Table renderer, we will describe also in this section the utility of "Display Attributes" and "Filter Values" properties.

- Prepare a saved search on the CRM, Go to the Transaction CRM_UI

Search: Incidents

Search Criteria

Hide Search Fields

Transaction Type

is

Defect (S1DM)

+

-

Time Frame

is

Last month

+

-

Maximum Number of Results: 100

Search

Clear

Save Search As: defects

☐ Include View

Save

Result List: 27 Incidents Found

New

New from Template

Create Follow-Up

Refresh

Filter:

ID	Ranking	Descript...	Priority	User St...	Posting ...	Messag...	Support...	Category	IRT Usage	IRT Status	IRT Text	MPT Us...	MPT St...	MPT Text	Change...	Transac...
800000...	0	Test 005	3: Medi...	New	09.04.2...				0%	<div></div>		0%	<div></div>		09.04.2...	Defect
800000...	0	Dumm...	3: Medi...	New	12.04.2...				0%	<div></div>		0%	<div></div>		12.04.2...	Defect
800000...	0	Dumm...	3: Medi...	New	12.04.2...				0%	<div></div>		0%	<div></div>		12.04.2...	Defect
800000...	0	Dumm...	3: Medi...	Confr...	12.04.2...				0%	<div></div>		0%	<div></div>		13.04.2...	Defect

Figure 246. Results in the CRM UI

- Display all the content of the saved search columns using a dynamic table renderer:

The generated query is:

Legend	Query
OFT	/STDF/DP_CRM:COLOR=#1f77b4 legend=defects OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Saved_search=5CF3FCDCEC001EE88CA1D5130FA1E121 Filter=1 Backlog= Drilldown=

Defects Grid Refresh Info				
	GUID	PROCESS_TYPE	PROCESS_TYPE_TXT	OB
20	5CF3FCDCEC001EE88EF818302	S1DM	Defect	8000000928
21	5CF3FCDCEC001EE88EB4F8A3	S1DM	Defect	8000000927
22	5CF3FCDCEC001EE88EB44E62	S1DM	Defect	8000000926
23	5CF3FCDCEC001EE88EB3F7B6	S1DM	Defect	8000000925
24	5CF3FCDCEC001EE88EB3E043	S1DM	Defect	8000000923
25	5CF3FCDCEC001EE88EAF3769	S1DM	Defect	8000000922
26	5CF3FCDCEC001EE88EAF0766	S1DM	Defect	8000000921
27	5CF3FCDCEC001EE88E8510657	S1DM	Defect	8000000909

Figure 247. Detail view (Display all the table columns)

- In this example, we will keep the content of two columns only and we will rename them as follow:

<KEY1> > <Display_name1>, <KEY2> > <Display_name2>

Query Settings

Jump in: Line Chart Renderer

SLA: Trend:

Display Value: Trend Line:

Yellow Thresh...:

Red Threshold:

Color Rating:

Display Attribu...:

Filter Values:

Color Categories:

Figure 248. Use of Display Attribute property

The generated query is:

Legend	Query
OFT	/STDF/DP_CRM:COLOR=#1f77b4 legend=defects OCC_JUMP_IN= SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES=Guid>GUID CRM,PROCESS_TYPE>Process Type visible=true Saved_search=5CF3FCE8D2301EE88CA1D5130FA1E121 Filter=1 Backlog= Drilldown= display_value=false

	GUID CRM	PROCESS TYPE
20	5CF3FCDCEC001EE88EF818302	S1DM
21	5CF3FCDCEC001EE88EB4F8A3	S1DM
22	5CF3FCDCEC001EE88EB44E62	S1DM
23	5CF3FCDCEC001EE88EB3F7B6	S1DM
24	5CF3FCDCEC001EE88EB3E043	S1DM
25	5CF3FCDCEC001EE88EAF3769	S1DM
26	5CF3FCDCEC001EE88EAF0766	S1DM
27	5CF3FCDCEC001EE88E8510657	S1DM

Figure 249. Detail view (Select/Edit some columns titles)

Also using the Display attributes property, we can select/edit some columns titles and Keep the left attributes with the same behavior using this syntax <KEY1> > <Display_name1>, <KEY2> > <Display_name2>, *

The Asterisk in column means that we will show all other columns in addition to those with changed names.

In a very similar way to the DISPLAY_ATTRIBUTES, the FILTERS_VALUES feature is used to select/Edit some rows.

FILTERS_VALUES= <KEY1>: <Value1 >, <Value2>& <KEY2> : <Value1 >, <Value2>

Figure 250. Use of Display Filter Values property

Sort Columns in the Dynamic Table Renderer:

1. Click on the Column Header in the Dynamic Table Renderer
2. A column menu entry for sorting will be displayed: there are two possibilities for sorting
 - a. Sort Ascending
 - b. Sort Descending

	ALERT_NAME	ALERT_LINK
345	Sort Ascending	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
59	Sort Descending	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
125	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
173	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
175	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
187	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
246	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
305	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
358	Batch Job Errors	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725E7419&MO TYPE=T SYSTEM&CATEGORY=&ALTY ID=0050568A
7	Errors in ABAP System Log	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725DB419&MO TYPE=INSTANCE&CATEGORY=&ALTY ID=80E0ED0E
16	Errors in ABAP System Log	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725DB419&MO TYPE=INSTANCE&CATEGORY=&ALTY ID=80E0ED0E
29	Errors in ABAP System Log	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725DB419&MO TYPE=INSTANCE&CATEGORY=&ALTY ID=80E0ED0E
36	Errors in ABAP System Log	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725DB419&MO TYPE=INSTANCE&CATEGORY=&ALTY ID=80E0ED0E
62	Errors in ABAP System Log	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725DB419&MO TYPE=INSTANCE&CATEGORY=&ALTY ID=80E0ED0E
72	Errors in ABAP System Log	/sap/bc/webdynpro/sap/diag app starter?APP ID=TECHMON ALERT INBOX&MO ID=FA163E15E1BA1EE8A0EB4C8F725DB419&MO TYPE=INSTANCE&CATEGORY=&ALTY ID=80E0ED0E

Figure 251. Sort Dynamic Table Renderer

Dynamic Table Paging:

This is an extension of dynamic table which offers the same content of Dynamic table with pagination option. Also, this renderer offers the possibility of navigation easily between pages via a slider input form where we can enter the desired page number:

Table [non translatable text]			page1/32		
	ALERT_NAME	ALERT_LINK			
1	ABAP Job	/sap/bc/webdyn			
2	ABAP Job	/sap/bc/webdyn			
3	Connection from SMD Agent to Host Agent failed	/sap/bc/webdyn			
4	Diagnostic Agent for Technical System Monitoring unavailable	/sap/bc/webdyn			
5	DPC ST_PI Extractor has Errors	/sap/bc/webdyn			
6	Connection from SMD Agent to Host Agent failed	/sap/bc/webdyn			
7	Diagnostic Agent for Technical System Monitoring unavailable	/sap/bc/webdyn			
8	Configuration XML is outdated	/sap/bc/webdyn			

Figure 252. Dynamic Table Paging

To define the number of rows displayed per page we have to add an attribute 'nb_rows_displayed' to the query in expert mode. The default value of this attribute is 30:

In our example we set the value to 10:

Legend	Query
OFT	/STDF/DP_MAI_ALERTING:KPI=Counter_Cur CONTEXT_ID= ALERT= TECHNICAL_SCENARIO= CONTEXT_TYPE= CATEGORY= RATING= Incident= SEVERITY= Threshold_unit= Threshold_value= processor= visible=true legend= COLOR=#1f77b4 OCC_JUMP_IN= display_value=false HTML_CONTENT_ID= nb_rows_displayed=10

All options of dynamic table (Display Attributes, Filters Values ..) are available for this renderer. When we apply a filter, it will be applied on the whole data and not only displayed rows. Then, the number of pages and the content will be refreshed according to filter values.

PS: Dynamic table renderer supports only one query

.12 SLR table renderer

Solution Availability		i
System Availability CRM	100.00	
System Availability S4H	100.00	
System Availability Portal	100.00	
Availability Alerts raised	37	
Portal Average Response Time	3450	
Number of Jobs cancelled	350	

Figure 253. SLR Table Renderer

.13 SLR Renderer

This Renderer display a Rating (Green, Warning or Red) for each query defined in the Gadget.

The rating is based on:

1. Target Thresholds for the SLA.
2. Period, Resolution for the SLA.
3. Color Rating.

★ \$

Gadget Settings

General

Time Range

Data

Title:

SLR renderer

Description:

Renderer:

SLR_RENDERER

Figure 254. SLR renderer

The SLR_Renderer uses ANY Queries defined in the Gadget and compute the SLA Rating based on the following values:

4. Thresholds are taken from the Query String (G2Y and Y2R) or the Gadget configuration: If there is no Thresholds, the Rating will be Green.
5. Period for the Rating is taken from the gadget period.
 - o If the Data Provider is of type DP_DF_KPI, the following parameters can be used: Period, Resolution
6. Rating is either High Is Good or Low is good depending on the G2Y and Y2R values.

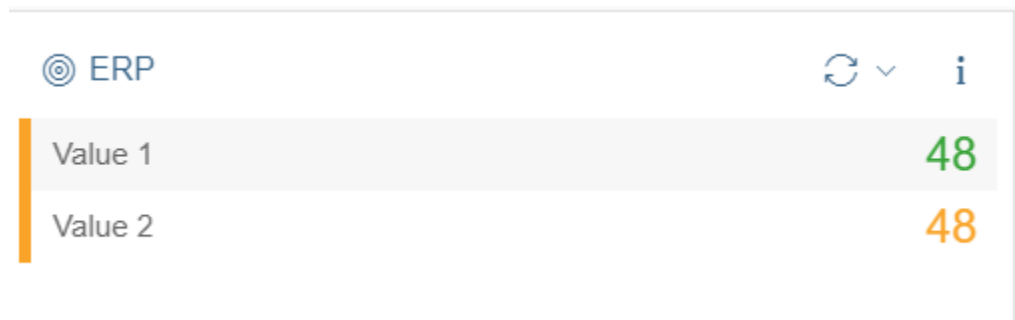


Figure 255. SLR renderer thresholds

.14 Stack Bar Chart

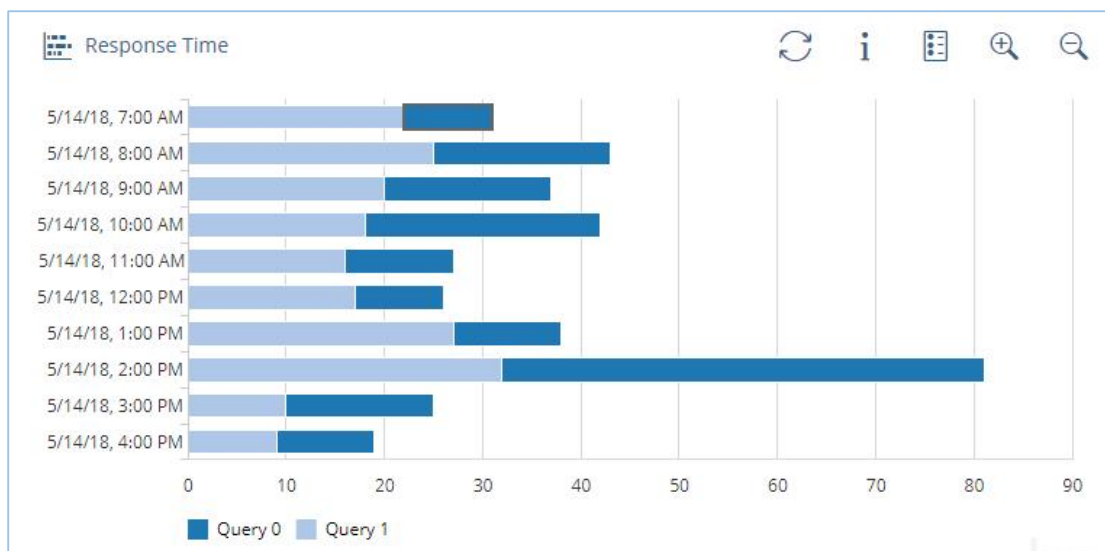


Figure 256. Stack Bar Chart

.15 Stack Column Chart

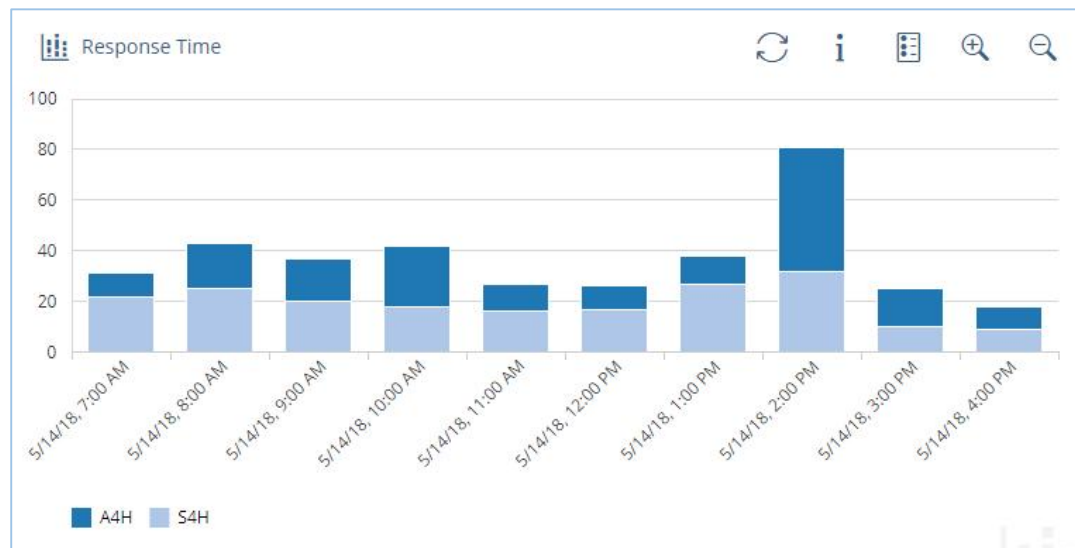


Figure 257. Stack Column Chart

.16 Stack_Column_Chart_2Label

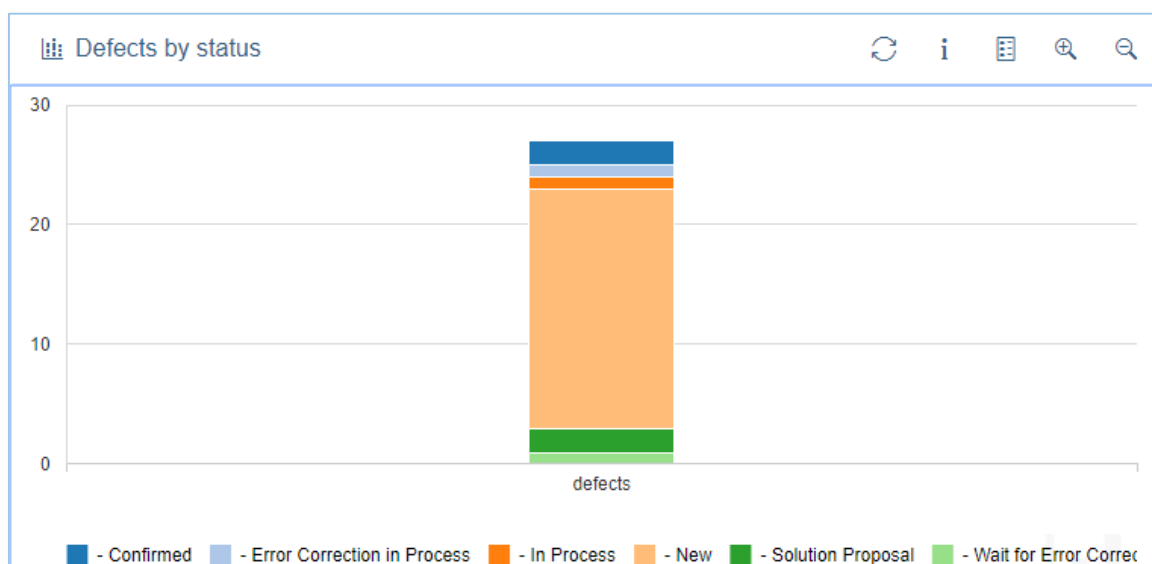


Figure 258. Stack_Column_Chart_2Label

Here is an example for the Stack_Column_Chart_2Label renderer "OCC_JUMP_IN":

- Prepare a saved search on the CRM, Go to the Transaction CRM_UI

We should add the number of the gadget which we want to jump to in the query: |OCC_JUMP_IN=207-2027

The generated query is:

Legend	Query
defects /	/STDF/DP_CRM:COLOR=#1f77b4 legend=defects / OCC_JUMP_IN=207-2027 SLA= TREND= G2Y= Y2R= COLOR_RATING= DISPLAY_ATTRIBUTES= visible=true Saved_search=5CF3FCE8D2301EE88CA1D5130FA1E121 Filter= Backlog= Drilldown=CONCATSTATUSER display_value=false

Query Settings

Content Properties Expert

/STDF/DP_CRM:COLOR=#1f77b4|legend=defects |OCC_JUMP_IN=207-2027|SLA=|TREND=|G2Y=|Y2R=|COLOR_RATING=|DISPLAY_ATTRIBUTES=|visible=true|Saved_search=5CF3FCE8D2301EE88CA1D5130FA1E121|Filter=|Backlog=|Drilldown=CONCATSTATUSER|display_value=false

Figure 259. Configuration gadget

When clicking on the column, a new window is displayed:

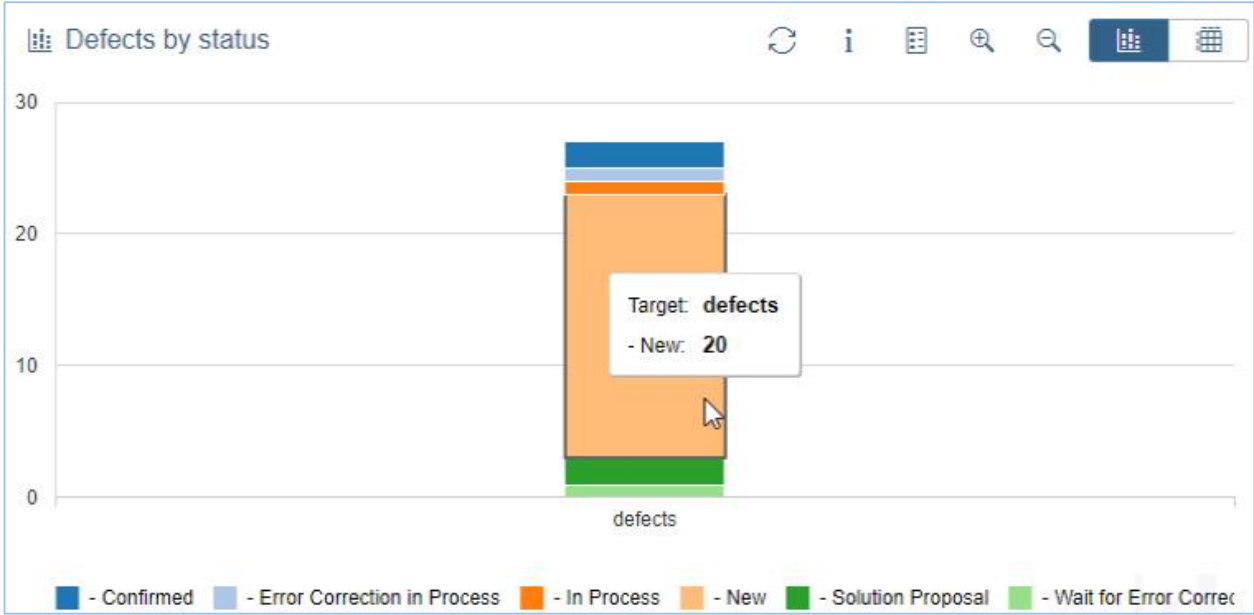


Figure 260. Detail View (1)

Here is the displayed window:

My New Dashboard							
My New Dashboard Defects							
Last Month Auto							
	GUID	PROCESS_TYPE	PROCESS_TYPE_TXT	OBJECT_ID	OBJECT_TYPE	VALID_FROM	VALID_TO
1	5CF3FCDCEC001EE892AD3AEF	S1DM	Defect	8000001044	BUS2000223	00000000	00000000
2	5CF3FCDCEC001EE892AB41A7	S1DM	Defect	8000001043	BUS2000223	00000000	00000000
3	5CF3FCDCEC001EE892AB06FF	S1DM	Defect	8000001042	BUS2000223	00000000	00000000
4	5CF3FCDCEC001ED892AA756B	S1DM	Defect	8000001041	BUS2000223	00000000	00000000
5	5CF3FCDCEC001ED892AA258B	S1DM	Defect	8000001040	BUS2000223	00000000	00000000
6	5CF3FCDCEC001ED892A9FBE6	S1DM	Defect	8000001039	BUS2000223	00000000	00000000
7	5CF3FCDCEC001ED892A632BF	S1DM	Defect	8000001038	BUS2000223	00000000	00000000
8	5CF3FCDCEC001EE892910C9E	S1DM	Defect	8000001035	BUS2000223	00000000	00000000
9	5CF3FCDCEC001EE8918565A4	S1DM	Defect	8000001031	BUS2000223	00000000	00000000
10	5CF3FCDCEC001ED890FC5924	S1DM	Defect	8000001023	BUS2000223	00000000	00000000

Figure 261. Detail View (2)

.17 Table History renderer

Early Watch Alert						
	2018-15	2018-16	2018-17	2018-18	2018-19	2018-20
Service Preparation						
Software Configuration						
Workload Overview						

Figure 262. Table History renderer

.18 Trend Table Renderer

Early Watch Alert							
	Trend	Week: 15	Week: 16	Week: 17	Week: 18	Week: 19	Week: 20
Service Preparation	↗ ✓						
Software Configuration	↗ ✓						
Workload Overview	↗ ✓						

Figure 263. Trend Table Renderer

.19 Waterfall Chart

This renderer is used only with the data provider DP_Build.

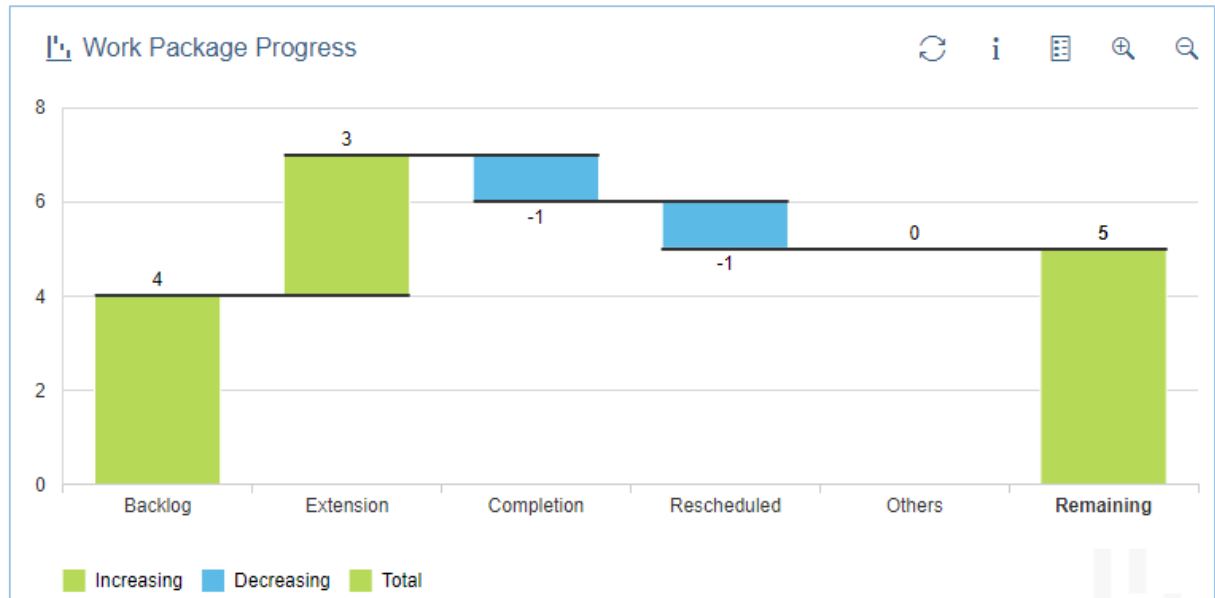


Figure 264. Waterfall renderer

.20 HTML renderer

Capabilities:

- Display Tiles and Text/HTML
- Available for all DPs: A new Option Group is added for all DPs allowing the selection of the HTML Content to be displayed

Options: The user can select one of the 3 options below:

- HTML: The gadget will consider displaying only the HTML content. The content could contain link to images or a base 64 images.
- Tile: The gadget will consider displaying only tiles. The tile will contain the SLR_RENDERER Value according to the specified SLA. It supports also the color rating.
- HTML and Tile: The gadget will display Tiles on the top of the HTML Content (Default)

Usage:

1. Select The HTML_RENDERER
2. Select the display Format (Tile, HTML or HTML and Tile)
3. Select the content from the Option Group "HTML Content"

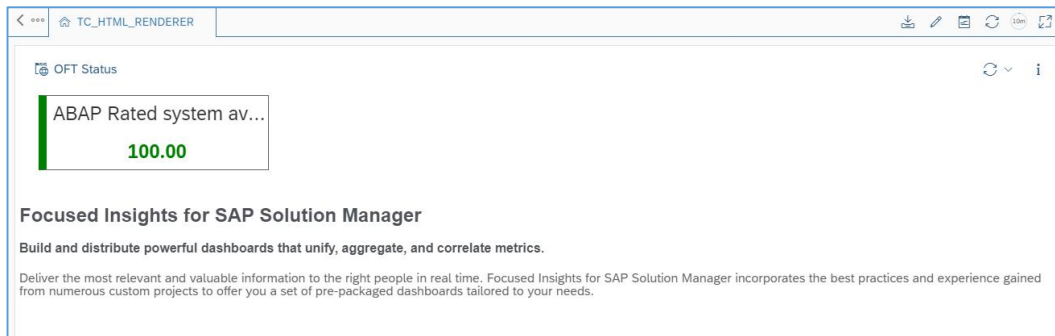


Figure 265. HTML Renderer (HTML & Tile)

.21 Renderers Usage

The renderers are used to display data providers 'data.

We can group the chart into categories:

- Trend Chart Single scale:
 - Line Chart
 - Pie Chart
 - Donut Chart
 - Line-Column Chart
- Trend Chart Double scale:
 - Dual Line Chart
 - Dual Line-Column
 - Dual Bar-Column
- Distribution Stack:
 - Stack Bar Chart
 - Stack Column Chart
 - Stack Column Chart2Label
- Comparison:
 - Waterfall Chart
 - Column Chart
 - Bar Chart
- Trend Table:
 - Table History Renderer
 - Trend Table Renderer
- Table:
 - Dynamic Table

- Alerts Tree:
 - Alert Table
- Compliance:
 - SLR Renderer
 - SLR Table Renderer


The following table is showing mapping Data Providers to Renderers 'categories':

Renderers \ Categories	Trend Chart Single scale	Trend Chart Double scale	Distribution Stack	Comparison	Trend Table	Table	Alerts Tree	Compliance
DP_SYSMON	x	x	x	x	x			x
DP_SYSMON_SNAPSHOT							x	
DP_EEM	x	x	x	x	x			x
DP_EEM_BI	x	x	x	x	x			x
DP_BPA_KPI	x	x	x	x	x	x		x
DP_BEX_QUERIES	x	x	x	x	x	x		x
DP_DF_TAC	x	x	x	x	x			x
DP_DVM	x	x	x	x	x			x
DP_MAI_ALERTING	x	x	x	x	x	x		x
DP_DF_KPI	x	x	x	x	x			x
DP_ITSM	x	x	x	x	x			x
DP_CCM	x	x	x	x	x	x		x
DP_CRM	x	x	x	x	x	x		x
DP_CALCULATION	x	x	x	x	x			x
DP_DCM	x	x	x	x	x	x		x

DP_ICM	x	x	x	x	x			x
DP_EWA	x	x	x	x	x	x		x
DP_BPO	x	x	x	x	x			x
DP_SOLDLOC	x	x	x	x	x	x		x
DP_BUILD	x	x	x	x	x	x		S
DP_SECURITY	x	x	x	x	x	x		x
DP_FRUN	x	x	x	x	x	x		x
DP_BPA	x	x	x	x	x			x
DP_TEST	x	x	x	x	x	x		x
DP_SQLSCRIPTS						x		
DP_BEX_VIEW	x	x	x	x	x	x		x
DP_TRANSACTIONS	x	x	x	x	x	x		x
DP_TABLE	x	x	x	x	x	x		x
DP_JSM	x	x	x	x	x	x		x
DP_ATC	x	x	x	x	x	x		x
DP_SAM	x	x	x	x	x	x		x
DP_ALERT_SEARCH	x	x	x	x	x	x		x

Limitations specific to internet explorer (IE)

- Ø when using the URL parameter &hardRefresh the Browser will be closed and restarted again in order to reinitialize the memory.
- Ø For some old IE versions, the copy & paste query option of the /STDF/DP_SYSMON_SNAPSHOT DP may not work.



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