


BI Fiori Launch Pad Overview [↑](#)

You can perform a fresh SAP BI 4.3 full install or upgrade your previous SAP BI 4.x system. In both cases, you need a new 4.3 license that can be downloaded from the [SAP Support web site](#).

Once installed and deployed, you can connect to the BI Launch Pad through its Login page, whose URL is by default <http://<server>:<port>/BOE/BI>



Log in to BI Launch Pad

boe:6400

cas

.....

Sign in

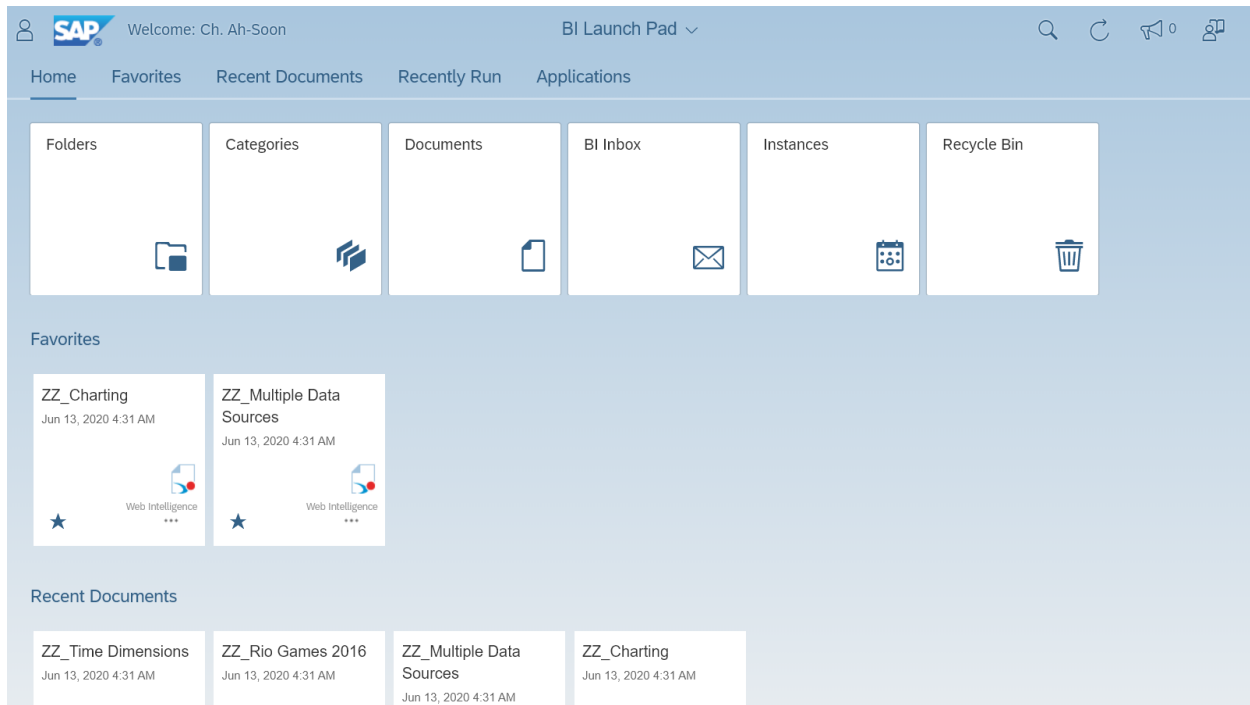
Contact Administrator

BI Launch Pad: Login Page

After you have authenticated, the **Home** page presents some tiles that give you access to repository's resources:

- **Folders:** to navigate in the BI Platform repository folders.

- **Categories:** to navigate in the BI Platform repository categories.
- **Documents:** to display your documents as a flat list.
- **BI Inbox:** to access the documents and alerts you have received.
- **Instances:** to give you an overview of all your schedules and publications.
- **Recycle Bin:** to display and restore documents you have deleted.



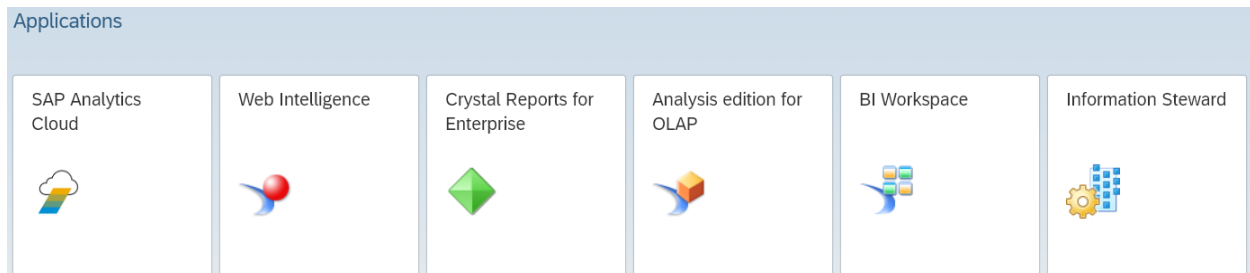
BI Launch Pad: Home Page

Under these tiles, three sections with document tiles are displayed. These documents are the ones:


- You have set as favorites (**Favorites**)
- You have previously opened (**Recent Documents**)

- That have been recently processed through schedules (**Recently Run**).

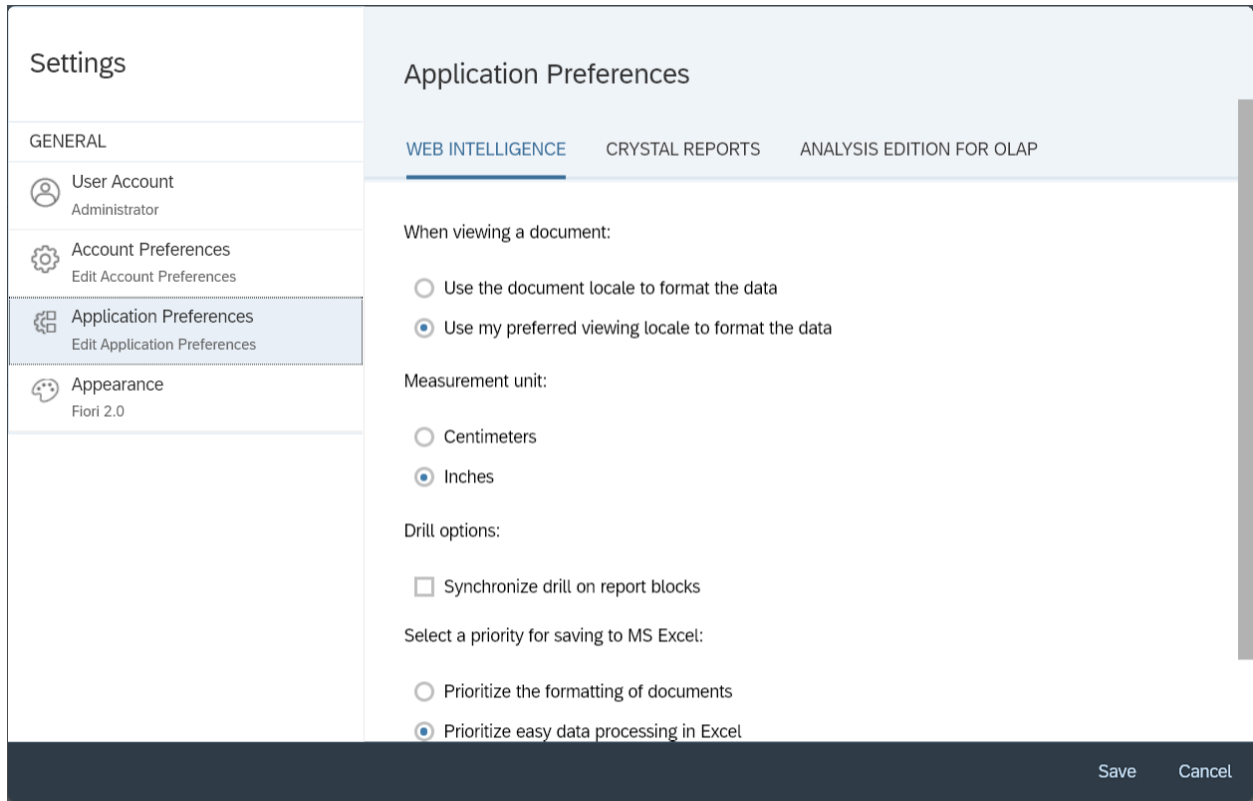
Finally, the **Applications** section contains tiles you can click to start the corresponding application hosted in BI Launch Pad. These applications include Web Intelligence.



BI Launch Pad: Applications Tiles

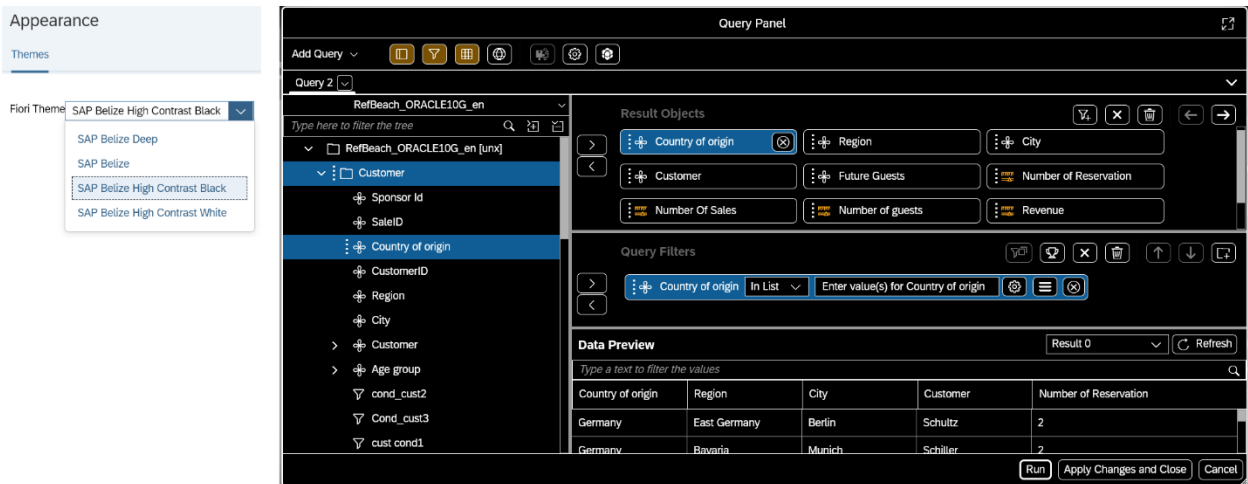
To modify the BI Launch Pad settings, click the icon () at the top left of the **Home** page, then **Settings** to open the **Settings** dialog box.

- In the **Application Preferences** section, click the **Web Intelligence** tab to display the Web Intelligence preferences. In addition to the usual drill, Excel save or right-to-left orientation options, you can also define your measurement unit (centimeters or inches). This was previously defined at document level and you had to set it for every document.



BI Launch Pad: Web Intelligence Preferences

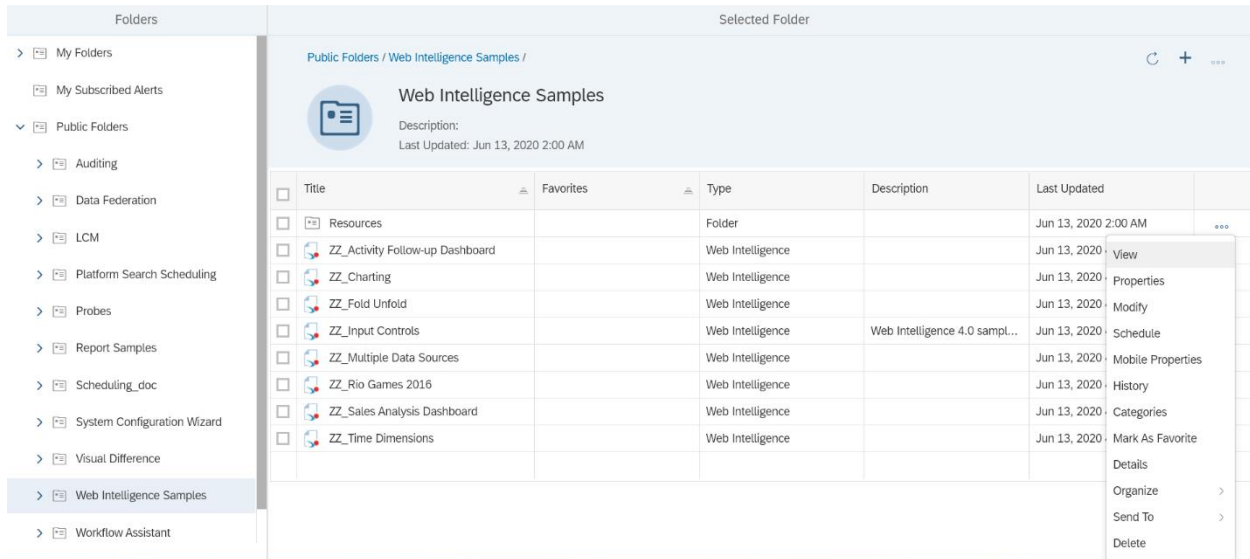
- In the **Appearance** section, you can also choose another **Fiori theme** for the user interface, for example a high contrast display for BI Launch Pad and Web Intelligence.



Web Intelligence: High Contrast Display

To open a Web Intelligence document:

- If it is displayed on the **Home** page as a tile, click this tile to open it in *Reading* mode
- If you access the document through the **Folders**, **Categories** or **Documents** tile, click the **More** button (☰) to open the contextual menu. This menu contains the different actions you can perform on this document, including **View** to open it in *Reading* mode or **Modify** to open it in *Edit* mode



BI Launch Pad: Document Menu

For more details about BI Launch Pad's new features, see [SAP BusinessObjects BI 4.3: What's New](#).






Web Intelligence: Reading Mode ↑

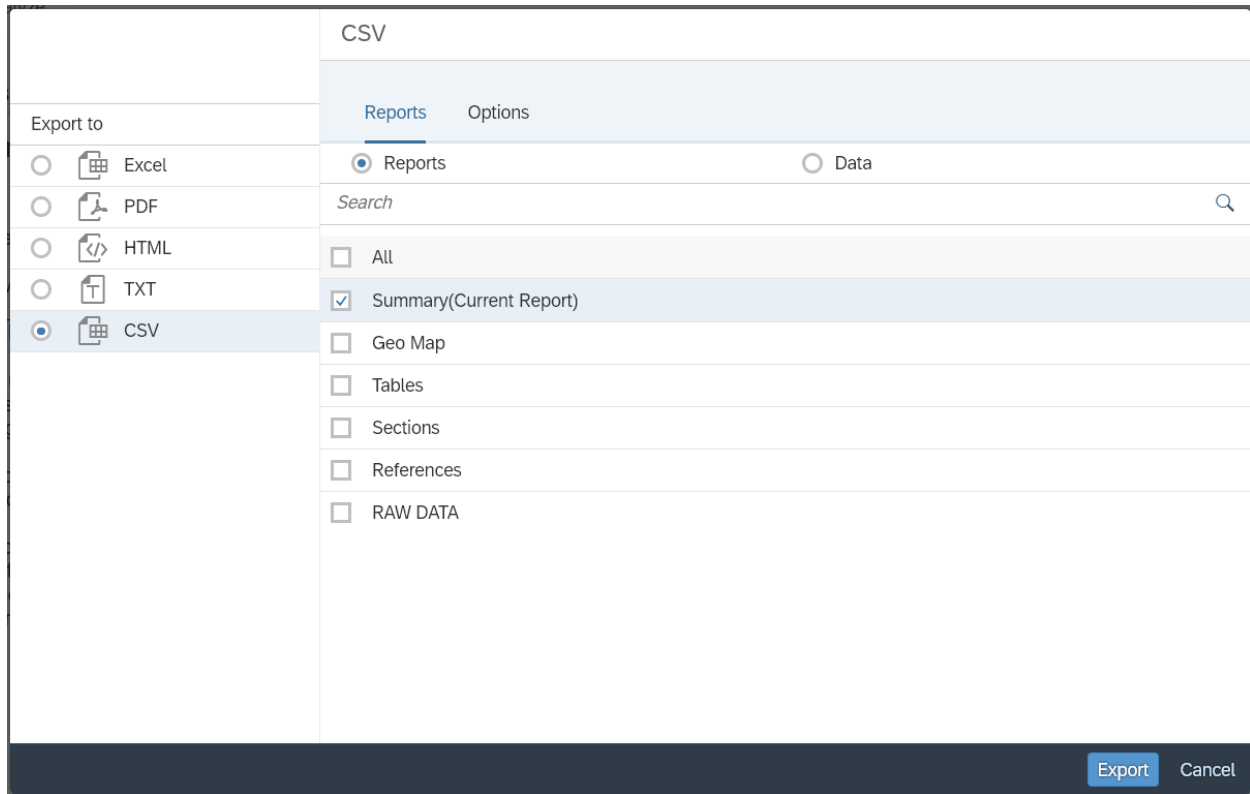
The Web Intelligence *Reading* mode proposes a simplified interface in which users can easily view, refresh and export documents. It proposes some interactivity and analysis capabilities through input controls, elements linking, drill or track changes. In SAP BI 4.3, this *Reading* mode interface is similar to the Web Intelligence Interactive Viewer Fiori-based interface released since [SAP BI 4.2 SP4](#).

Main Toolbar


The toolbar contains sections with the following commands:



File

- : Opens the menu with the **Save** and **Save As**
- : Undoes the last actions.
- : Redoes the last undone actions.
- : Opens the **Print** dialog box to set parameters (report and page selection, page size, orientation, margins and scaling) and generate a PDF that can be printed out.
- : Opens the **Export to** dialog box to export the report's or cube's data into different file formats. The dialog box has been reorganized to better display all possible options (Request [215268](#)) and to propose the Excel format by default (Request [140228](#)).





Web Intelligence: Export to Dialog Box

- : Opens the **Send to users** dialog box in which you can select the users or groups that are to receive this document in their BI Platform repository inbox.

- : Opens the Online Help on the SAP web site.
- : Displays the Web Intelligence version.

Data





- : Refreshes the document's queries that have been selected for refresh by the document's designer. In the new interface, this button is more visible (Request [131476](#)), especially when a data provider has been partially refreshed. In this case, a warning is sent and an orange dot () is added to the **Refresh** button (Request [206429](#)).

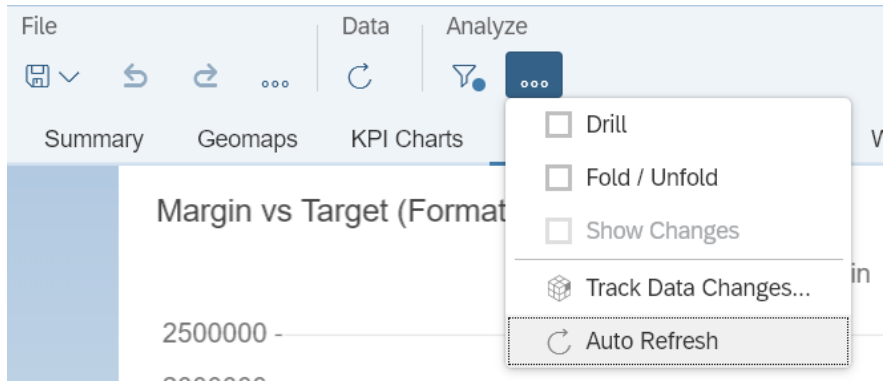


Partial content loaded in Query 1 ×

Web Intelligence Refresh: Partial Refresh Warning

Analyze

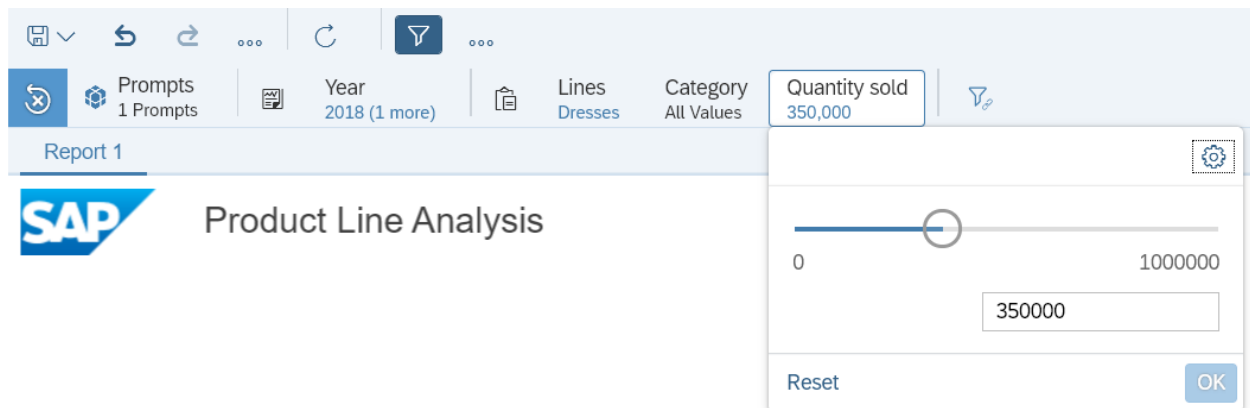
- : Opens or closes the **Filter Bar** used to display and set filters values (see description below). Another icon is displayed () if (a) filter(s) already applies/apply to the current report.
- **Drill** checkbox: Enables/disables the drill mode.
- **Fold/Unfold** checkbox: Enables/disables the fold / unfold.
- **Show Changes** checkbox: If the “Track Data Changes” feature has been enabled, use this checkbox to highlight these changes.
- : Opens the **Track Data Changes** dialog box in which you can enable/disable the tracked changes, define the dataset reference and the reports to compare. It also displays the fonts and colors used to show the differences.
- : Switches to the "Auto Refresh" mode in which the document is refreshed regularly and automatically (see [SAP BI 4.2 SP6](#)). Before entering this mode, you need to define a refresh frequency and answer potential prompts if any. These values are kept for the next refresh actions, as long as you remain in this mode.



Reading Mode: Auto-Refresh





Filter Bar


In *Reading* mode, the **Filter Bar** is the single place where you can see and, when possible, modify the filters and input controls that impact your document's dataset.



Reading Mode: Filter Bar

In detail, the **Filter Bar** contains the following items:

- The **Reset** button () to reset all input controls to their default values and remove the element linking filtering (Request [144999](#)).
- The prompts that have been answered during the document's queries execution. Click **Prompts** () to see these values. To modify them, refresh your document and provide new values for the prompts.
- The document's input controls () that apply to the whole document, and the report input controls () that apply only to the current report. Click an input control to modify its values using list, multi-list (checkboxes), slider, spinner... depending on the document's designer choice. For list and multi-list, a search text field can be used to find only the values that match a search string. For a group of input controls, click the group and select the input controls to add. The order in which you select the input controls defines the filter path, *i.e.* the input controls' dependencies. For example, if you select *Country* before *City*, the selected countries filter your choice of cities.

- Element linking through which a block is filtered by a value selected in a table. Click the element linking icon () to display the value of this element linking and reset it, if needed.

If the window is too small to display the full **Filter Bar**'s content, then arrows are displayed on its edges allowing you to scroll.







Reading Mode: Filter Bar Scrolling Arrows

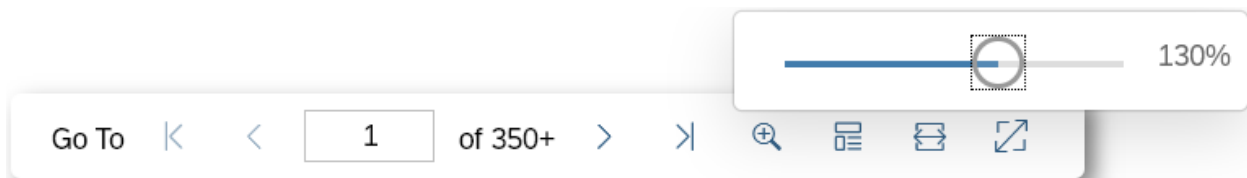
Report Selection and Vanishing Toolbar

In *Reading* mode, you can move from one report to another by clicking the corresponding tabs displayed under the toolbars.

To navigate in the report, you may use the **Vanishing Toolbar** at the bottom of the page. This toolbar appears when you move your cursor to the bottom of the page and disappears when you stay idle for a few seconds. This toolbar contains the following commands:

- The controls to go to the first page, previous page, a specific page, next page or last page.




- : Opens the **Zoom** slider to select the zoom ratio.
- : Toggles between the *Print* layout and the *Draft*
- : Fits the page's width to the window's width.
- : Fits the page to the window.

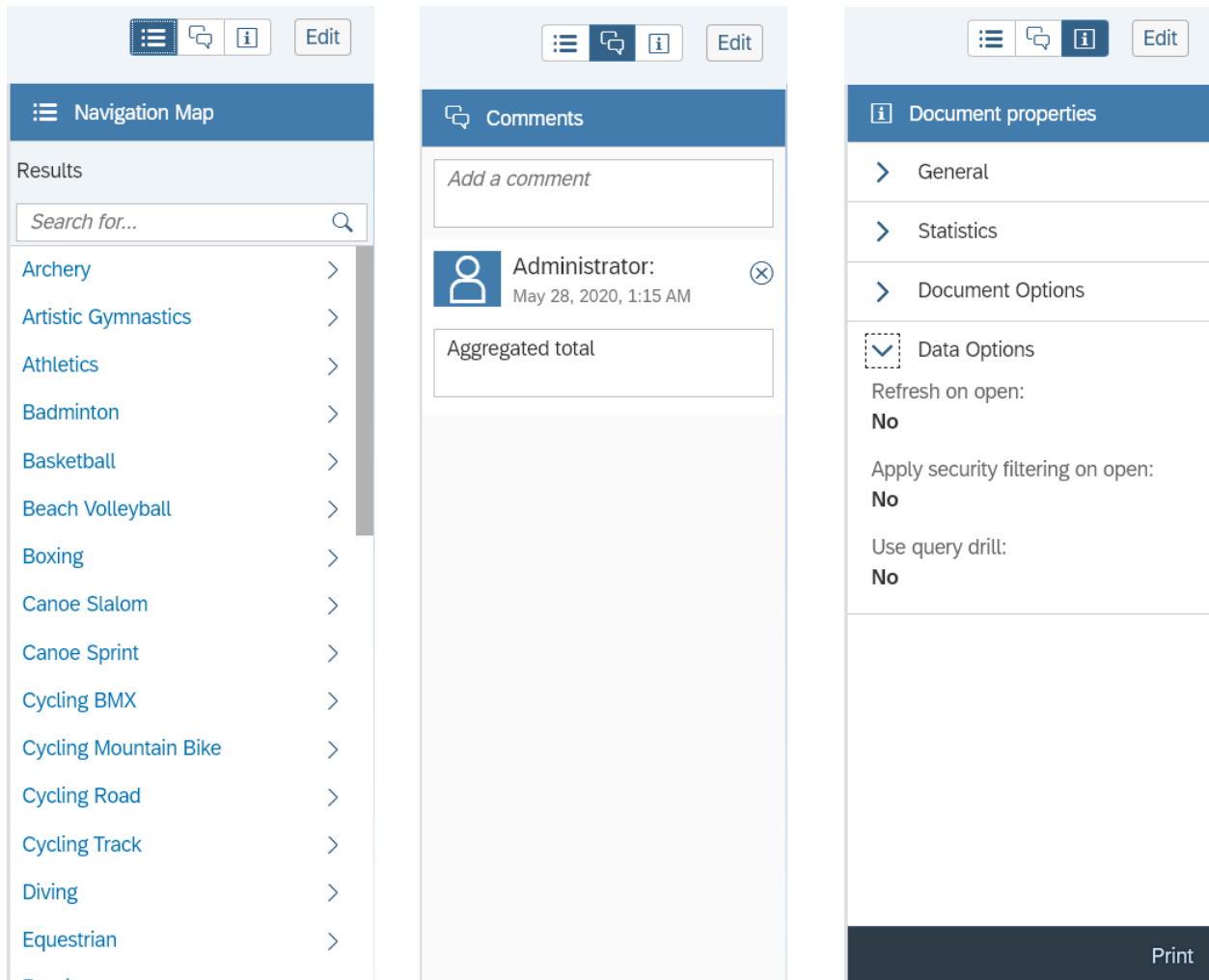


Reading Mode: Vanishing Toolbar

Side Panel

Unlike the previous releases, the side panel is located on the right. To open or close this side panel, click one of the buttons in the toolbar depending on the content you want to display:

- : The **Navigation Map** pane, to quickly navigate in the report based on its sections.
- : The **Comments** pane, containing the comment threads. Click an existing comment in the document to view its thread or right click a report element in the document to comment it.
- : The **Document properties** pane, to display the document's statistics and properties (Refresh on open, document style, ...)



Reading Mode: Navigation Map, Comments and Properties Side Panels

Web Intelligence: Edit Mode

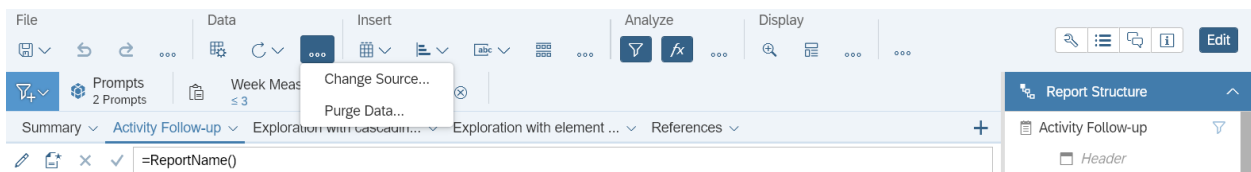
The main improvement in SAP Web Intelligence 4.3 is the *Edit* mode. It completes the FIORI convergence (Request [209030](#)). This mode has been simplified to improve the productivity of report designers by allowing them to perform tasks faster.

There are several ways to open the *Edit* mode:

- By clicking the **Web Intelligence** tile on the BI Launch Pad **Home** page and creating a new document.
- By selecting the **Modify** command (⋮) on the document menu allowing you to edit this document.
- In *Reading* mode, by clicking the **Edit** button to edit the current document.

Main Toolbar

The toolbar contains only general commands that apply to the overall document. These commands should be familiar and have been reorganized for a simpler and faster access (Request [107473](#)).






Edit Mode: Toolbar






The toolbar contains sections with the following commands:

File, that contains the same commands as in *Reading* mode






Data

- : Opens the **Query Panel** allowing you to edit the document's queries.
- : Opens the **Refresh** menu described below. As in *Reading* mode, when a data provider has been partially refreshed, an orange dot is displayed on the **Refresh** button () to provide you with a visual "document contains partial data".
- **Change Source**: Opens the **Change Source Wizard** dialog box, to change universes, SAP BW or SAP HANA data providers.
- **Purge Data**: Opens the **Purge Data Providers** dialog box, to remove datasets from queries.

Insert




- : Opens the menu in which you can select tables types and forms to insert into your report.
- : Opens the menu in which you can select one of the default charts types to insert. For further charts types, open the **Turn Into** section in the **Data** side panel.
- : Opens the menu in which you can select predefined cells to insert.
- : Adds a section.
- : Inserts a custom element, if you have registered one in the CMC.

Analyze

- : Opens/closes the **Filter Bar** (see below). As in *Reading* mode, an icon is used to highlight that the dataset is filtered (.
- : Opens/closes the **Formula Bar** (see below).
- **Drill, Fold/Unfold, Show Changes** checkboxes: As in *Reading* mode, click these checkboxes to enable/disable drill, enable/disable fold/unfold or show document changes.
- : Opens the **Track Data Changes** dialog box.
- : Opens the **Manage Formatting Rules** dialog box.

Display


- : Opens the **Zoom** slider to select the zoom ratio.

- : Toggles between the *Print* layout and the *Draft*
- **Structure** checkbox: Use this checkbox to switch between *Structure* and *Data*
- : Fits the page's width to the window's width.
- : Fits the page to the window.

Navigate contains the same controls as in the [Vanishing Toolbar](#) of the *Reading* mode to navigate in the report's pages.

Depending on your screen size, some commands are reachable by opening the **More** menu (⋮).

Filter Bar

Like in *Reading* mode, you can use the **Filter Bar** to view and change filters values. In *Edit* mode, you can in addition manage input controls and group of input controls, through the **Manage Input Controls** button (.

The screenshot shows a software interface with a menu open over a data visualization. The menu, located on the left, contains the following items: '+ New Input Control', 'New Group of Controls >', 'Manage Filter Bar...', and 'Reset All'. The background shows a data table with a bar chart. The table has columns for 'C', 'Element Linking', 'IC properties', 'Variable IC - 1', and 'Variable IC'. The data rows are: Overcoats (121,076), City Skirts (103,458), Outerwear (102,147), and Jackets (83,056). The 'IC properties' column is highlighted in blue.

C	Element Linking	IC properties	Variable IC - 1	Variable IC
		Overcoats	121,076	
		City Skirts	103,458	
		Outerwear	102,147	
		Jackets	83,056	

Edit Mode: Filter Bar

Click this button to open a menu with the following commands:

- **New Input Control:** Opens the **New Control** dialog, in which you can provide the different parameters to create an input control (the impacted object, its scope document or report, the interface item used to modify it...)

New Control *

Object

Name

Description

Current target

Document

Current report

Cascading IC

- Header
- Body
 - Block 1
 - Block 3
 - Footer

Type

Operator

User restricted list of values OFF + Select values

Sort list of values

Allow selection of all values ON OFF

Allow selection of null values OFF

Reset on refresh OFF

Default value(s)

OK Cancel


Edit Mode: New Control

- New Group of Controls:** Once you have selected the scope of the group to create (the whole document or the current report), the **New Group** dialog box opens. You can give the new group a name and click **Add Control** to select the input controls to add in this new group. If needed, you can click **New Control** to create an input control on the fly and add it.

New Group (Report) *

Name

Input Controls



 Select at least 2 controls

Lines

Category

SKU number

+ New Control

Edit Mode: New Group of Input Controls

- **Manage Filter Bar:** Opens the **Manage Filter Bar** dialog box listing all input controls and groups. Select a group or input control and click the **Edit** icon (➤) to

edit it or the **Delete** icon (⊗) to delete it.

To define the position of a group of input control on the **Filter Bar**, select it and use the arrow buttons (↑ and ↓) to move it up and down in the list.

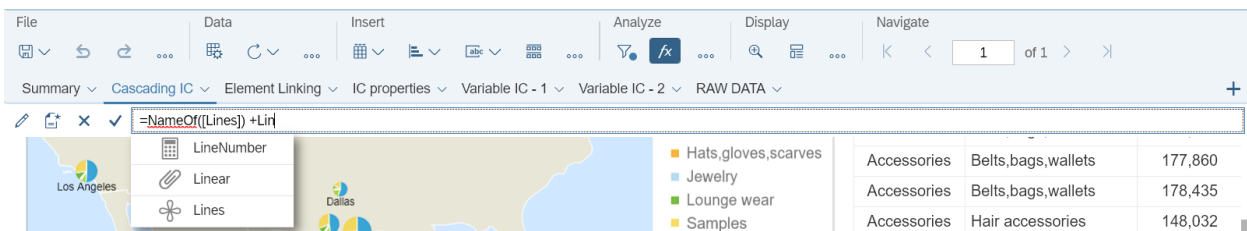
You can also create a group or an input control from this dialog box by clicking **+ Add**.

- **Reset All:** Resets all input controls to their default values and removes the element linking filtering.

Another way to edit an input control's properties is to click first the input control in the **Filter Bar**, then the **Settings** icon (⚙️) and finally **Advanced Settings**. This opens the **Edit Control** dialog box.

Formula Bar

In the **Formula Bar**, you can enter a value or a formula in a cell. This **Formula Editor** supports auto-completion: while you type a formula, a menu proposes the objects, functions or operators that match the letters you have typed (Requests [236699](#) and [241647](#)). You may select the one to use by clicking it or by using the arrow keys and pressing [Enter].



The screenshot shows a software interface with a menu bar (File, Data, Insert, Analyze, Display, Navigate) and a toolbar. Below the toolbar, there are several dropdown menus: Summary, Cascading IC, Element Linking, IC properties, Variable IC - 1, Variable IC - 2, and RAW DATA. The main area displays a formula bar with the text `=NameOf(Lines) + Lin`. A dropdown menu is open below the formula bar, showing options: LineNumber, Linear, and Lines. To the right of the formula bar, there is a data table with columns for categories and values.

Hats,gloves,scarves	Accessories	Belts,bags,wallets	177,860
Jewelry	Accessories	Belts,bags,wallets	178,435
Lounge wear	Accessories	Hair accessories	148,032
Samples			

Edit Mode: Formula Bar

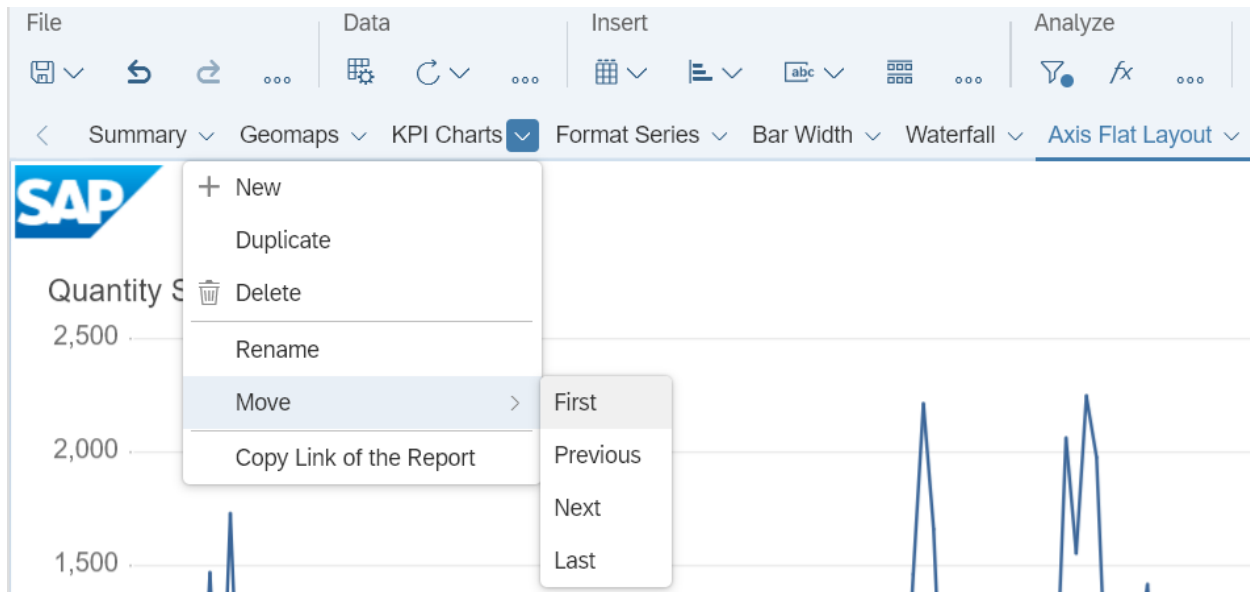
The **Formula Bar** contains the following four buttons:

- **Display the Formula Editor:** Opens the **Formula Editor** that can help you to type the formula.
- **Create a new variable using this formula:** Opens the **Formula Editor** allowing you to create a variable from the formula in the **Formula Bar**.
- **Restore the initial formula:** To cancel the formula you have entered and restore the previous one.
- **Validate the formula:** To validate and save the current formula in the cell.

Report Tab

In the document, you access a report by clicking the corresponding tab below the **Main Toolbar** and **Filter Bar**.

Click the drop-down menu (∨) beside the report name to open the menu containing commands to add a new report, duplicate, delete, rename or move the selected report.



Edit Mode: Report Menu

The last command in the menu (**Copy Link of the Report**) copies the *Opendoc* URL to this report into the clipboard. You may copy and share this URL that can be used to directly open this report.

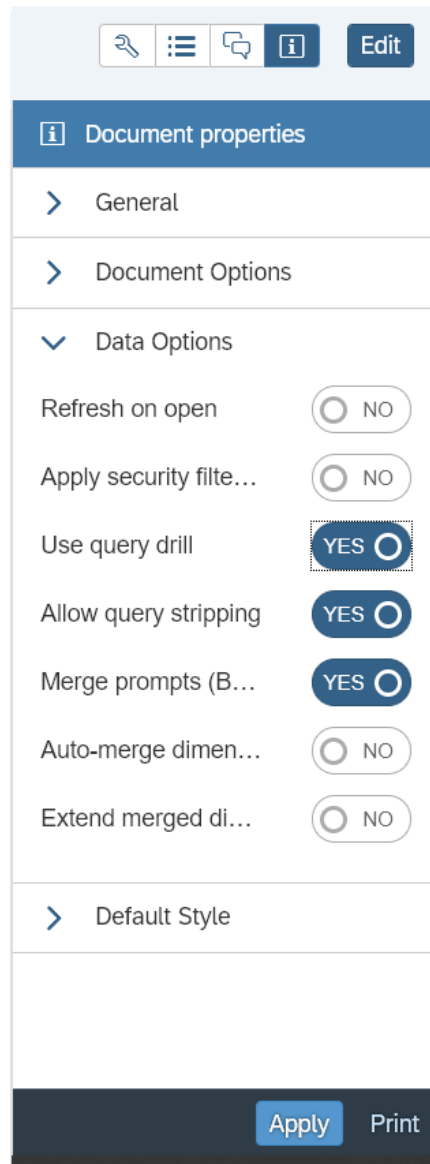
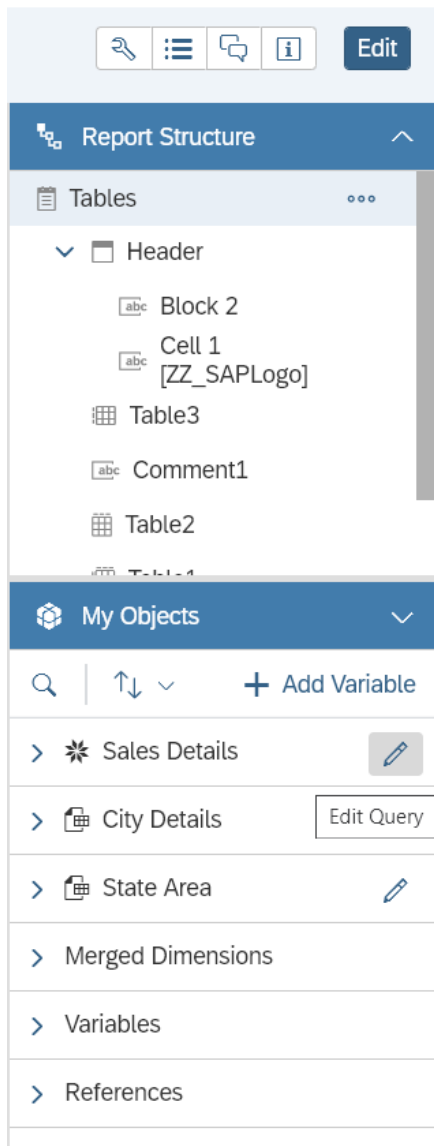
Main Side Panel

The *Edit* mode proposes two side panels and as in *Reading* mode, they are located on the right. By default, only the main side panel opens. It contains two stacked panels:

- **Report Structure:** This panel displays the report structure with the different blocks it contains.

- **My Objects:** This panel displays the document dictionary with all objects retrieved by the queries and also the enrichments added by the document designer.

Like in *Reading* mode, the buttons on the toolbar can be used to display the **Navigation Map**, **Comments** and **Document properties** panels in the main side panel. In *Edit* mode, they replace the **Report Structure** and **My Objects** panels when selected. **Document properties** panel allows you to modify document's options and properties in *Edit* mode.

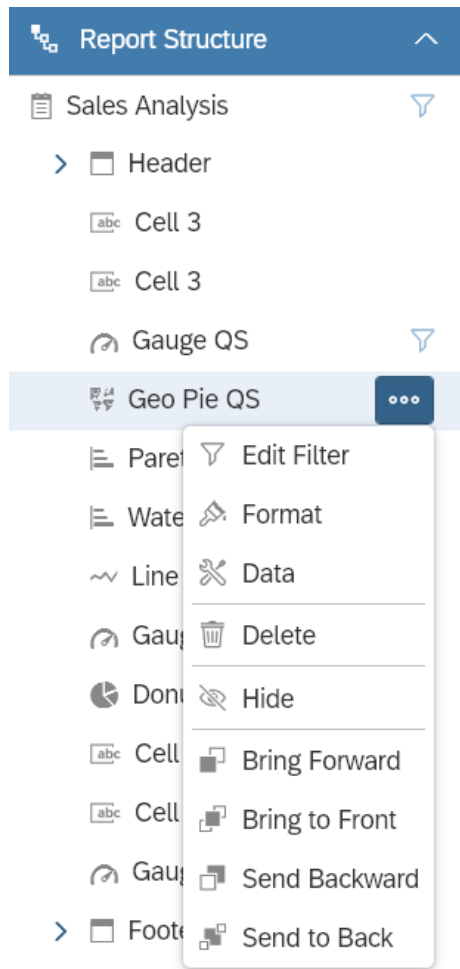


Edit Mode: Main Side Panel

Main Side Panel: Report Structure

As in previous releases, the **Report Structure** displays a tree of all items in the current

report: header, footer, charts, cells, tables, ...

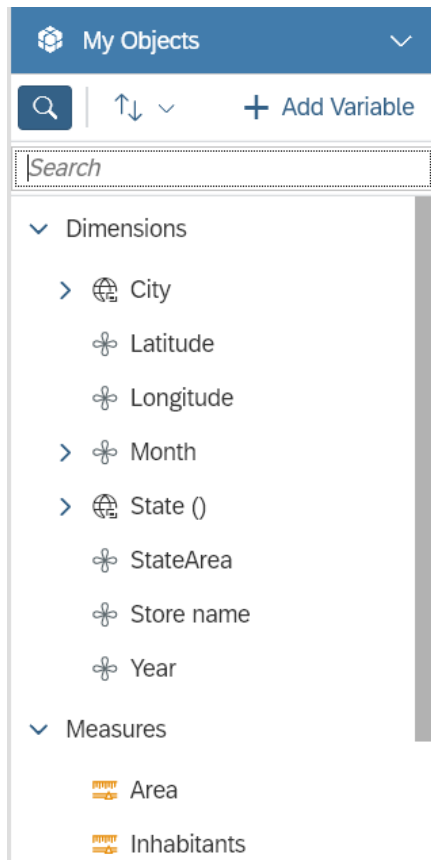


Edit Mode: Report Structure Side Panel

It can be useful to understand how a report is organized and access a specific block rather than looking for it in the document: if you click the **More** icon (⋮) beside an item, the **Format** and **Data** commands open the **Format** and **Data** panels described below.

Main Side Panel: My Objects

The **My Objects** panel lists the document's dictionary. In this panel, you manage the objects retrieved from the document's queries, the enrichment you defined for these objects as well as the variables and references you create. For example, to add a new variable, click **Add Variable**, to opens the **Formula Editor** and create your variable.



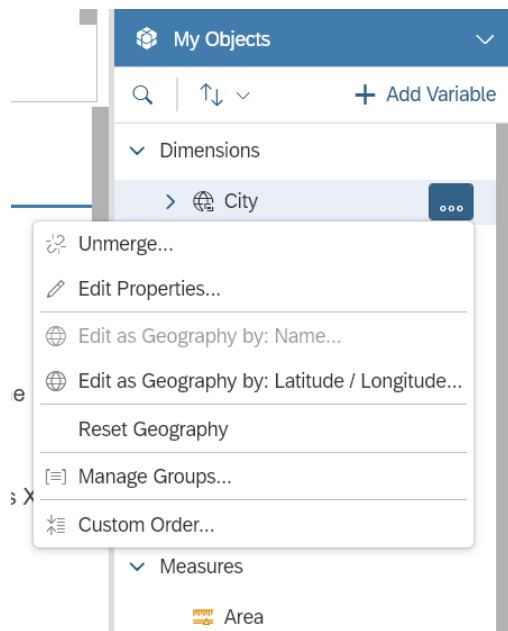
Edit Mode: My Objects Panel

You can display these objects in alphabetical order, by folders or by queries. The corresponding options are **Alphabetical View**, **Folders View** or **Queries View** and are available in the **View Mode** menu (↑↓).

Click the **More options** icon (☰) beside an object to open its contextual menu with the usual actions you can perform:

- Enriching a dimension by making it a geo or time dimension
- Merging / unmerging objects
- Managing groups
- Editing object properties
- Setting the measure type to Number or Decimal
- Defining a custom sort for the object


- ...




Edit Mode: My Objects Contextual Menu

This panel works in a similar way than in previous releases. There are, however, a few usability enhancements:

- You can delete several variables at the same time (Request [208832](#)).

- The focus remains on the current variable when you edit it (Request [208418](#)).
- In **Queries View**, you can directly edit a query and open it in the **Query Panel** by clicking the **Edit Query** icon (.

Build Side Panel

The *Edit* mode introduces a second side panel that can be opened or closed through a fourth button () located in the toolbar. This second side panel replaces the modal dialog boxes (**Assign**, **Turn To**, **Format**, **Breaks**, **Sort**, ...) available in previous releases. It contains all the properties that were previously exposed in the modal dialog boxes. Depending on their category, these properties are displayed in one of these two panels:

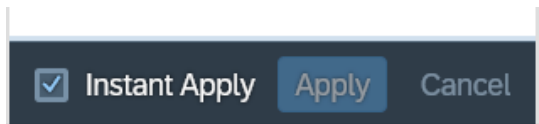
- **Data**, defines the data structure of the item you have selected

- **Format**, defines the format of the item you have selected

You can switch from one panel to another by clicking their respective header.

They are contextual panels and the displayed properties depend on your selection. When you select an element, it automatically displays the relevant properties.

The properties you set in the **Data** panel are immediately applied to the selected item. You can decide to automatically apply the properties you picked in the **Format** panel by selecting the **Instant Apply** checkbox at the bottom of the panel. As these format changes imply regular requests to the server for each modification, you may prefer to unselect this checkbox and rather click **Apply** in one request to the server.



Edit Mode: Format Panel Apply Options

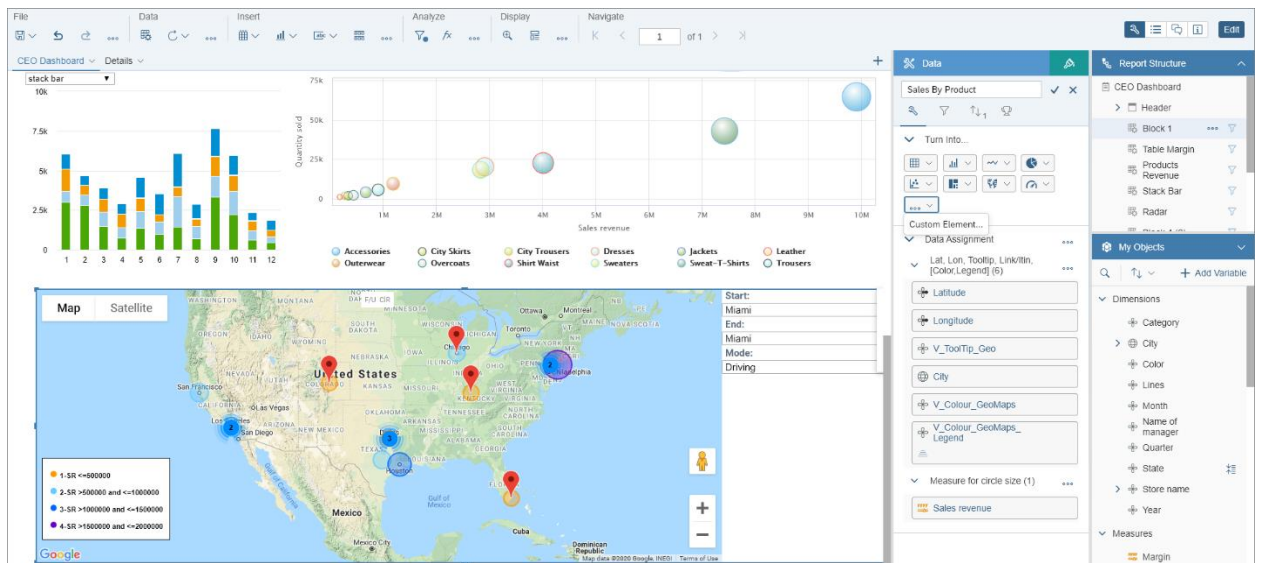
This new side panel is one of the main enhancements of the document authoring workflows. As described in the next two sections, setting a format or organizing a block feed is much easier through this side panel than via the previous dialog boxes (Requests [109434](#) and [107959](#)).

Build Side Panel: Data

The **Data** panel is available when you select a chart or a table and is used to define the data and structure of this selected table or chart block. The corresponding properties of the **Data** panel are organized in tabs, and only tabs relevant to your selection are

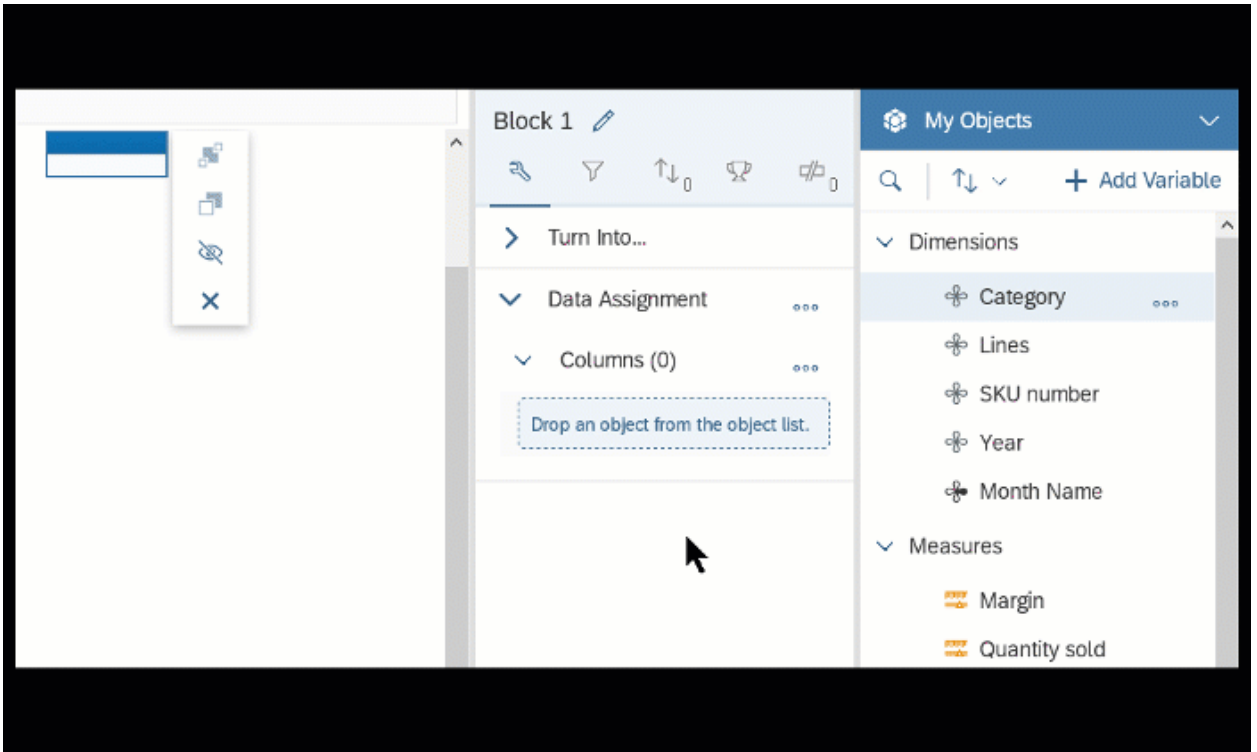
displayed. These tabs are:

- 🔧: The **Feeding** tab contains the **Turn into** command used to select the table or chart type for this block. If you have registered custom elements in the CMC, they appear in the last menu of the **Turn Into** command.







Edit Mode: Selecting Custom Element (Courtesy from Need4Viz)

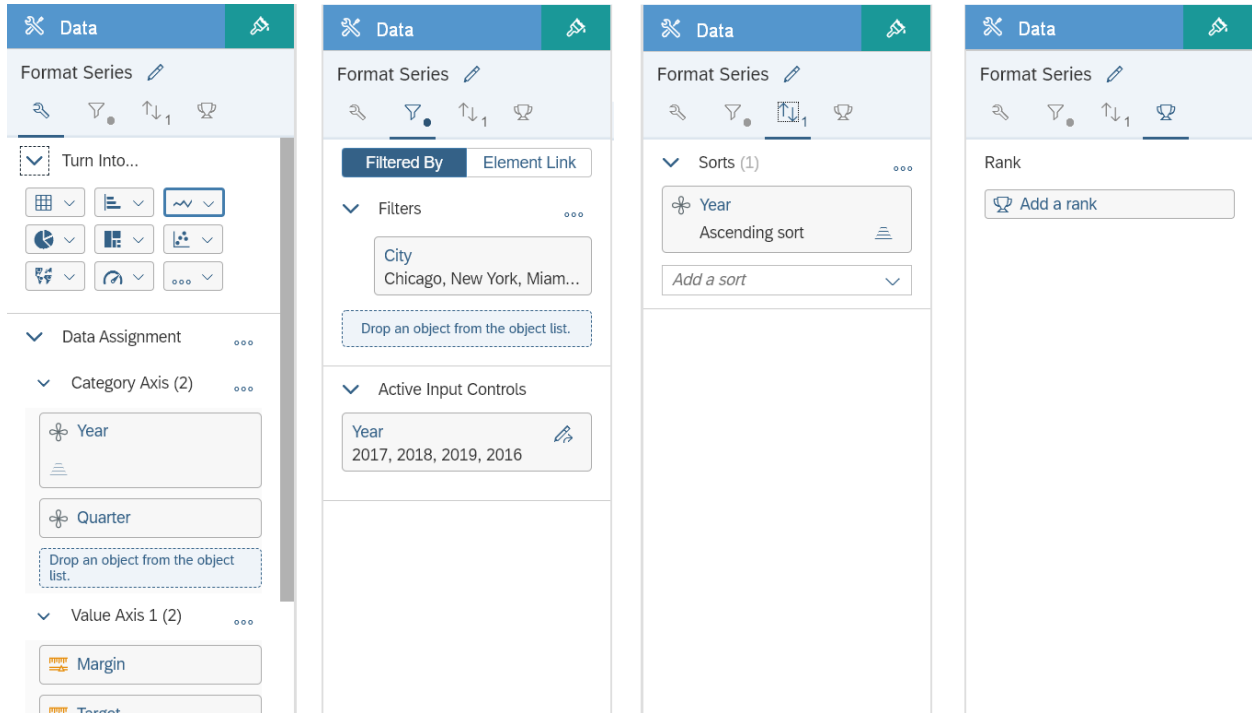
The **Data Assignment** section defines the objects used in the selected table or the chart. You may easily add objects to this block by drag-and-dropping them from the **My Objects** panel. Drag and drop can also be used to more easily change the objects' order in the block.



Edit Mode: Adding Objects to a Table Through Drag and Drop

Another way to add objects is to click the **More** icon (⋮), select the **Formula** and picks them from the **Formula Editor** or enter a formula to feed the block.

- : To manage the **Filters** and **Element Links** for the selected block. If a filter has been defined, then a dot is displayed on the tab. This tab provides an overview of all filters that apply to this block by listing also the input controls.
- : To manage the **Sort** that applies to the selected block. If sorts have been defined, the number of defined sorts is displayed on the tab.
- : To manage the **Ranking** that applies to the selected block. If a ranking is defined, a dot is displayed on the tab.
- : To manage the **Breaks** options of the selected table.



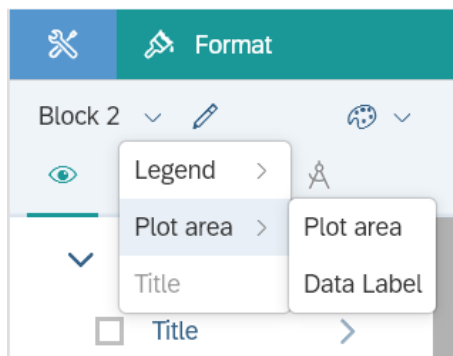
Edit Mode: Data Sub-Tabs for a Chart

Build Side Panel: Format

The **Format** panel contains all formatting properties for the selected item: report, cell, table, table cell, chart... To select a specific area of a chart (axis, title, legend, ...), you can either:


- Click this area in the chart itself.




- Or select the chart and then the desired chart area in the menu located beside the chart's name in the **Format**

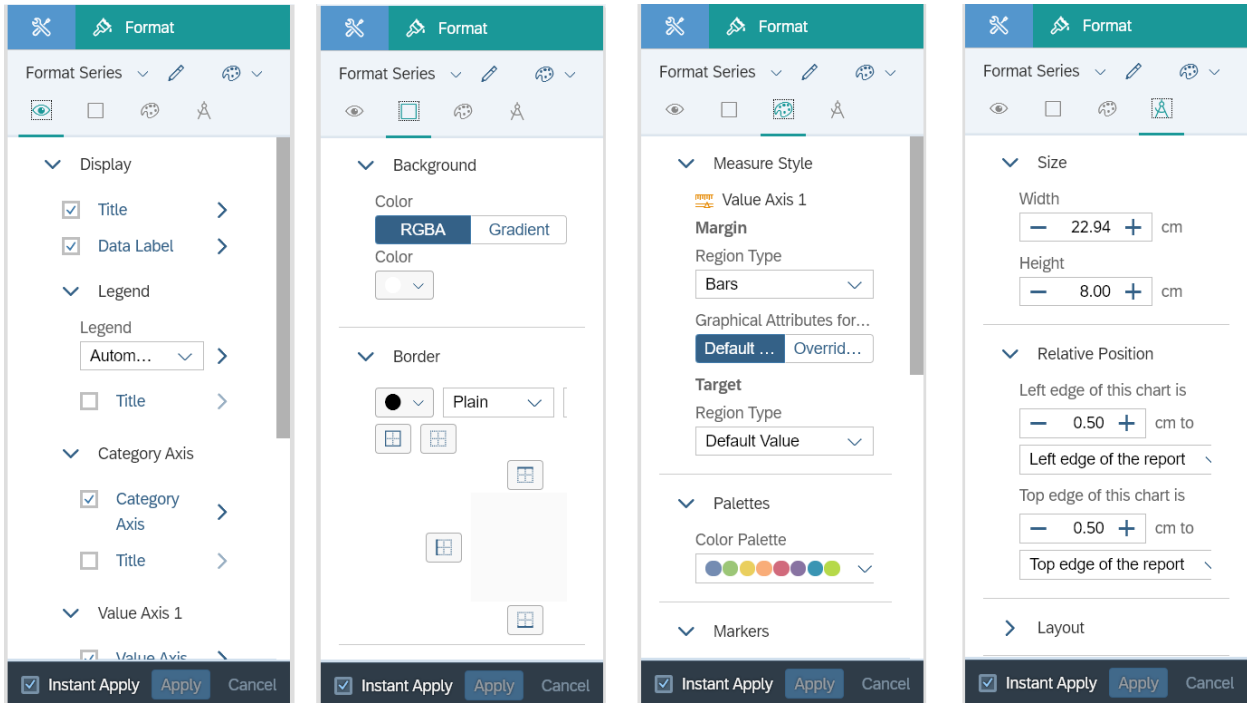


Edit Mode: Chart Area Selection

The properties you can set depend on your selection, since some may not be relevant to your selection. These properties are organized by categories in the **Format** panel's sub-tabs.

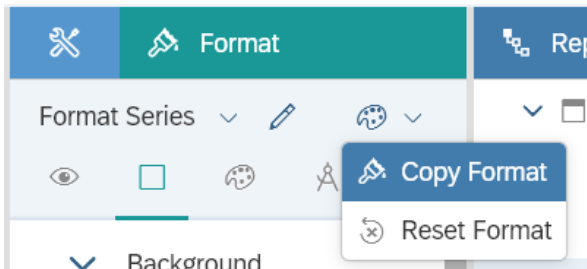
- : Contains **Display** settings. For tables, it includes the properties that define what must be displayed or hidden: header, footer, object name, hide when empty, duplicate rows aggregation... For charts, it also includes the components to be displayed or not: title, data label, legend, ...

- : Contains **Appearance** settings, like background color, borders' definition, spacing, padding...
- **T**: Contains **Text** settings, like its police, font, color, alignment, ...
- : Contains **Styling** settings for charts, like palette, markers size...
- : Contains **Layout** settings. For pages, it includes print layout, margins and scaling properties. For blocks, it includes relative positioning regarding other blocks, size and page break options...



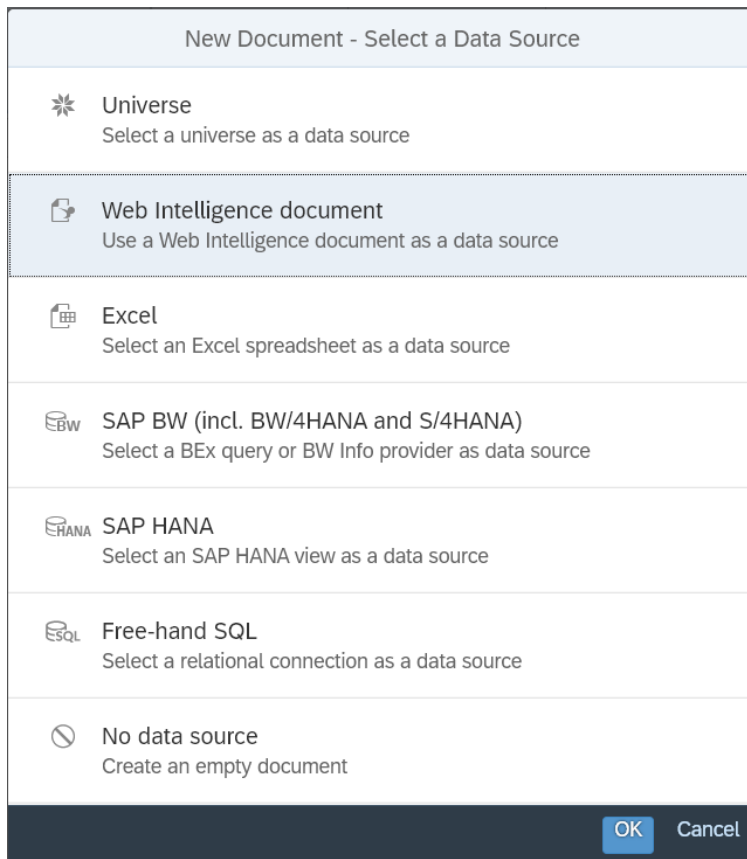
Edit Mode: Format Sub-Tabs for Charts

At the top of the panel, beside the name of the selected block area (that can be changed as in the **Data** side panel), you may open the **Format Painter** menu (). It contains the **Copy Format** and **Reset Format** commands to respectively copy or reset the format of the current block.



Query Panels

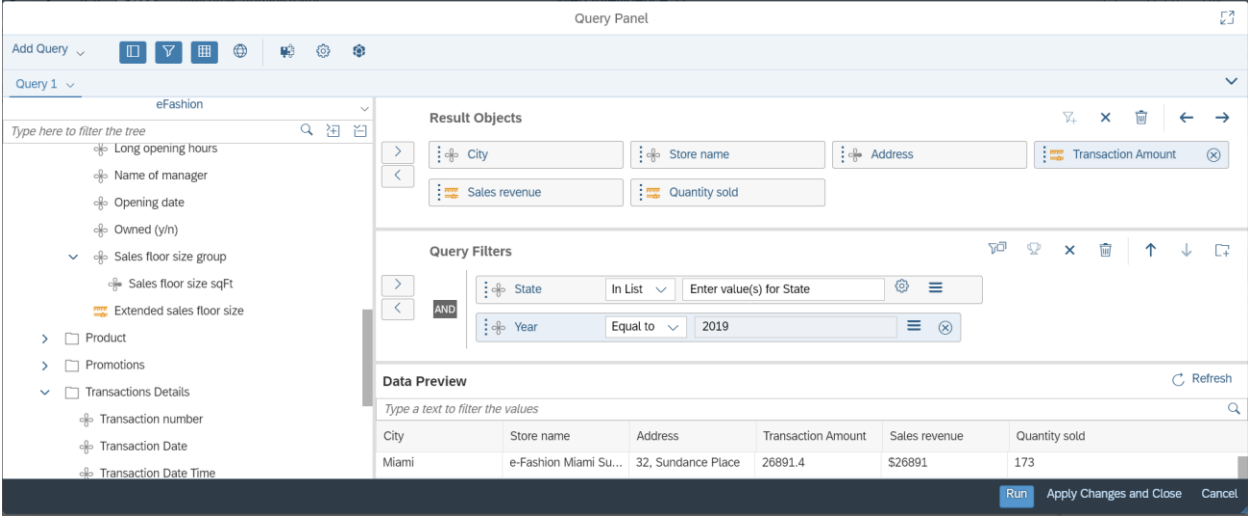
When you create a document or add a query to an existing document, you are asked to select a data source type and then the data source itself.



Query Panel: Data Source Type Selection

The Query Panel opens, and you can select objects to create a query and retrieve the

corresponding dataset. This Query Panel depends on the data source type. In SAP BI 4.3, these Query Panels are similar to the ones available in SAP BI 4.2, except for the FIORI skin, and propose the same features.



Query Panel: Universe Data Source

Query Panel

Add Query ▾

Sales Details City Details ▾ State Area ▾

Object Properties

Name: City

Qualification: Dimension ▾

Type: String ▾

Aggregate function: Sum ▾

Associated dimension: ▾

Query Properties

Name: City Details

Source Path: /Web Intelligence Samples/Resources/ZZ_USCi ...

Refreshable

Query Definition

[Edit settings...](#)

Result Objects

City Latitude Longitude

Inhabitants

Data Preview Refresh

Type a text to filter the values

City	Latitude	Longitude	Inhabitants
Austin	30.2676	-97.74298	931830
Boston	42.35863	-71.0567	667137
Chicago	41.88415	-87.63241	2695598
Colorado Springs	38.83345	-104.82181	416427
Dallas	32.77815	-96.7954	1300092

Run ▾ Apply Changes and Close Cancel

Query Panel: Excel Data Source

To run the query and close the query panel, click **Run**. If your document contains several queries, you can open a menu from this button and select the query to run.

Run Sales Details

Run City Details

Run State Area

Run all queries

Run ▾ Apply Changes and Close Cancel

Query Panel: Selecting Query to Run

Refresh and Purge Queries

The **Refresh** menu () of the toolbar's **Data** section contains the following commands:

- **Refresh** to refresh all authorized queries.

- **Refresh Data For** to open a dialog box that provides some statistics about the queries' last refresh. You can explicitly select the data sources to refresh during the next document refresh.

Refresh Data Providers					
<input checked="" type="checkbox"/>	Data Providers	Last refresh date	Last refresh durati...	Number of rows	Status
<input checked="" type="checkbox"/>	Sales Details	9/25/2019 5:02:22...	1s	696	
<input checked="" type="checkbox"/>	City Details	9/25/2019 5:02:22...	1s	11	
<input checked="" type="checkbox"/>	State Area	9/25/2019 5:02:22...	1s	8	

Refresh Cancel

Refresh Data Providers Dialog Box

The toolbar's **Data** section also contains the **Purge Data** command that opens the **Purge Data Providers** dialog box. The content of this dialog box is the same as in the **Refresh Data Providers** dialog box. However here, you can explicitly purge data from the data providers of your choice by selecting the checkbox in front of the data providers and clicking **Purge** (Request [143679](#)).

Purge Data Providers					
<input type="checkbox"/>	Data Providers	Last Refresh Date	Duration	Rows	Status
<input type="checkbox"/>	* Sales Details	9/25/2019 5:02:22 PM	1s	696	
<input checked="" type="checkbox"/>	City Details	9/25/2019 5:02:22 PM	1s	11	
<input checked="" type="checkbox"/>	State Area	9/25/2019 5:02:22 PM	1s	8	

Purge Cancel

Web Intelligence: Rich Client ↑

SAP BI 4.3 also offers Web Intelligence Rich Client for desktop usage. It is not a Java application any longer but rather reuses the same interface as the SAP BI 4.3 web version in BI Launch Pad.

As all desktop tools in SAP BI 4.3 (Information Design Tool, Universe Design Tool...), it is released in 64-bit (Request [107828](#)).

Login

You can start Web Intelligence Rich Client from the **Start** menu or by double-clicking a locally-saved Web Intelligence document. You land on the login page the process of which has been simplified (Request [127659](#)). You are required to enter the system name, your credentials and the authentication mode. With the toggle button, you can choose to work in *Online* or *Offline* mode (used to work disconnected after you have retrieved resources locally on your desktop).

The Standalone and ZABO modes (allowing you to download and install Web Intelligence Rich Client from BI Launch Pad) are not yet released.

Start Session

Start a new session using credentials and authentication modes or use the offline mode.

System
BOESERVER

Authentication Mode
Enterprise

User
cas

Password
Your Password...

Work offline NO

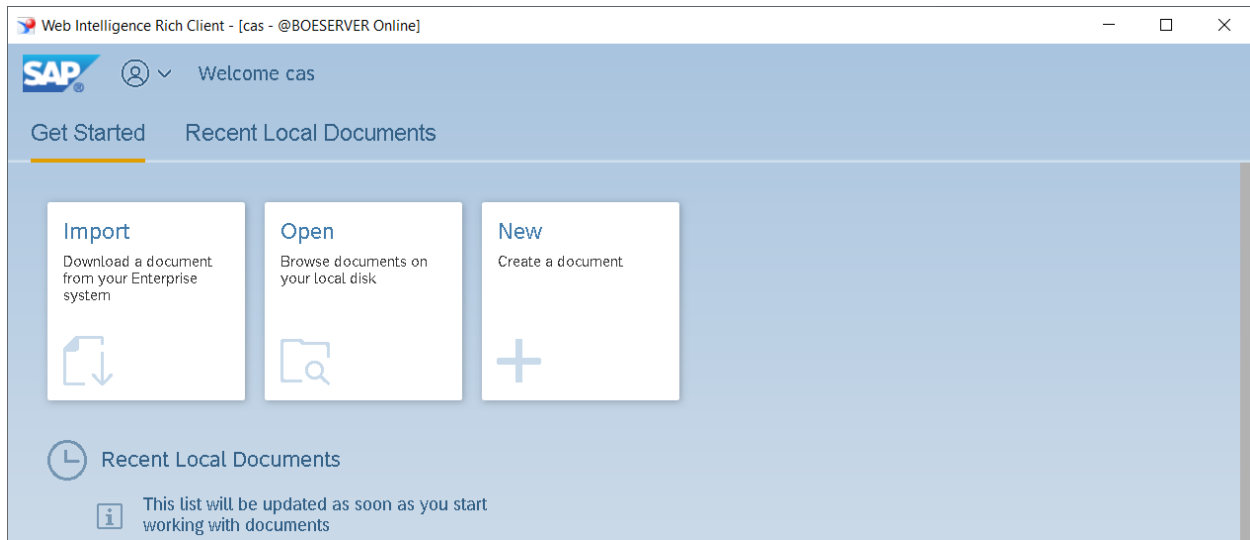
Start

Web Intelligence Rich Client : Login Page

If your login parameters are valid, Web Intelligence Rich Client displays the **Welcome** page.

Welcome Page

The new Web Intelligence **Welcome** page design is similar to the **Home** Page of BI Launch Pad.



Web Intelligence Rich Client: Home Page

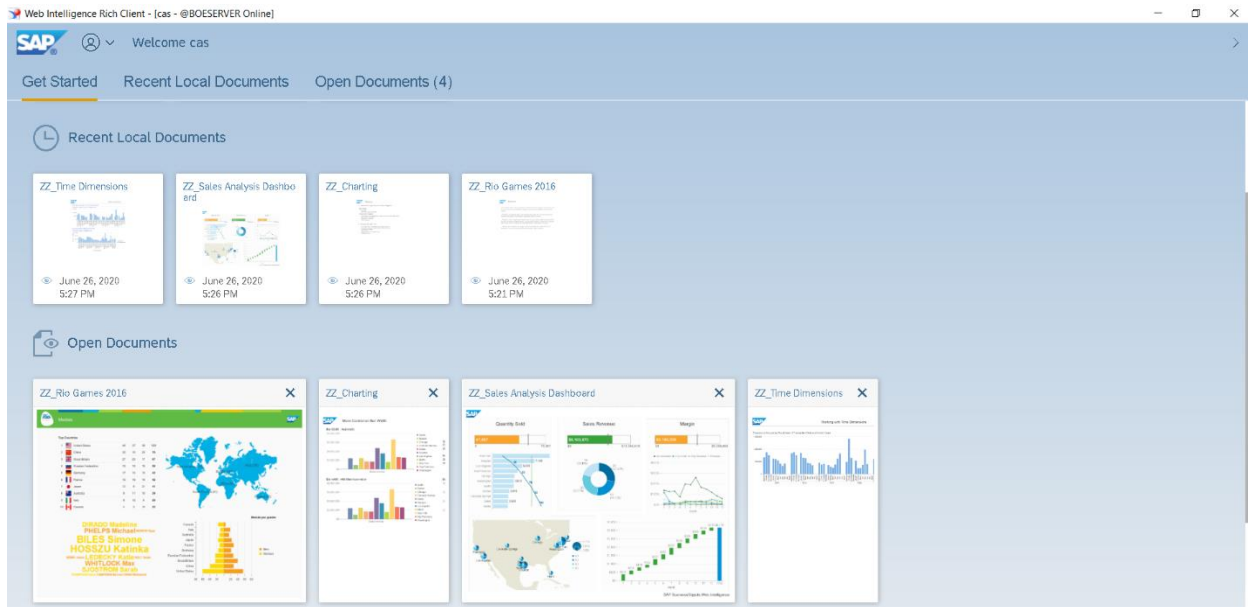
Three tiles are displayed at the top of this page. They offer actions that follow the workflows of your documents:

- **Import:** To select a document in the BI Platform repository and explicitly import it to a local folder so that you can edit it.
- **Open:** To open a document you have previously imported on your local file system.
- **New:** To create a local document.

The **Welcome** page also displays two other sections:

- The **Recent Local Documents** section displays tiles for the local documents you have previously opened. These tiles contain a thumbnail of the document, a snapshot taken the last time the document was saved, as well as its last save date. Click a tile to open the corresponding document.

- The **Open Documents** section displays tiles for the documents that are open in this session. These tiles show a thumbnail of the active report of the document. You can also click this thumbnail to quickly switch to this document or click the cross icon in the tile's header to close it.

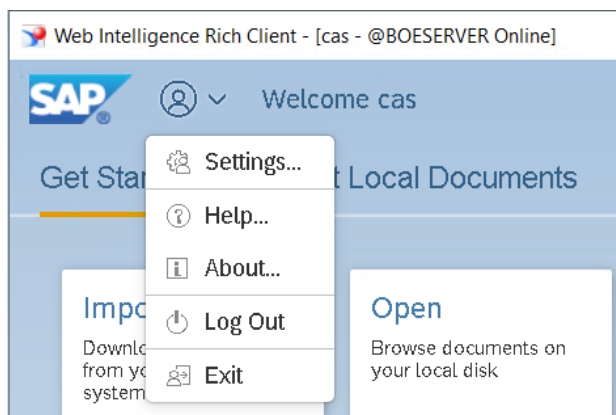


Web Intelligence Rich Client: Recent and Open Documents Tiles in Welcome Page

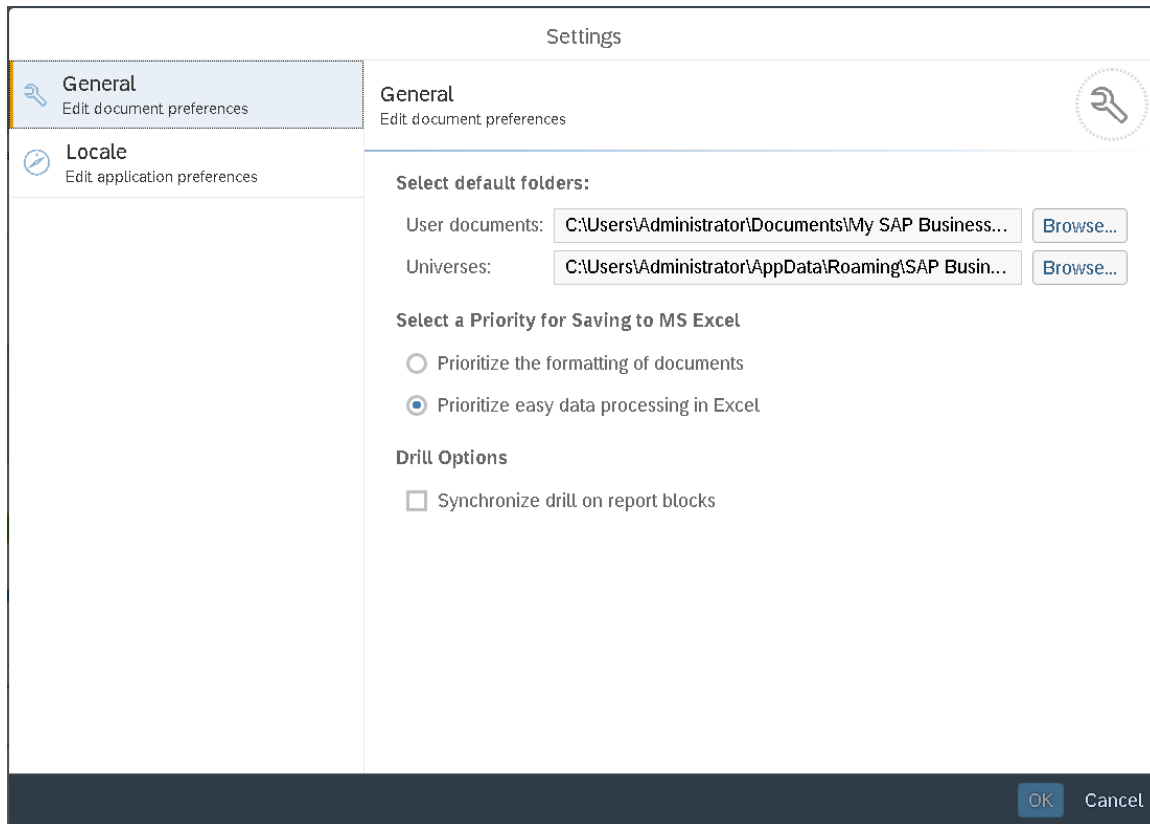
The drop-down menu at the top of the **Welcome** page header, contains the following commands:

- **Settings:** to set Web Intelligence Rich Client parameters like the local documents' default folder, the drill options, the locales or the measurement unit.
- **Help and About:** To open the usual Online Help and **About** dialog box.
- **Log Out:** to logout and return to the Login page.

- **Exit:** to exit the tool. When exiting, all local Web Intelligence processes are terminated.



Web Intelligence Rich Client: User Menu



Web Intelligence Rich Client: Settings Dialog Box

Creating a Document

To create a local document, click the **New** tile in the **Welcome** page. The interface and workflows to create a document are the same as in BI launch Pad:

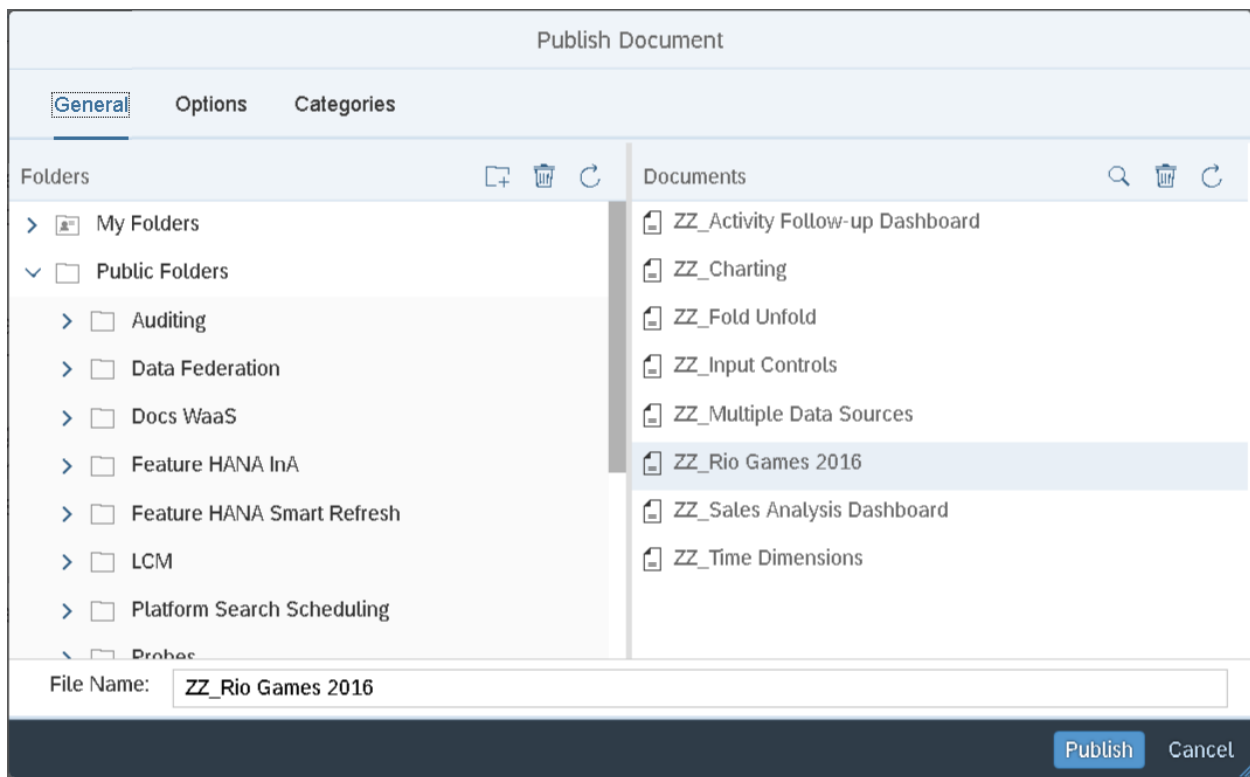
- Select the data source type, then the data source itself. (The data source you can select must be stored in the repository; local data providers are not yet supported.)
- Create and run your query.
- Add charts, tables, formatting... to your report and add new reports and queries

Basically, you can take advantage of the same *Edit* and *Read* modes as in the web version, except for some features that are not yet supported or not yet available:

- You can view comments but cannot modify comments on local documents.
- You cannot send a document to BI Platform users.

Once you have finalized your document, you can:

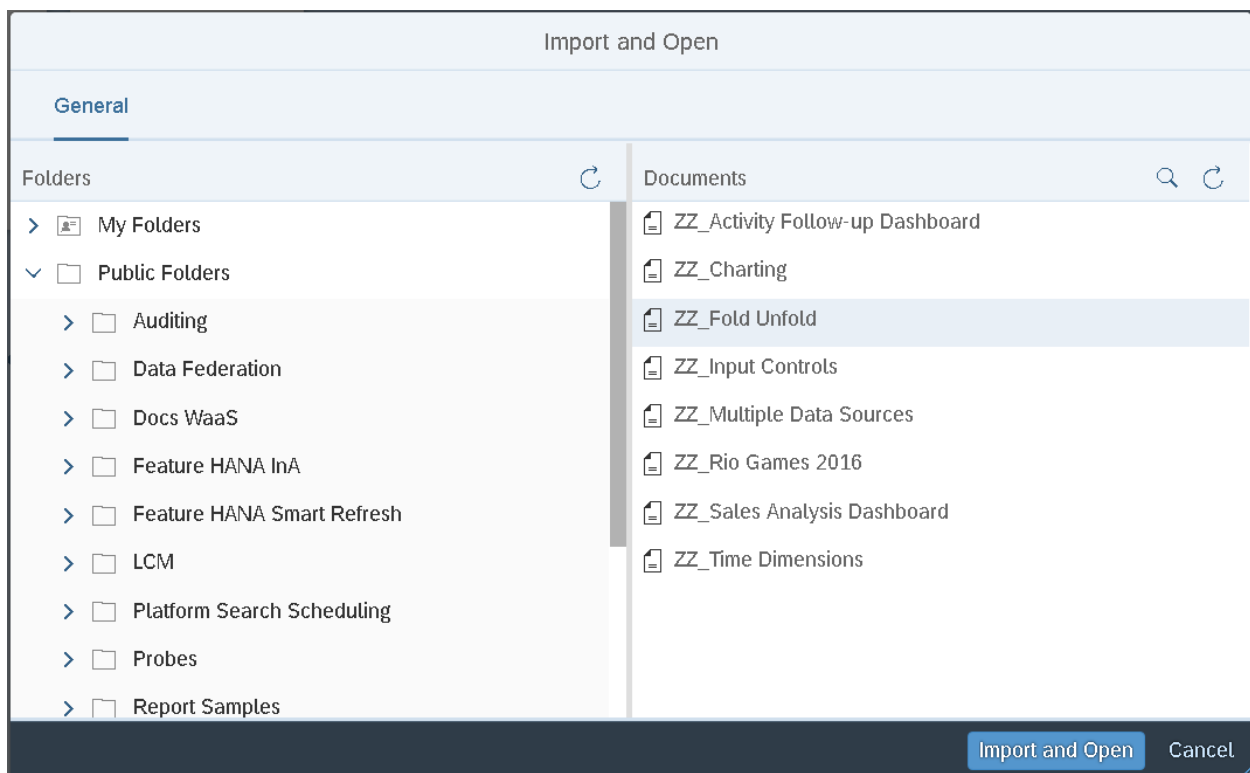
- Save it locally by selecting the **File > Save** You can reopen it later by selecting the **Open** tile in the **Welcome** page.
- Publish it in the BI Platform repository by selecting the **File > Publish to Enterprise** command, and then select the destination folder in the **Publish Document** dialog box.



Web Intelligence Rich Client: Publish Document Dialog Box

Importing a Document from the Repository

If you have already some documents in the BI Platform repository, you can work on them in Web Intelligence Rich Client. Start Web Intelligence and connect to the BI Platform repository. In the **Welcome** page, click the **Import** tile to open the **Import and Open** dialog box and select the document to import and open.



Web Intelligence Rich Client: Import and Open Dialog Box

The selected document is copied to your file system, and this copy is opened for you to work on it using the same interface as in BI Launch Pad.

Once you have finalized your changes, you can save it in the BI Platform repository again by selecting the **File > Publish to Enterprise** command first, and the destination folder in the **Publish Document** dialog box as a second step.

You may prefer to save it locally for further changes before publishing it. In this case, select the **File > Save** command or select the **File > Make Copy** one to create another local copy.

In both cases, depending on your security rights, you may save it:

- With document access to all users, so that all repository users that have provided their credentials can open it.
- While removing the document's security, so that users do not need to authenticate anymore.
- While keeping it secured for you only.

Later on, if you restart Web Intelligence Rich Client in *Online* or *Offline* mode, you can reopen this local copy by clicking the **Open** tile in the **Welcome** page.

Web Intelligence: Document as a Data Source [↑](#)

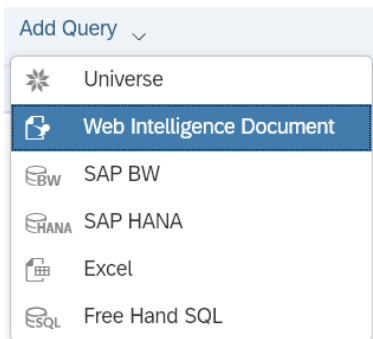
The support of Web Intelligence document as a data source for another document is a new capability offered in SAP BI 4.3 (Requests [107970](#) and [109142](#)). The source document can be considered as a virtual universe and a database; and their metadata and data can be shared and leveraged by other documents.

This feature covers several use-cases:

- A document that queries a large dataset can be refreshed during quiet periods through a schedule and then be used as a data source for other documents. These documents do not query the initial data sources, but the dataset saved in the source document. This prevents initial data sources from being too solicited and improves the refresh time.
- A power report designer may prepare metadata (merged dimensions, geo-dimensions, time dimensions, variables) and share it through a source document.
- Likewise, a document that queries multiple heterogeneous data sources can be exposed as one single metadata provider and hide the complexity of the data sources it queries.

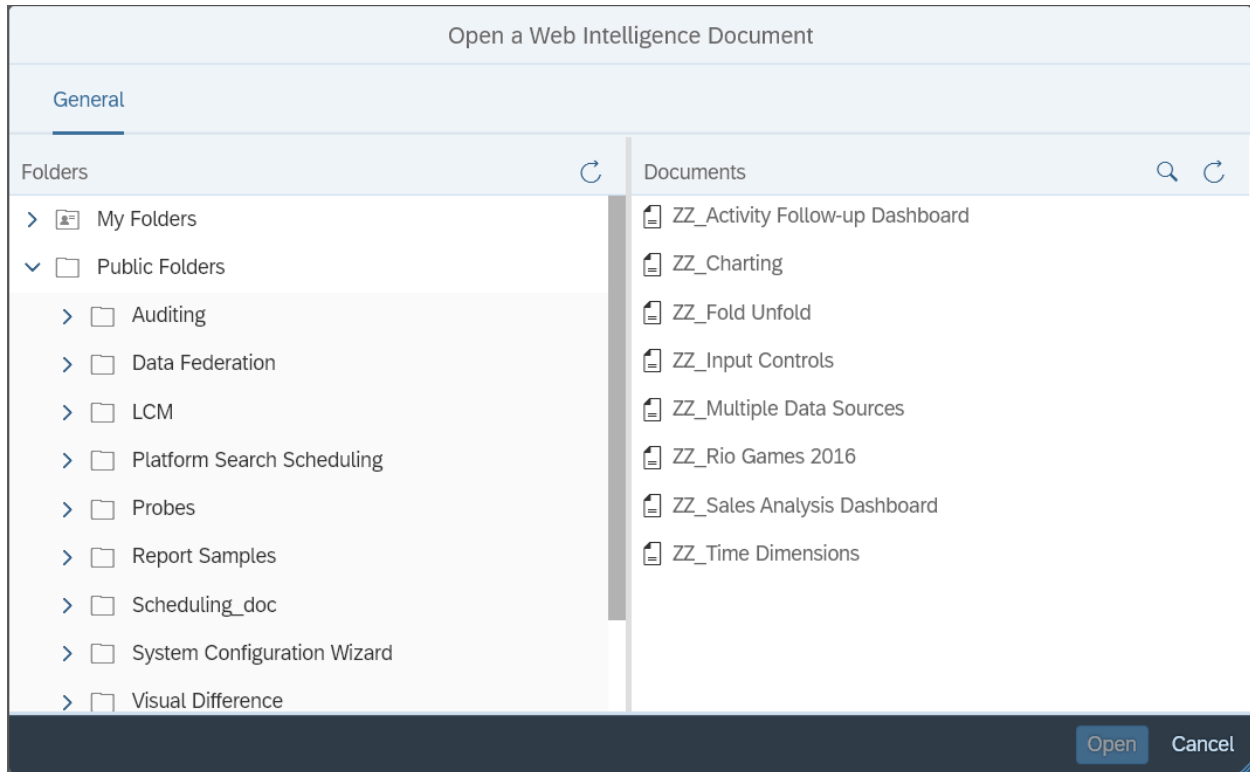
Creating a Query

When you create a document or add a query to an existing document, you can select **Web Intelligence document** in the list of possible data sources.



Web Intelligence: Adding a New Query

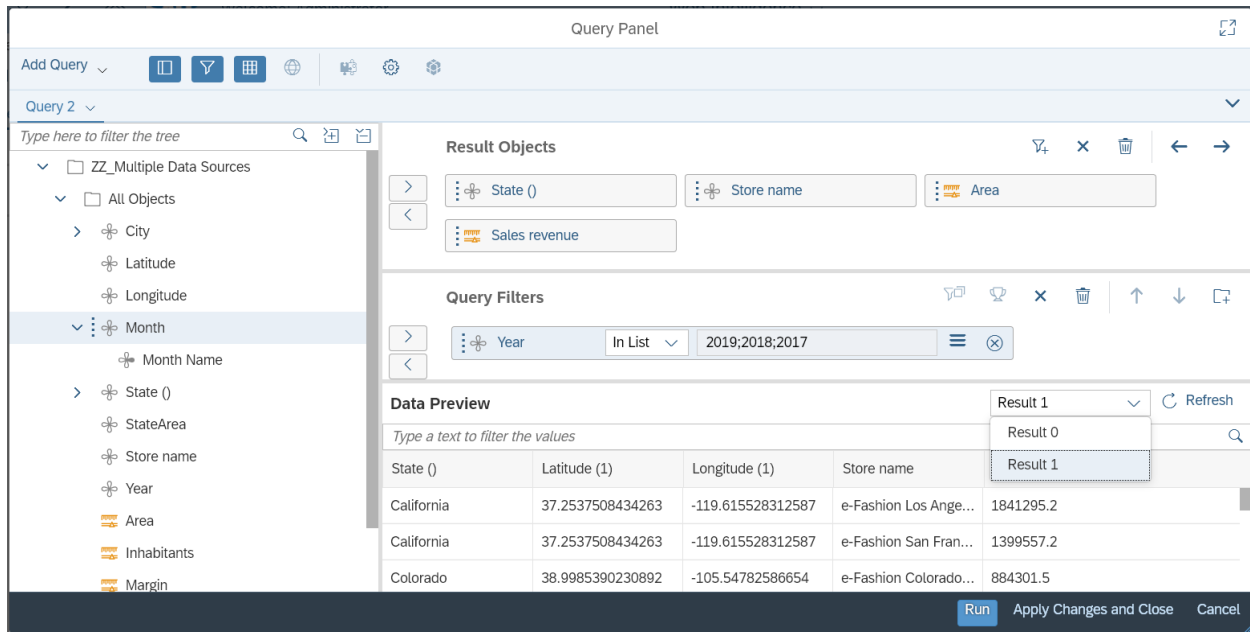
You are then asked to select a document in your *Personal* folders or in the *Public* folders of the BI Platform repository.



Web Intelligence: Document Selection

Once you have selected the source document, the **Query Panel** opens and displays the document's objects: its dimensions, attributes, measures, hierarchies or variables... You can define a query by drag-and-dropping objects in the **Results Objects** section. You can also add filters in the **Query Filters** section to narrow down the dataset to retrieve from the source document.

This **Query Panel** is very similar to the one used for universes, although it does not yet support features like combined queries, advanced filters or query stripping.



Query Panel: Web Intelligence Document Data Source

If the source document contains hierarchies, you may use the **Member Selector** to select the members to query. This **Member Selector** supports the same operators as for SAP BW data sources: *Children*, *Descendants Until* and *Descendants Unit Named Level*, but not *Ancestors* nor *Parents*.

Refreshing Data

The refresh retrieves the dataset from the source document. If your query contains filters or member selections, they are applied when it is sent to the source document.

After the refresh, the objects that your query consists of appear in the **My Objects** panel. You can use them to feed the tables and charts in your report like you would for any data source. If you have enriched the source document with merged dimensions and/or geographical or time dimensions, they are retrieved as well and can be reused in the new document.

During this refresh, the source document is not refreshed. This is the reason why a source a document defined as being *refreshed on open* or based on an SAP HANA Online data source, cannot be used as a data source. The source document must be explicitly refreshed, either manually or through a schedule. If the **Smart View** option has been selected in the CMC, the data is retrieved from the source document's last scheduled instance.

The aggregation of variable defined as measure is delegated to the source document. If you change the aggregation scope, the measure returns #TOREFRESH. Refresh the document to send the query against the source document so it returns the new aggregated value for the measure.

View-Time Security Filtering

The date of the dataset retrieved from the source document corresponds to the source document's last refresh time. At refresh time, it is secured with the security profiles that apply to the user who is running the query. As the source document is not refreshed, it might be an issue if this source document dataset is shared with other users who do not have the same security profiles.

If the source document queries a universe created with Information Design Tool and secured with a Business Security Profile, you can enable the **Apply security filtering at view time** option (see [SAP BI 4.2 SP6](#)) to filter the dataset when a document based on this source document is opened.

If you set this option for the consuming document, the Business Security Profiles that apply to the user are enforced on the fly when the document is opened and without refreshing the source document, nor the document created on it:

- **Display Data** Business Security Profiles prevents a denied object and its data to be displayed.

- Only rows that match the filters conditions defined in the **Filters** Business Security Profiles are displayed.

If you set this option for the source document, the filtering is applied when data is retrieved from this source document:

- **Display Data** Business Security Profiles prevents a denied object and its data from being retrieved.

- Only rows that match the filters conditions defined in the **Filters** Business Security Profiles are retrieved.

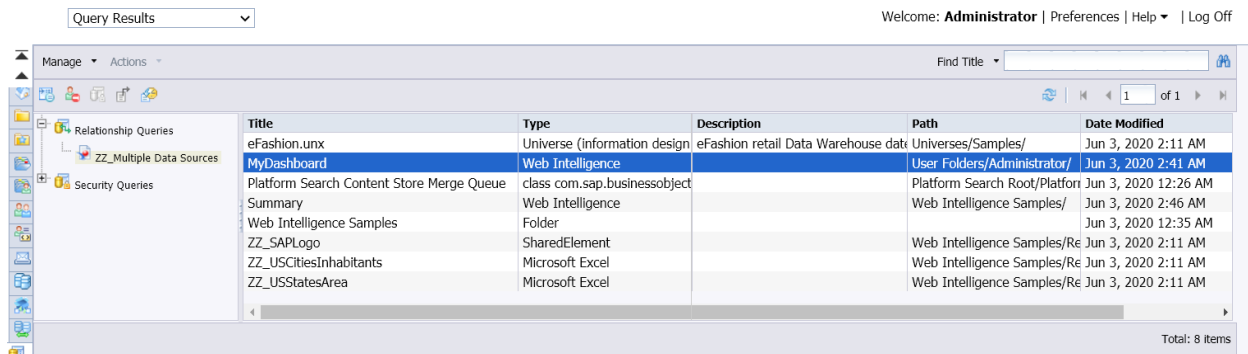
You can also set this option for both documents.

As this security relies on universe's Business Security Profile, it applies only to source document queries based on universe created in Information Design Tool.

Document Dependencies

In the BI Platform repository, a link is created between the source document and a document that uses it as a source. Hence, dependencies between these documents are properly displayed in Life Cycle Management, Promotion Wizard or in the CMC if you

use **Tools > Check Relationships**.



The screenshot shows the SAP Query Results interface. At the top, there is a 'Query Results' dropdown menu and a 'Welcome: Administrator | Preferences | Help | Log Off' message. Below this is a 'Manage' and 'Actions' menu bar with a 'Find Title' search field. The main area displays a table with columns: Title, Type, Description, Path, and Date Modified. The table lists several data sources, with 'MyDashboard' highlighted in blue. A 'Total: 8 items' indicator is visible at the bottom right of the table.

Title	Type	Description	Path	Date Modified
eFashion.unx	Universe (information design)	eFashion retail Data Warehouse data	Universes/Samples/	Jun 3, 2020 2:11 AM
MyDashboard	Web Intelligence		User Folders/Administrator/	Jun 3, 2020 2:41 AM
Platform Search Content Store Merge Queue Summary	class com.sap.businessobject		Platform Search Root/Platform	Jun 3, 2020 12:26 AM
Web Intelligence Samples	Web Intelligence		Web Intelligence Samples/	Jun 3, 2020 2:46 AM
ZZ_SAPLogo	Folder			Jun 3, 2020 12:35 AM
ZZ_USCitiesInhabitants	SharedElement		Web Intelligence Samples/Re	Jun 3, 2020 2:11 AM
ZZ_USStatesArea	Microsoft Excel		Web Intelligence Samples/Re	Jun 3, 2020 2:11 AM

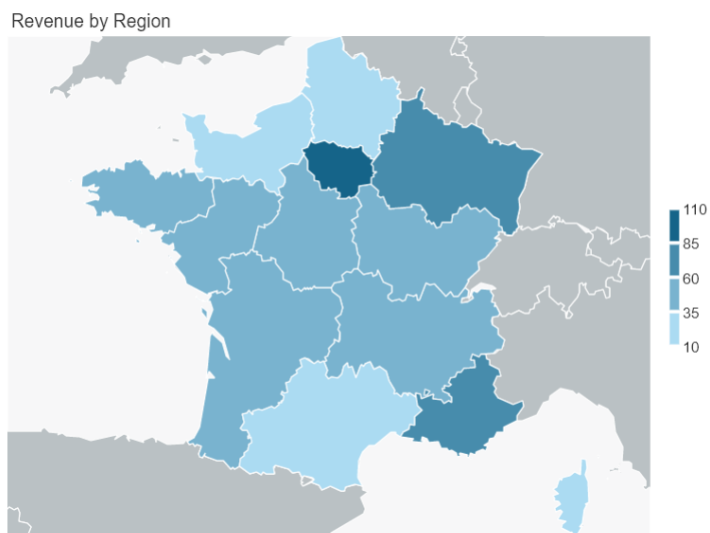
CMC: Source Document Relationship

Web Intelligence: Geo Map

To provide more accurate geo dimensions, the *Here* geographical database used by Web Intelligence has been updated with its 2019 version:

- Borders and regions take geographical changes into consideration, e.g., new French regions are available (Request [144513](#)).
- Regions, sub-regions and cities have been added in some countries for better coverage.

- New cities have been added, some have been removed, considering the 100,000 inhabitants limit, except for the United States of America.



Geo-Map: New French Regions

If you have created geo charts in SAP BI 4.2 with a mapping by name, you need to remap these names when editing these documents in SAP BI 4.3 due to ID changes in the geographical database.

Web Intelligence: Formula Language Functions and Formula Editor [↑](#)

In the *Data Provider* category, *DataProviderType* has been updated to return the correct

data provider type. The possible values are: "Universe", "Text", "Excel", "Web Services", "SAP BW", "SAP HANA", "Free-Hand SQL" and "Web Intelligence" for the new Web Intelligence document data source. Besides *NumberOfRows*, *NumberOfColumns* has been added to return the number of objects of a data provider.

- **string** *DataProviderType* (**Data provider** dp)

- **int** *NumberOfColumns* (**Data provider** dp)

In the *Document* category, *DocumentPath*, *DocumentParentFolder* and *DocumentParentFolder* have been added to respectively return the document's path (Request [108755](#)), the name of its parent folder (Request [206442](#)) and the document description (Request [144988](#)). *QuerySummary* has also been updated to return the correct data provider type (cf. *DataProviderType*).

- **string** *DocumentPath* ()

- **string** *DocumentParentFolder* ()

- **string** DocumentDescription ()

- **string** QuerySummary ()

In the *String* category, *Trim*, *LeftTrim* and *RightTrim* have been extended to allow you to define the character to remove from the string (Request [217310](#)). By default, this character is the space character.

- **string** Trim (**string** str [; **string** ch])
- **string** LeftTrim (**string** str [; **string** ch])
- **string** RightTrim (**string** str [; **string** ch])

To create more readable and maintainable formulas, you can use the classic comments usually supported by most programming languages (Request [111272](#)) in the formula language:

- To comment the end of a line, you may use //

- To comment a block in the formula, you may use /* */

When you open the **Formula Editor**, all category folders are closed by default (Request [202146](#)). To find a function more easily, the *All* category (that contains all functions) is displayed at the top of the categories' list.

As in the **Formula Bar**, the **Formula Editor** supports auto-completion. When you type a formula, a menu displays the objects, functions or operators that match the letters you typed (Request [241647](#)). Select the one to use by clicking it or using the arrows keys and pressing [Enter].

Edit Variable ✕

Name:

Description:

Qualification: **Type:**

Formula

```
/* Used in Pareto Chart */
=Round (RunningSum([Sales revenue])/Sum([Sales revenue]ForAll([Lines]))*100; 0) / ma
// Last changed: 2020 June 2
```

✓
✕

- Max
- Match
- Margin
- Max Value

75 to 100%

Actual value

Functions

- > All
- > Aggregate
- > Character
- > DataProvider

Operators

=
<
<=
<>
>
>=

.
+
-
/
*
(
)

Values...

Prompts...

Quantity sold

Auto-Completion in the Formula Editor

Web Intelligence: Security Rights [↑](#)

To adapt the new interface and deployment modes, the Web Intelligence security rights have been updated:

- Names and categories have been simplified and aligned (Request [214981](#))
- Two new rights are introduced to secure the use of Free-Hand SQL



(Request [219070](#))

Free Hand SQL script

Query: Edit Free Hand SQL script and Query: View

The following table lists Web Intelligence application security rights, with their equivalent in SAP BI 4.2. SAP BI 4.3 Security Right	Previous SAP BI 4.2 Name
Data: Enable data tracking	Data - Enable data tracking
Data: Enable formatting of changed data	Data - Enable formatting of changed data
General: Enable Desktop client access	Desktop interface - Enable Web Intelligence Desktop
Desktop: Publish to Enterprise	Desktop interface - Export documents
Desktop: Print documents	Desktop interface - Print documents

Desktop: Remove documents security	Desktop interface - Remove document security
Desktop: Give access to everyone	Desktop interface - Save document for all users
Documents: Disable automatic refresh on open	Documents - Disable automatic refresh on open
Documents: Enable autosave	Documents - Enable autosave
Documents: Enable creation	Documents - Enable creation
Documents: Publish and manage content as web service	Documents - enable publish and manage content as service
General: Edit Web Intelligence preferences	General - Edit 'My Preferences'
General: Enable Web client access	Interfaces - Enable web viewing interface
Query: Edit script generated from universe	Query script - Enable editing (SQL , MDX, ...)
Query: Edit Free Hand SQL	
Query: View script generated from universe	Query script - Enable viewing (SQL , MDX, ...)
Query: View Free Hand SQL	
Reporting: Create and edit breaks	Reporting - Create and edit breaks
Reporting: Create and edit conditional formatting rules	Reporting - Create and edit conditional formatting r
Reporting: Create and edit input controls and group	Reporting - Create and edit input controls
Reporting: Create and edit predefined calculations	Reporting - Create and edit predefined calculations
Reporting: Create and edit filters and consume input controls	Reporting - Create and edit report filters and consum
Reporting: Create and edit sorts and rankings	Reporting - Create and edit sorts
Reporting: Create and edit formulas, variables, groups and references	Reporting - Create formulas and variables
Reporting: Enable document change	Reporting - Enable formatting
Reporting: Merge objects	Reporting - Enable merged dimensions
Reporting: Insert and remove reports, tables, charts, and cells	Reporting - Insert and remove reports, tables, chart

In the CMC, the following rights are prefixed with the "Obsolete_" tag since they are either useless in SAP BI 4.3 or their security intent is replaced by customization when it

is supported:

- Disable Export to BI On Demand for this user
- Disable Import from BI On Demand for this user
- General - Enable right-click menus
- Interfaces - Enable Rich Internet Application
- Left pane - Enable document structure and filters
- Left pane - Enable document summary
- Desktop interface - Save documents locally

- Desktop interface - Import documents

Add/Remove Rights							
Object: Web Intelligence	▼Specific Rights for Web Intelligence	Implicit Value	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Principal: Administrators	Desktop: Publish to Enterprise	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▼General	Desktop: Remove documents security	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
General	Desktop: Send by e-mail	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
▼Application	Documents: Disable automatic refresh on open	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Web Intelligence	Documents: Enable auto save	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Documents: Enable creation	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Documents: Publish and manage content as web service	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	General: Edit Web Intelligence preferences	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	General: Enable Desktop client access	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	General: Enable Web client access	Granted	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

CMC: Web Intelligence Application Security Rights

The following rights are still exposed in the CMC but will be leveraged once the corresponding features are supported:

- Desktop: Send by e-mail
- Desktop: Enable local data providers

- Desktop: Install from BI Launch Pad
- Shared: Publish shared elements
- Shared: Insert shared elements

The following table lists Web Intelligence document security rights, with their equivalent in SAP BI 4.2.	Previous SAP BI 4.2 Name
SAP BI 4.3 Security Right	
Edit Query	Edit Query
Export the cube's data	Save as CSV
Export the report's data	Export the report's data
Import document locally	N/A
Refresh List of Values	Refresh List of Values
Refresh the report's data	Refresh the report's data
Use Lists of Values	Use Lists of Values
View SQL	View SQL

The Save as Excel or Text and Save as PDF security rights have been removed since exporting or scheduling report's data into PDF, Excel, HTML archive, Text or CSV archive is now simply covered by the Export the report's data right.

Two new rights have been introduced:

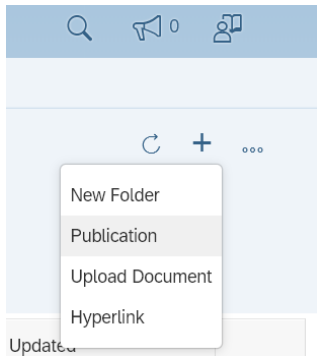
- Export the cube's data: This right allows the user to export a document's cube data or to schedule it into a CSV file. (Request [134236](#))
- Import document locally: This new right replaces the previous application Desktop interface - Save documents locally and Desktop interface - Import documents security rights and is used to allow the document to be saved locally so that it can be opened in Web Intelligence Rich Client.

The Publish shared elements right is still exposed in the CMC but will be leveraged only when the corresponding feature is supported.

Web Intelligence: Publishing and Scheduling [↑](#)

When the new BI Launch Pad has been released in SAP BI 4.2 SP4, it was possible to schedule documents but not to distribute them through publications. In SAP BI 4.3, this missing capability has been implemented in BI Launch Pad and offers the same options as in SAP BI 4.2.

To create a publication, go to a folder, click the **Create/upload objects** button (**+**) at the top of the folder's page and select **Publication** in the menu.



BI Launch Pad: Publication in the Create Menu

In the **New Publication** page, enter the publication parameters. These parameters are organized by sections, displayed in two tabs. Depending on the document type, some parameters appear only after the source documents have been added to the publication.

New Publication

General ▾ Summary ▾

Publication Details

*Title

Keywords

Description

Source Documents

Items (0) Remove ▾ ▲ +

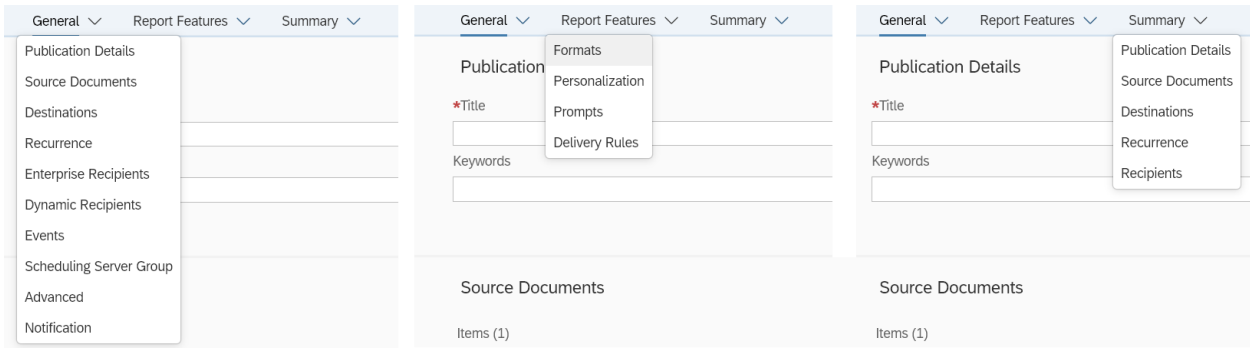
<input type="checkbox"/>	Title	Type	Refresh at Runtime

Save Save and Close Close

BI Launch Pad: New Publication

To navigate into the possible parameters more easily, you may click the following tabs, and select the section in the corresponding menus:

- **General.** This tab contains the generic publication parameters: publication details, source documents, destination, recurrence, enterprise and dynamics recipients, events, ...
- **Report Features.** This tab and its sections appear if your publication contains a Web Intelligence or Crystal Reports document. It contains publication properties that are specific to this document type. For Web Intelligence, this covers the publication formats, personalization, prompts and delivery rules.
- **Summary:** This tab displays the publication's most common parameters.



BI Launch Pad: Publication Menus

When the publication is defined, click **Save** or **Save and Close**.

In SAP BI 4.3, you can still schedule a document. To provide the same look & feel as in **New Publication** page, the **Schedule** page has been modified.

Schedule

General Report Features

Instance Title

*Title

Destinations

Delivery Destinations

Add

Selected Delivery Destinations

Default Enterprise Location ⊗

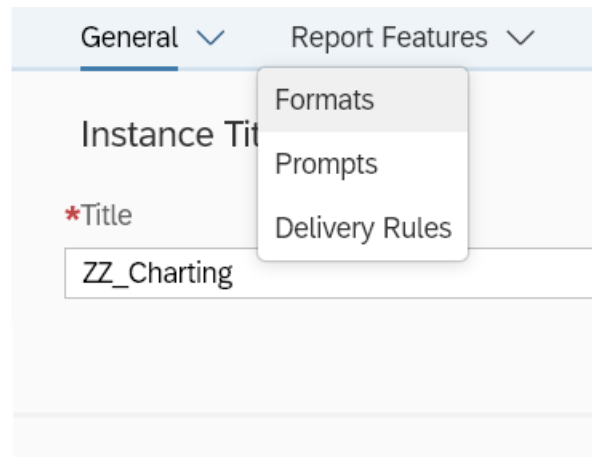
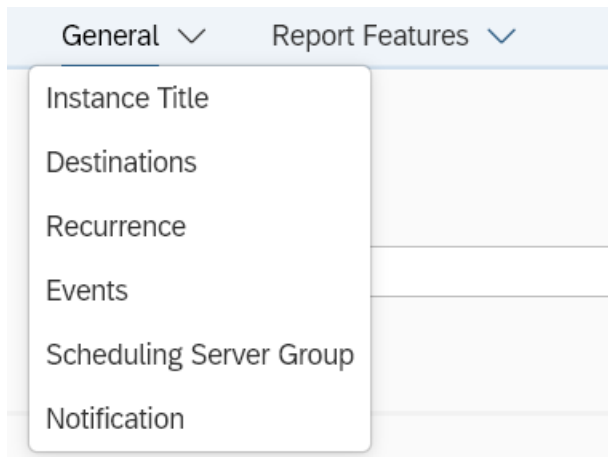
Recurrence

Schedule Close

BI Launch Pad: New Schedule

When defining a schedule, you can move to specific sections through two tabs and the corresponding menus.

- The **General** tab contains the generic sections that define a schedule, like the schedule's destinations and recurrence, its attached events, ...
- The **Report Features** tab contains the sections specific to a Web Intelligence document. Formats, Prompts and Delivery Rules are available, but Caching properties are not yet implemented.



BI Launch Pad: Schedule Menus

Both schedule and publication take advantage of the new options introduced in SAP BI 4.3:

- When you define the publication or schedule frequency in the **Recurrence** section, you can select business days and hours for the schedule to run.
- Another new option, **Allow Retries**, can be used to define if a failed schedule must be re-run and if so, how many times and when.

Recurrence

Run Report:

Repeat:

On

S M T W T F S

Business Hours Start Business Hours End

Every:
 Ex: Every 2 hrs

Start Date:

End Date:

Allow Retries
 ON

Number of Tries

Retry interval in sec...

BI Launch Pad: Recurrence Options

- In the BI Launch Pad **Home** page, click the **Instances** tile to display an overview of all schedules and publications run by you and their status. At the top of the page, you can find controls to filter this list by date, status, scheduled object type or just by name.

Schedule Instances

Instance Time:

Status:

- Success
- Partial Success
- Failed
- Running
- Recurring
- Paused
- Expired

Type: Title:

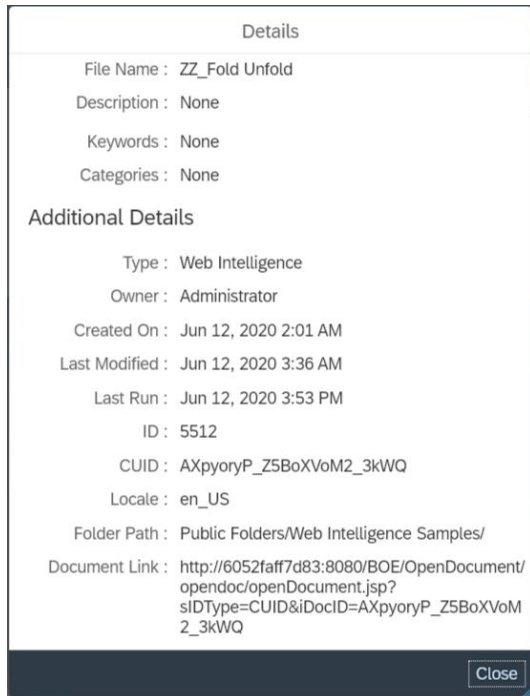
Instances (2)

<input type="checkbox"/>	Title	Type	Instance Time	Scheduled By	Subscription	
<input type="checkbox"/>	ZZ_Charting	Web	Jun 12, 2020 4:46 ...	Administrator		
<input type="checkbox"/>	ZZ_Charting	Web	Jun 12, 2020 4:46 ...	Administrator		

BI Launch Pad: Schedule Instances Page

Web Intelligence: OpenDocument URL

The **Copy Link of the Report/Table/Chart/Cell** commands previously described allow you to directly generate an *OpenDoc* URL to access the corresponding item. You can also get the link to access a document by opening the document's contextual menu in BI Launch Pad and selecting the **Details** command. The *OpenDoc* URL you can share is provided in the **Document Link** field.



BI Launch Pad: Document Details Dialog Box

With the Web Intelligence user interface simplification, the *sViewer* option is no longer used by the *Opendoc* URL and is skipped when it is processed. Some options like instance are not yet supported in SAP BI 4.3 and will be supported in future Support Packages.

To allow your user to directly access a folder, you can select the **Details** command in a folder's contextual menu, and share the URL provided in the **Folder Link**.

Details	
Folder Name :	Web Intelligence Samples
Description :	None
Keywords :	None
Additional Details	
Type :	Folder
Owner :	Administrator
ID :	5526
CUID :	AeN4IEu0h_tAtnPEjFYxwi8
Created On :	Jun 12, 2020 2:01 AM
Last Modified :	Jun 12, 2020 2:01 AM
Folder Link :	http://6052faff7d83:8080/BOE/BI?startFolder=AeN4IEu0h_tAtnPEjFYxwi8&isCat=false

BI Launch Pad: Folder Details Dialog Box

Web Intelligence: REST Web Services [↑](#)

In the Web Intelligence REST Web Services, some new APIs have been added:

- To get, create, edit and delete referenced cells in a document

- To get, create, edit and delete table's calculations
(*Average, Count, Max, Min, Percent or Sum*)

- To get the details of a publication

Some existing APIs offer additional options and can be used to:

- Purge a document
- Set a table cell as a section
- Change the position of a report element in the layout (front, back...)
- Delete all breaks of a table
- Update or delete all breaks on a table axis
- Get, edit or delete all custom formatting of a report element

- Get the details of a hierarchy member
- Re-order input controls
- Create a custom format for number or datetime
- Get the marker palettes, the gradient orientations and the locales supported by the BI Platform server

Web Intelligence: Performance Enhancements [↑](#)

To improve the performance of Web Intelligence, several enhancements have been implemented:

- The most visible one is the progressive disclosure, aka lazy loading: to avoid blocking the user while the document is fully displayed, the document skeleton is computed and displayed first, followed by the charts in the background. The gain is particularly significant on document a that contains many charts.

- The Web Intelligence REST Web Services calls used by the new Web Intelligence interface have been optimized
- Documents with the *Refresh on open* option are automatically purged when saved in order to reduce the document opening time (Request [110058](#)).
- A Web Intelligence document stores details related to the universes it queries. If one of these universes has been modified, the updated details are retrieved from this universe when the document is opened. A warning message is displayed to recommend that you save the document, to avoid the same update next time it is opened.

Information Design Tool: 64-Bit [↑](#)

Like other client tools in SAP BI 4.3 (Web Intelligence Rich Client and Universe Design Tool), Information Design Tool and Connection Server drivers are released in 64-bit only (Request [210604](#)).