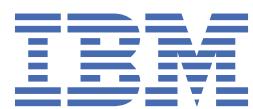


IBM Cognos Analytics
Version 12.0.x

What's New



©

Product Information

This document applies to IBM Cognos Analytics version 12.0.0 and may also apply to subsequent releases.

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Chapter 1. New and changed features in 12.0.x

The following topics document new and changed features in Cognos® Analytics release 12.0.x.

Release 12.0.3 - April 2024

This section describes new and changed features in IBM® Cognos Analytics 12.0.3.

Multiple components

Learn about enhancements to the user interface, training materials, and features that affect multiple IBM Cognos Analytics components.

Enhanced support for Content Security Policies

As of release 12.0.3, Cognos Analytics supports additional Content Security Policy (CSP) directives that restrict the source of resources loaded by the application. Sources such as inline javascript or eval() once commonly used in applications - including a previous generation of Cognos Analytics - are common vectors for cross-site-scripting (XSS) attacks. A CSP can reduce the surface area for such attacks in an application.

If your Cognos Analytics environment uses a CSP that excludes the unsafe directives, some of its legacy features are negatively affected. When these features are blocked, you must disable a set of features disable a set of features that are impacted by the blocked CSP directives. Other affected features are not disabled, but have limitations.

For more information, see the following topics:

- "Content Security Policies (CSP)" in the *IBM Cognos Analytics Manage Guide*.
- "Configuring a Content Security Policy" in the *IBM Cognos Analytics Manage Guide*.
- "Feature impacts when a CSP blocks unsafe directives" in the *IBM Cognos Analytics Manage Guide*.
- "Disabling a set of features that are blocked by a CSP" in the *IBM Cognos Analytics Manage Guide*.
- "Content Security Policy violations" in the *IBM Cognos Analytics Manage Guide*.
- "More secure administration features" in the *IBM Cognos Analytics What's New Guide*.

Faster processing of content retention rules

As of Cognos Analytics 12.0.3, content retention rules are applied more efficiently. This is the result of the retention rules being applied at different times than in previous releases.

A new method of processing

Asset owners can set retention rules on stored content that determine whether objects should be retained or deleted from the Content Store. Previously, retention rules were applied immediately: either when an asset's retention rule was updated or when a new object, governed by a retention rule, was added to the Content Store. This processing method resulted in Add or Update requests taking a long time to complete. In some cases, when many objects were flagged for removal, some objects were not removed, even though they met the retention criteria.

As of 12.0.3, retention rules are not applied immediately. They are instead applied as part of background processes that run at a regular interval.

Benefits

The processing of retention rules in this manner provides the following benefits:

- Add or Update requests are faster.

- Delete operations are done in small batches, reducing the transaction size.
- Expired objects (controlled by duration-based retention rules) are now removed on time (roughly within 10 minutes).

Note: You may occasionally see more retained objects than are specified by your retention rules. These extra objects will be removed the next time that the background processing runs (the default interval is 10 minutes).

Tuning

For tuning purposes, the administrator can adjust the interval that the background processes are run. This is accomplished by changing the values of these two Content Manager advanced settings:

- CM.RETENTIONS_EXPIRATION_CHECK_INTERVAL
- CM.RETENTIONS_OUT_OF_SCOPE_CHECK_INTERVAL

Upgrade implications

The new retention processing feature requires a higher version of the Content Store schema. As the feature is also available in release 11.2.4 FP3, it is compatible with release 12.0.3. However, the 11.2.4 FP3 schema is *not* compatible with the lower-version schema used in releases 12.0.0, 12.0.1, or 12.0.2.

Important:

Do not upgrade your 11.2.4 FP3 content to release 12.0.0, 12.0.1, or 12.0.2. To upgrade 11.2.4 FP3 content to version 12.0.x, choose release 12.0.3 or later.

Reason:

To support faster processing of content retention rules, schema changes are made in the content store of 12.0.3 (and later) and 11.2.4 FP3 (and later). Therefore, when you upgrade from 11.2.4 FP3 (or later), you must upgrade to a release with the same content store enhancements, for example, 12.0.3 (or later).

You can still upgrade any 11.2.x content **other than** 11.2.4 FP3 to any version of 12.0.x.

Setting retention rules on Content Store objects

You can set retention rules for your content by specifying these settings:

- the maximum number of versions of an asset that can be retained
- the maximum number of days or months that an asset is retained

Properties

Report

Display of run history

Occurrences
5

Display of report output versions

Occurrences
1

Default portal action

View most recent report

Rows per page in HTML reports

Default

- Set the maximum number of occurrences of run history or report versions that you can save
- Set the maximum duration that a run history item or report version is retained before it is deleted

Carbon design adoption

Several more Cognos Analytics features have adopted the IBM Carbon Design System. Carbon design streamlines the web client user experience and unifies product familiarity across multiple IBM products.

For more information, see <https://carbondesignsystem.com/>.

Note: All of the following features have the same workflow as with their previous, legacy user interface. However, these features are now more secure and have a cleaner look and feel.

Run history details

Actively running background requests or previously run background or scheduled requests now appear in a Carbon user interface.

Run details - 45 second report

View the details of this particular run.

Start time: Mar 22, 2024, 7:54:45 AM

Status: Succeeded

Completion time: Mar 22, 2024, 7:55:32 AM

View the parent entry

Messages

Time	Severity	Message
No entries		

Report

Options

Formats: HTML

Languages: English

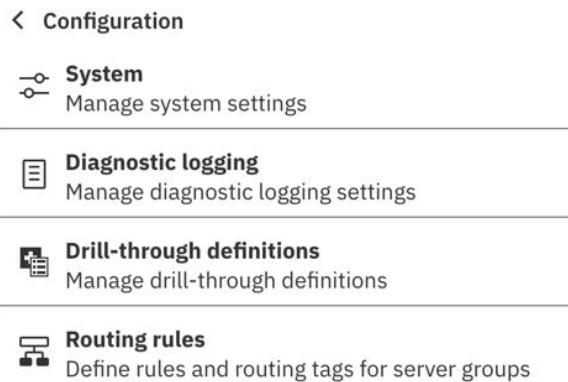
Save the report: Team Content > reports > 45 second report

Report outputs

Yes

Drill through definitions

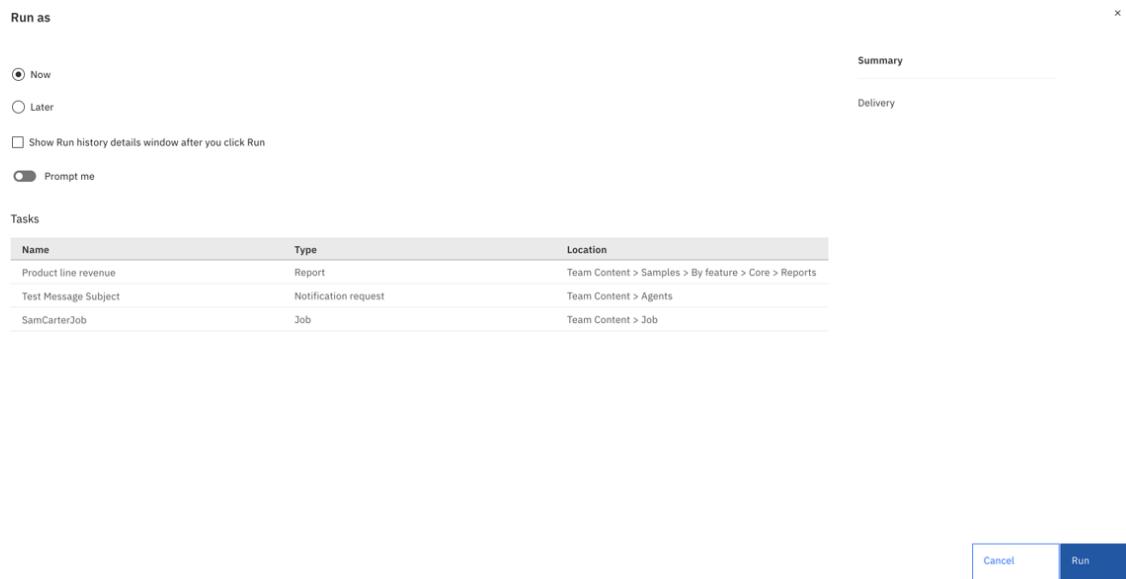
You can now access **Drill-through definitions** via **Manage > Configuration**.



For more information, see [Setting up drill-through access in packages](#).

Running agents and agentViews

Agents and agentViews now use the modern **Run as** window.



Archive versions

To access the archive for an asset, right click and then click **View versions > Archives**

Archive versions

Specify a date range to view the relevant output versions. For the versions that are displayed, click the available format.

[Close](#)

Start date	End date
Date range 02/25/2024	03/25/2024 →
Versions	
Mar 25, 2024, 2:33:49 PM	Formats English ▾
Mar 22, 2024, 5:51:00 AM	[HTML] English
Mar 15, 2024, 1:20:13 PM	[XML] English
Mar 8, 2024, 6:51:00 AM	[CSV] English
	[Excel 2007] English
	[PDF] English
	[Excel 2007 Data] English

Set Multiple Languages

The **Multilingual names and descriptions** window also now follows Carbon design. Click **Properties > Specify multilingual names and descriptions**.

Multilingual names and descriptions ×

Specify language-specific names and descriptions for the selected object.

Language

English ▼

Remove values for this language

Name

New report123

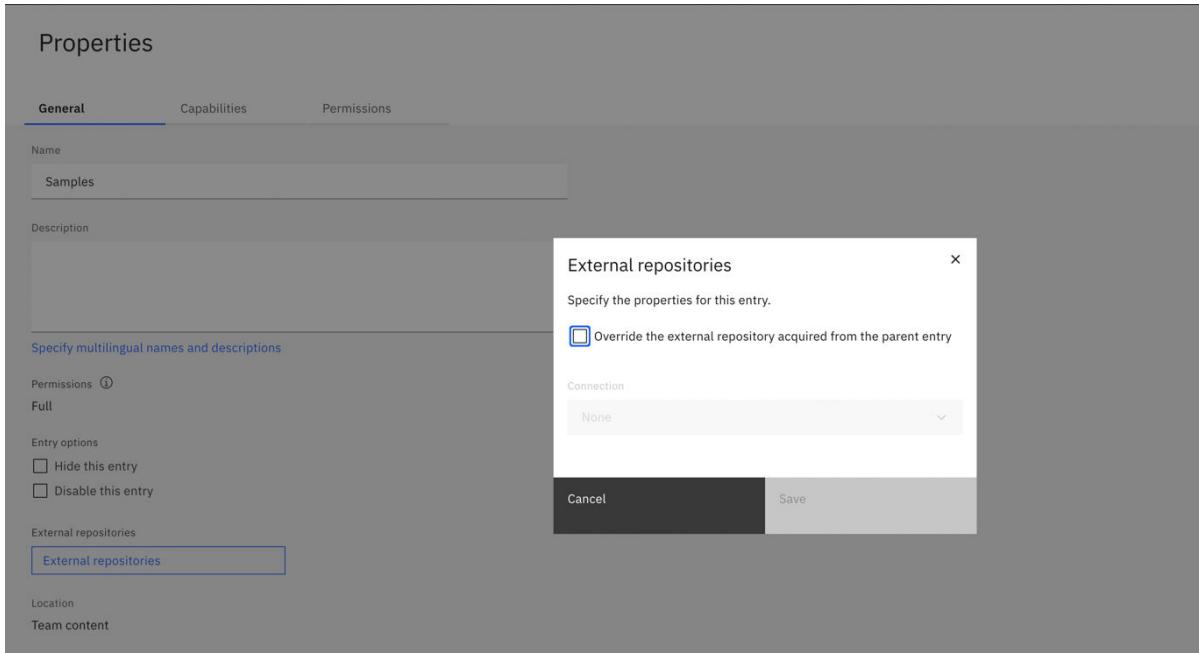
Description

Enter a description

Cancel Save

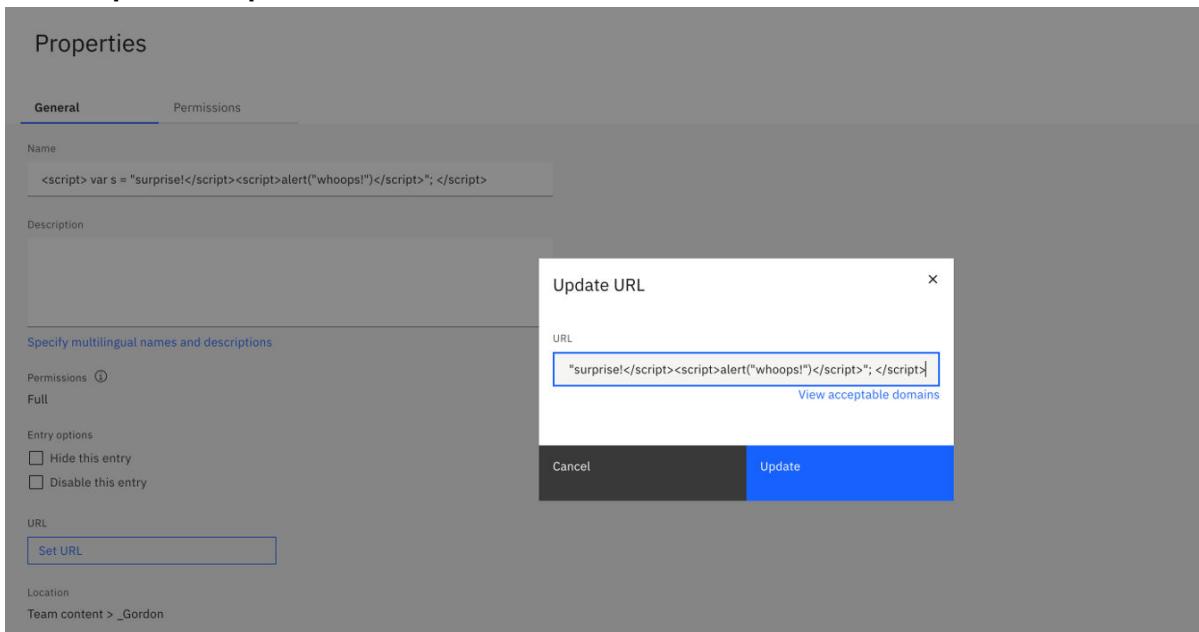
Set external repositories

Properties > External repositories



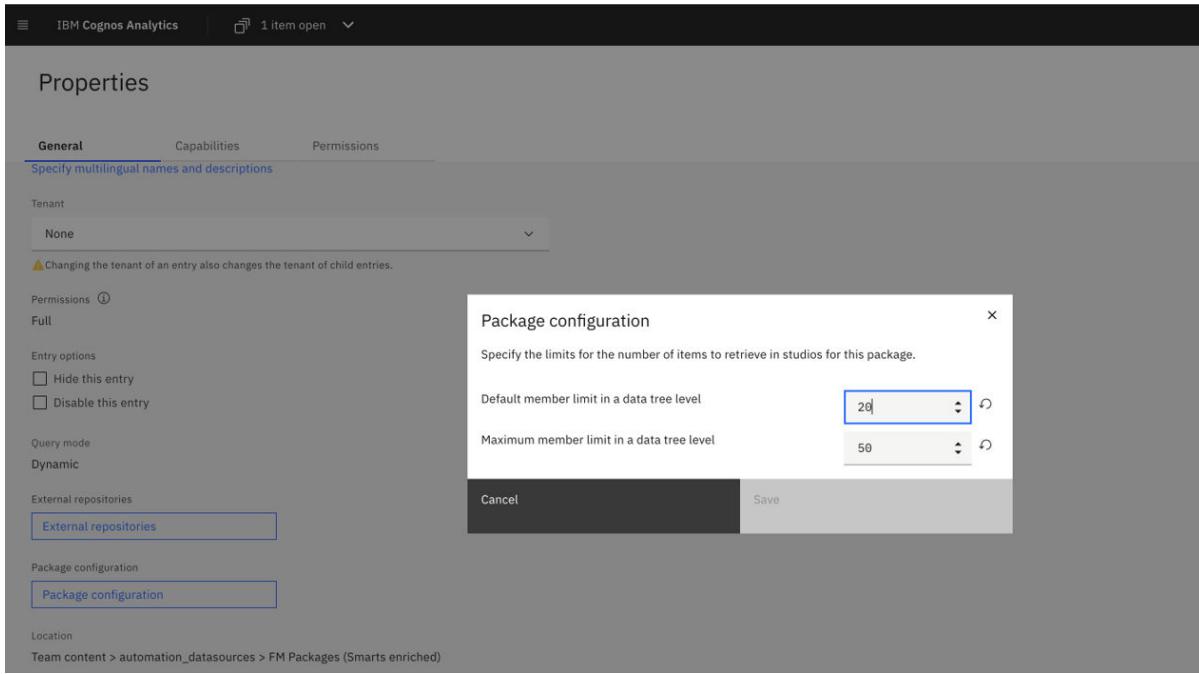
Update URL dialog

Click **Properties > Update URL**.



Package Configuration dialog

Properties > Package configuration



Assistant

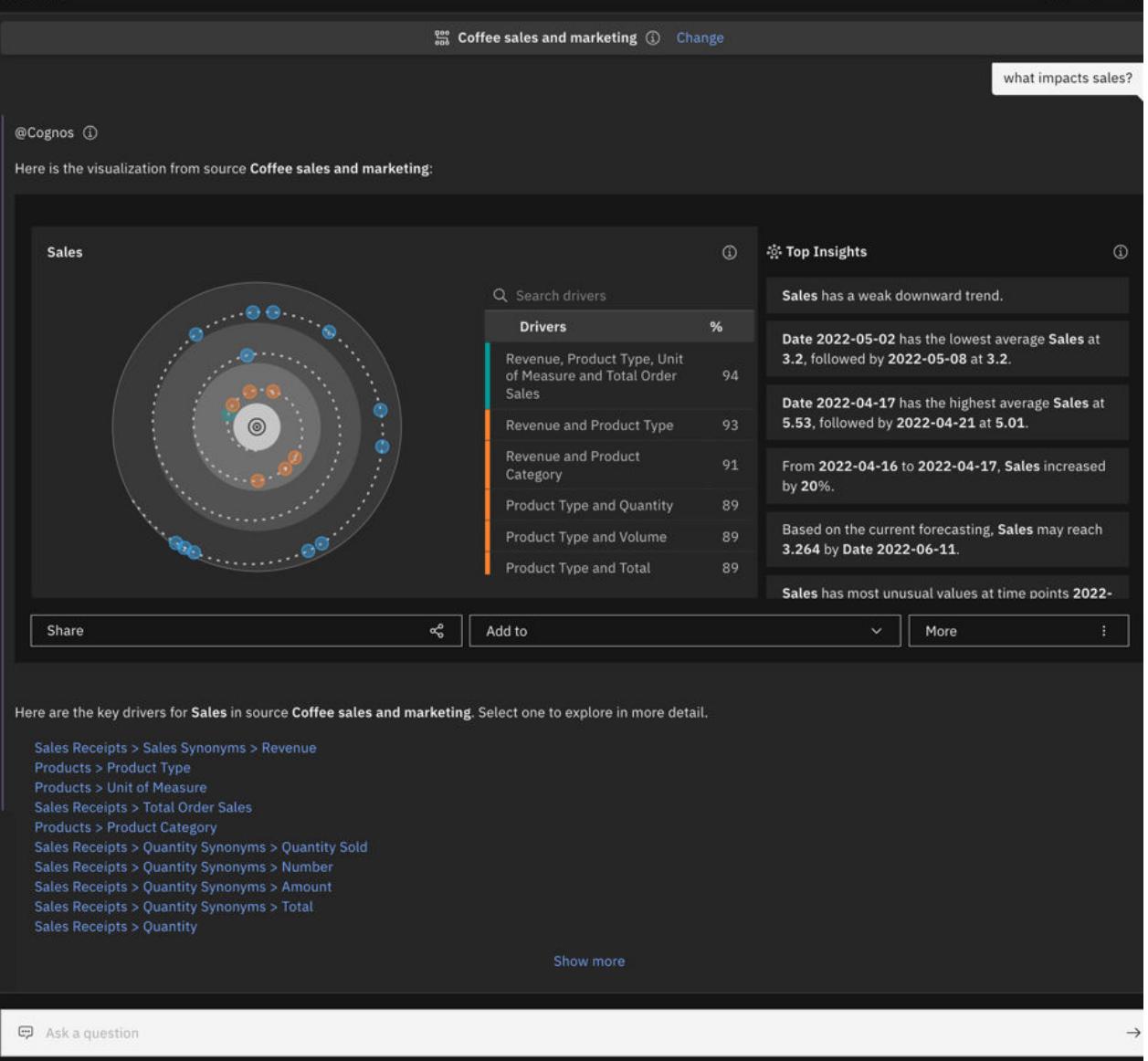
Ask questions in natural language to find, explore, and gain quick insights into your data.

Improved responses to questions on key drivers and influencers

The Assistant now shows improved responses when you ask the Assistant to show key drivers and influencers that impact your data.

In IBM Cognos Analytics 12.0.3, when you ask **What impacts sales?**, the Assistant responds with a spiral chart with insights and a list of key drivers that impact sales.

Assistant



Here is the visualization from source **Coffee sales and marketing**:

Sales

Q. Search drivers

Drivers	%
Revenue, Product Type, Unit of Measure and Total Order Sales	94
Revenue and Product Type	93
Revenue and Product Category	91
Product Type and Quantity	89
Product Type and Volume	89
Product Type and Total	89

Top Insights

- Sales** has a weak downward trend.
- Date **2022-05-02** has the lowest average **Sales** at 3.2, followed by **2022-05-08** at 3.2.
- Date **2022-04-17** has the highest average **Sales** at 5.53, followed by **2022-04-21** at 5.01.
- From **2022-04-16** to **2022-04-17**, **Sales** increased by 20%.
- Based on the current forecasting, **Sales** may reach 3.264 by Date **2022-06-11**.
- Sales** has most unusual values at time points **2022-**

Share Add to More

Here are the key drivers for **Sales** in source **Coffee sales and marketing**. Select one to explore in more detail.

- Sales Receipts > Sales Synonyms > Revenue
- Products > Product Type
- Products > Unit of Measure
- Sales Receipts > Total Order Sales
- Products > Product Category
- Sales Receipts > Quantity Synonyms > Quantity Sold
- Sales Receipts > Quantity Synonyms > Number
- Sales Receipts > Quantity Synonyms > Amount
- Sales Receipts > Quantity Synonyms > Total
- Sales Receipts > Quantity

Show more

Ask a question

The key drivers are sorted in the list by their predictive strength and you can click these drivers to explore them further.

When there are no key drivers that impact the data, the Assistant shows a list of influencers instead.

Previously, when you asked the Assistant **What impacts sales?** or **What influences net profit?**, only a list of influencers displayed in the Assistant.

Dashboards

Use IBM Cognos Analytics dashboards to discover key insights about your data and monitor events or activities at a glance.

Generating automatic dashboards from the quick launch scenarios

The quick launch scenarios in the Cognos Analytics welcome page, **Upload and create** and **Create from existing data**, now include the option to automatically create a dashboard that is based on the uploaded or selected data source.

Upload and create

Select one of the available types of assets to create from the uploaded file.

Recommended



Automatic dashboard
Automatically generate a dashboard to quickly visualize your data.

Insights in Assistant
Ask questions in natural language, and discover insights.

Other options



Blank dashboard
Create a dashboard layout without pre-populated visualizations.



Data module
Make meaningful connections between your data sources.

If an automatic dashboard cannot be generated from the selected source, a message is displayed that suggests selecting a different source or creating a different type of asset.

For more information, see the "Generating a dashboard automatically" topic in the *IBM Cognos Analytics Dashboards and Stories Guide*.

Resizing table columns

You can now resize columns in table visualizations.

Previously, the default width was applied to all table columns, and the dashboard author could not resize the columns.

To change the column width, in the table heading, click the column border on the right. The border color is changed to blue, and the pointer is turned into a double-headed arrow. Drag the border to the left or to the right, based on the amount of content in the column.

Vehicle Class	Employment Status	Number of Open Complaints
Four-Door Car	Employed	1,180
	Unemployed	460
Luxury Car	Employed	46
	Unemployed	22

The minimum column width is 100 pixels. Resizing a column does not affect adjacent columns.

You can also resize the heading height by clicking the bottom border of the heading row and dragging the border up or down.

Vehicle Class	Employment Status	Number of Open Complaints
Four-Door Car	Employed	1,180
	Unemployed	460
Luxury Car	Employed	46
	Unemployed	22

For more information, see the "Visualization types" topic in the *IBM Cognos Analytics Dashboards and Stories Guide*.

Drill-through enhancements

The dashboard drill-through definition dialog box was enhanced to improve the user experience with parameters. The list of parameters in the drill-through definition is now sorted, with the broken parameters shown at the top. A filter is also added that allows to display the parameters based on their mapping state.

Parameters with broken mappings are shown first, followed by unmapped parameters, and then by mapped parameters. The **Filter by mapping state** drop-down menu allows users to view only broken, unmapped, or mapped parameters. By default, all parameters are shown.

Edit drill-through definition

Assign columns from your dashboard to the prompts of the target report

Name

Filter by mapping state

Name	Filter by mapping state
Target report changed parameter name ...	All
 ...	 ...
(?) pProd	Select a column
⚠ pProdType	Select a column
(✓) pOrderMethod	Order method type
(✓) pCountry	Retailer country

All ▼
 Broken
 Unmapped
 Mapped

Mapping errors in the dashboard drill-through definition occur when the report author changes the name of a parameter, or changes the data item that the parameter refers to. In previous versions of the product, trying to find the mappings with errors in a long list of mappings was tedious. With the current user interface enhancements this task is much easier.

For more information, see the topic "Editing a drill-through definition to a report" in the *IBM Cognos Analytics Dashboards and Stories Guide*.

Styling individual headers in a crosstab

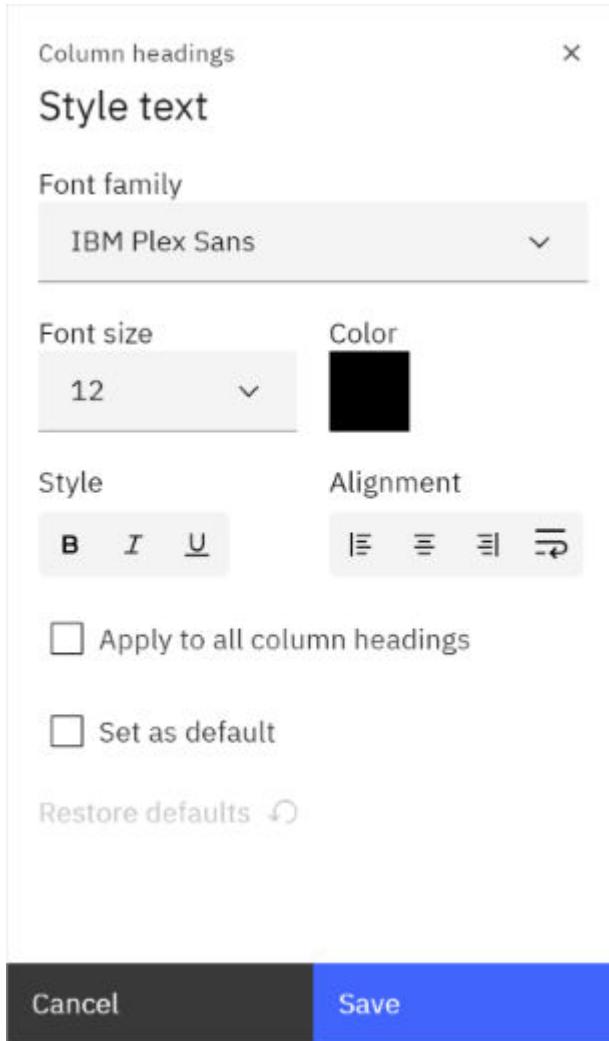
You can now style text of individual column and row headers in crosstab.

The **Style text** property that is used for [Formatting text in a crosstab or table](#) has additional options:

- The **Apply to all column headings** or **Apply to all row headings** option. Use this option to apply your style to all column or row headers, not only to individual headers.
- The **Set as default** option. Use this option to set your style as the default style for headers of new columns or rows, or the style to which you restore all style changes you do after saving your style as the default. To return to your default style, click **Restore defaults** in the **Style text** pane.

Note: The **Set as default** option only works in the crosstab where a style is set as default.

The following image shows the **Style text** pane with additional options that appears when you style column headers.



Custom labels for data columns

You can assign custom labels to data columns in dashboards.

To customize the column label, use the **Customize label** property. You can set the property in the following ways:

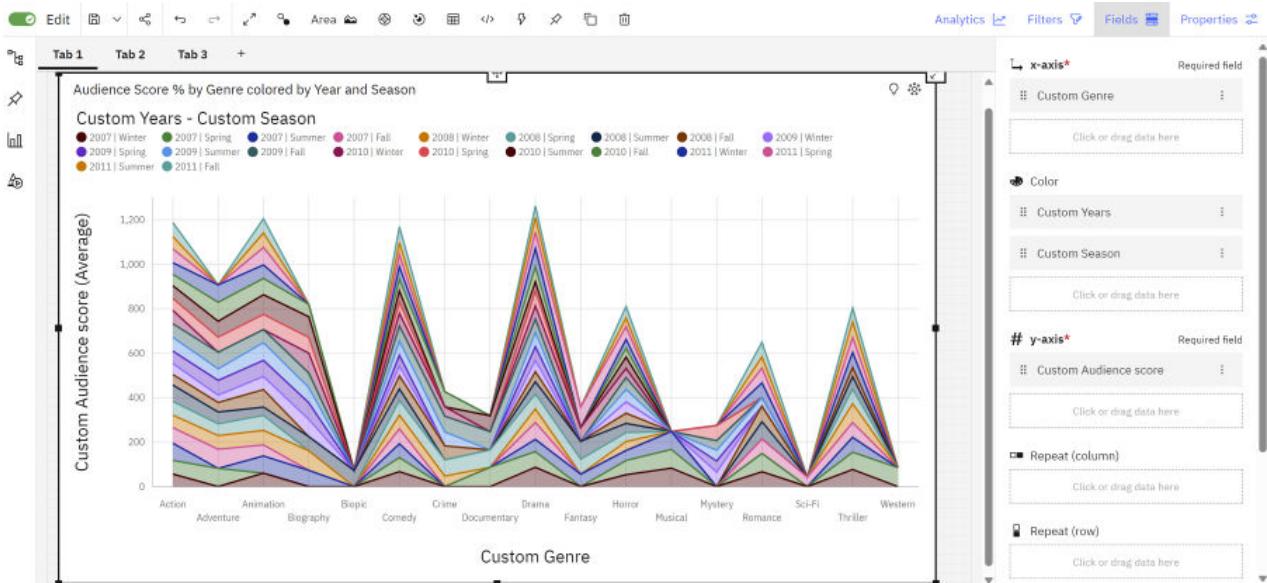
- In a visualization, right-click the legend title, the item axis title, or the value axis title and select **Customize label** in the context menu.
- In a crosstab, right-click a column or row header, and in a table, right-click a column header, and select **Customize label** in the context menu.
- In the **Fields** pane, at a data column name in a slot, click the **More** icon : and select **Customize label** in the context menu.

To apply a custom label to a column, in the **Customize label** panel, enter your label in the **Enter custom label** field, and click **Save**.

Your labels are viewed in both the visualization and the **Fields** pane, except for the crosstab where custom labels are viewed in the **Fields** pane only.

Note: In visualizations, your labels are hidden by the item axis title, the value axis title, and the color legend title if these titles are provided in the **Properties** pane.

The following area visualization shows the audience score for movie genres in years and seasons. Custom labels that were given to data columns are viewed in the visualization and the **Fields** pane.



Displaying value in a legend

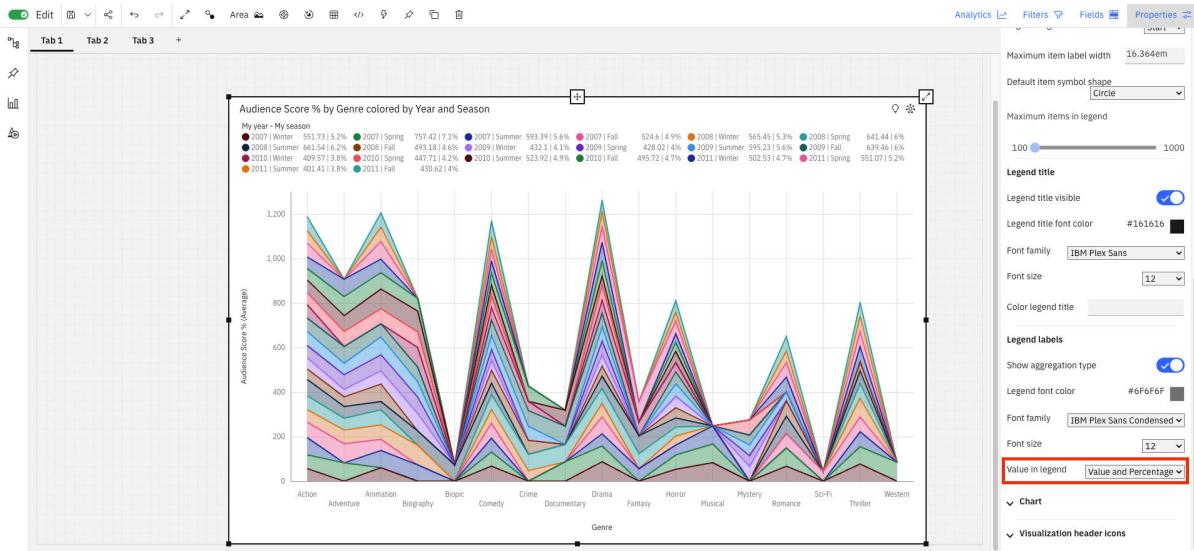
Use the **Value in legend** property to specify what value a legend is displaying.

You can select between value, percentage, and both value and percentage options. If the legend does not have enough space, it automatically truncates the swatch text.

The feature is available on Dashboards and you can use it in the following chart types:

- Bar Charts
- Area Charts
- Line Charts
- Bubble Charts
- Bullet Charts
- Bar and Line Charts
- Dual Line Charts
- Pie Charts
- Treemap Charts
- Waterfall Charts

You can set the value to be displayed by selecting it from the **Value in legend** dropdown list.



For more information, see [Working with the legend](#).

Reports

IBM Cognos Analytics- Reporting is a web-based report authoring tool that professional report authors and developers use to build sophisticated reports against multiple databases.

Native custom controls in the toolbox

Custom controls can now be added directly to the **Insertable objects** toolbox. This can be done by creating and uploading an extension for the custom control.

The extension is created by a developer, and includes the following details:

- The location in the toolbox where the control appears.
- The name, tooltip (description), and icon.
- The JavaScript **Module path** property.
- The design mode JavaScript module.

To upload the extension, in **Manage > Customization > Extensions**, click **Upload extension** , and select the extension.

When you open the reporting user interface, the custom control is available on the **Toolbox** tab, in the group that the developer assigned it to.

To support this functionality, a sample extension named **Native_Custom_Control_Popup** and a sample report named **Native custom control popup** are provided with Cognos Analytics 12.0.3. The sample extension adds a custom control named **Popup** to **Toolbox > LAYOUT**, as shown in the following image:

Insertable objects

The screenshot shows the SAP Fiori Insertable objects catalog. At the top, there are icons for Find, Refresh, and a search bar. Below the search bar is a grid icon. The main area is organized into sections: PINNED, TEXTUAL, LAYOUT, DATA CONTAINER, PROMPTING, ADVANCED, and DEVELOPER. The LAYOUT section is expanded, showing four options: Popup (selected and highlighted with a red border), Block, Table, and Field set. Below the LAYOUT section is an IMAGE section with an icon and the label 'Image'.

And the following image shows how the **Popup** custom control is used in the **Native Custom Control Popup** sample report.

The screenshot shows a report interface with three filter buttons at the top: Year, Product Line, and Company. The Product Line button is active, showing a dropdown menu for selecting a product line. The menu lists five categories: Camping Equipment, Golf Equipment, Personal Accessories, Outdoor Protection, and Mountaineering Equipment. At the bottom of the menu are two buttons: 'Select all' and 'Deselect all'. To the right of the menu is a table with data. The first column contains 'Revenue' and 'Information' links. The second column contains numerical values: \$1,948,223.21, \$1,372,444.61, \$348,204.38, \$215,013.28, and \$3,883,885.48. The third column contains 'Information' links. The table has a blue header row and alternating row colors.

Revenue	Information
\$1,948,223.21	Information
\$1,372,444.61	Information
\$348,204.38	Information
\$215,013.28	Information
\$3,883,885.48	

For more information, see [“Sample support for native custom controls” on page 27](#).

New JavaScript API documentation [Native Custom Controls](https://ibm.biz/NativeCCDocs) (<https://ibm.biz/NativeCCDocs>) was created to support this functionality.

Note: In previous versions of Cognos Analytics, to implement custom controls, you needed to add JavaScript to a report, as documented in the topic [Adding JavaScript to a report](#). This functionality is still valid.

Custom control API to detect saved report output

A new JavaScript API function `isSavedOutput()` is added to the scriptable report APIs. This function is used to detect whether a report is a saved report output.

Some of the scriptable report APIs are invalid in the context of saved report outputs. In previous versions of Cognos Analytics, these APIs generated errors when they were executed in saved outputs.

Starting with this release, the JavaScript function `isSavedOutput() → {Boolean}` can be used when creating custom controls or modifying the report functionality through APIs. This function returns a Boolean value to identify if the report is a saved output or not. Before calling a specific function, a client developer can use this new function to check whether the code can be executed in the saved report output.

The affected APIs include the following functions: `back()`, `cancel()`, `finish()`, `next()`, `reprompt()`. If a saved report output contains the unsupported API, a message is displayed that the API is not supported in saved report outputs.

The new function is documented in [Scriptable Reports](#) (https://ibm.biz/CC_Docs), with the Application interface.

New and updated JavaScript API documentation

The JavaScript documentation describes the APIs that are used to implement custom functionality in reports.

The following documentation is available:

- [Scriptable Reports](#) (https://ibm.biz/CC_Docs)

This preexisting documentation was updated and enhanced in this release.

- [Native Custom Controls](#) (<https://ibm.biz/NativeCCDocs>).

This documentation is new in this release.

For more information, see “[Native custom controls in the toolbox](#)” on page 14 and “[Custom control API to detect saved report output](#)” on page 16.

CCLocaleGenerator tool

The CCLocaleGenerator tool reads local information from the `cognos_analytics_install\configuration\i18n_res.xml` file and generates the prompting configuration files.

For more information, see the “[Locale-sensitive expressions](#)” topic in the *IBM Cognos Analytics - Reporting Guide*.

Dashboards and reports

Learn about new features that are common for dashboards and reports.

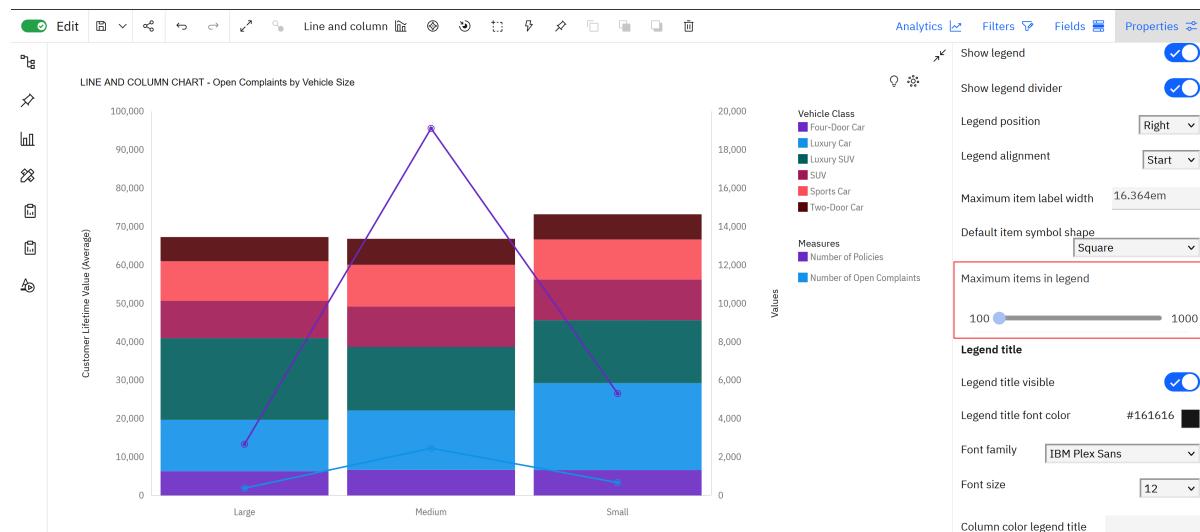
Setting the maximum number of items in a legend

Use the **Maximum items in legend** property to specify the maximum number of items to appear in a legend for a visualization that supports this property.

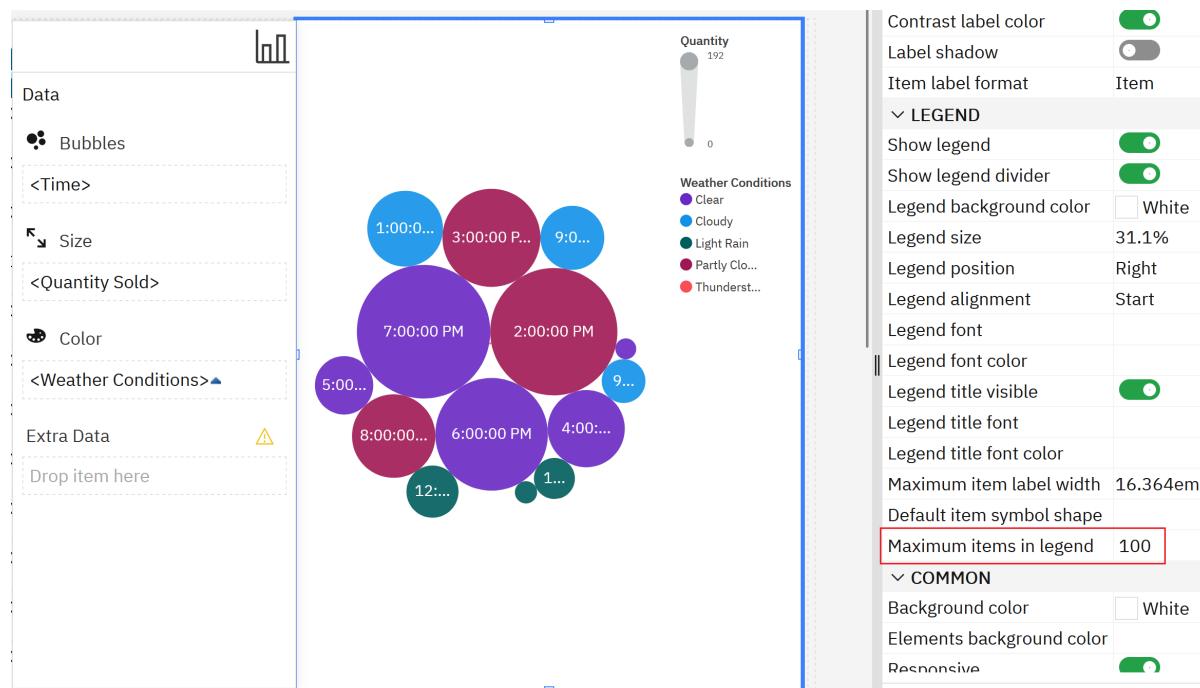
You can set a value between 100 and 1000. Values below 100 are automatically set to 100. Values above 1000 are automatically set to 1000.

This property is available in dashboards and reports for the following visualizations: bar, area, line, bubble, bullet, bar and line, dual line, pie, treemap, and waterfall. In combined visualizations, such as dual line or bar and line, the property applies to the legends of both visualizations.

In dashboards, set the **Maximum items in legend** property by using a slider.



In reports, you must type the value.



For more information, see the topic "Working with the legend" in the *IBM Cognos Analytics Dashboards and Stories Guide* and "Customizing the chart legend" in the *IBM Cognos Analytics - Reporting Guide*.

Mapbox Boundaries v4

As of release 12.0.3, maps use **Mapbox Boundaries v4**.

The updated version implements **adm3** (township, town, charter township) and **adm4** (city, town, village) boundaries from Mapbox for US and for all other countries. It also adds over 30,000 new postcode boundaries.

For more information, see *Maps*.

Modeling

Learn about new features and changes to the IBM Cognos Analytics modeling components, primarily data modules.

Enriching OLAP data sources

Use the **Load metadata** option in the administration user interface to import and enrich OLAP metadata.

An enriched cube includes the data characteristics that are required for the product AI-based functionality, such as forecasting in dashboards, to work.

The **Load metadata** option is available in the **Assets** page, from the cube context menu.

Assets

Connection type	
IBM Planning Analytics	
<input type="text"/> Search	
Asset	Status
CATALOG/NC2	◊ Not loaded
CATALOG/NC1	◊ Not loaded
CATALOG/modelcube3	◊ Not loaded
CATALOG/modelcube2	◊ Not loaded
CATALOG/ModelCube	◊ Not loaded
CATALOG/Input Cube	◊ Not loaded

Note: The option **Create data module** that was available from the **Assets** page in previous versions of Cognos Analytics is no longer available. For more information, see “[New way of creating OLAP-based data modules](#)” on page 18.

OLAP-based data modules that were created in previous versions of the product are still functional. However, to take advantage of the smart metadata for features like forecasting in dashboards, load the source metadata using the **Load metadata** option.

For more information, see the “Loading OLAP metadata” topic in the *IBM Cognos Analytics Manage Guide*.

New way of creating OLAP-based data modules

Data modules that are based on OLAP data sources are now created the same way as data modules that are based on relational data sources.

From the **Open menu**  in the application bar, click **New > Data module**, and select the related data server connection. The supported data server connection types include **IBM Planning Analytics**, **IBM Planning Analytics as a Service**, **Microsoft Analysis Services**, **Microsoft Azure Analysis Services**, and other OLAP connections.

In previous versions of Cognos Analytics, the cube data was imported and enriched when the option **Create data module** in the **Assets** page was used. This option is no longer available.

For more information, see the "Creating a data module from an OLAP cube" topic in the *IBM Cognos Analytics Data modules* guide.

Administration

Manage the security, access, and functionality of IBM Cognos Analytics components.

Enhanced support for Content Security Policies

As of release 12.0.3, Cognos Analytics supports additional Content Security Policy (CSP) directives that restrict the source of resources loaded by the application. Sources such as inline javascript or eval() once commonly used in applications - including a previous generation of Cognos Analytics - are common vectors for cross-site-scripting (XSS) attacks. A CSP can reduce the surface area for such attacks in an application.

If your Cognos Analytics environment uses a CSP that excludes the unsafe directives, some of its legacy features are negatively affected. When these features are blocked, you must disable a set of features disable a set of features that are impacted by the blocked CSP directives. Other affected features are not disabled, but have limitations.

For more information, see the following topics:

- "Content Security Policies (CSP)" in the *IBM Cognos Analytics Manage Guide*.
- "Configuring a Content Security Policy" in the *IBM Cognos Analytics Manage Guide*.
- "Feature impacts when a CSP blocks unsafe directives" in the *IBM Cognos Analytics Manage Guide*.
- "Disabling a set of features that are blocked by a CSP" in the *IBM Cognos Analytics Manage Guide*.
- "Content Security Policy violations" in the *IBM Cognos Analytics Manage Guide*.
- "More secure administration features" in the *IBM Cognos Analytics What's New Guide*.

Support for Planning Analytics as a Service

A new data server connection type, **IBM Planning Analytics as a Service**, takes advantage of MDX capabilities in the Planning Analytics Engine (PAE). These capabilities allow Cognos Analytics to send MDX queries directly to PAE, instead of processing the MDX itself. This change reduces memory requirements for the query service. It also reduces the number of caches used and the number of queries sent to Planning Analytics as a Service.

If you upgrade your Planning Analytics connection to a Planning Analytics as a Service connection, you can continue to use your existing packages and modules. When you create the connection, you enter a different URL for the database host and select a different authentication method. You don't need to modify your reports. However, some differences in results are expected.

Loading metadata for OLAP data sources

Use the **Load metadata** option in the administration user interface to import and enrich OLAP metadata.

You need to load the cube metadata before you can use the cube to create data modules. When the metadata is loaded, it is also enriched with the data characteristics that are required for the product AI-based functionality, such as forecasting in dashboards, to work.

The **Load metadata** option is available in the **Assets** page, from the cube context menu.

Assets

The screenshot shows the 'Assets' page in IBM Planning Analytics. At the top, it displays the connection type as 'IBM Planning Analytics'. Below this is a search bar labeled 'Search'. A table lists six assets under the columns 'Asset' and 'Status'. Each asset row has a small icon next to its name. To the right of the table is a button labeled 'Load metadata'.

Asset	Status
CATALOG/NC2	◊ Not loaded
CATALOG/NC1	◊ Not loaded
CATALOG/modelcube3	◊ Not loaded
CATALOG/modelcube2	◊ Not loaded
CATALOG/ModelCube	◊ Not loaded
CATALOG/Input Cube	◊ Not loaded

Note: The option **Create data module** that was available from the **Assets** page in previous versions of Cognos Analytics is no longer available. For more information, see “[New way of creating OLAP-based data modules](#)” on page 18.

OLAP-based data modules that were created in previous versions of the product are still functional. However, to take advantage of the smart metadata for features like forecasting in dashboards, load the source metadata using the **Load metadata** option.

For more information, see the “[Loading OLAP metadata](#)” topic in the *IBM Cognos Analytics Manage Guide*.

Faster processing of content retention rules

As of Cognos Analytics 12.0.3, content retention rules are applied more efficiently. This is the result of the retention rules being applied at different times than in previous releases.

A new method of processing

Asset owners can set retention rules on stored content that determine whether objects should be retained or deleted from the Content Store. Previously, retention rules were applied immediately: either when an asset's retention rule was updated or when a new object, governed by a retention rule, was added to the Content Store. This processing method resulted in Add or Update requests taking a long time to complete. In some cases, when many objects were flagged for removal, some objects were not removed, even though they met the retention criteria.

As of 12.0.3, retention rules are not applied immediately. They are instead applied as part of background processes that run at a regular interval.

Benefits

The processing of retention rules in this manner provides the following benefits:

- Add or Update requests are faster.
- Delete operations are done in small batches, reducing the transaction size.
- Expired objects (controlled by duration-based retention rules) are now removed on time (roughly within 10 minutes).

Note: You may occasionally see more retained objects than are specified by your retention rules. These extra objects will be removed the next time that the background processing runs (the default interval is 10 minutes).

Tuning

For tuning purposes, the administrator can adjust the interval that the background processes are run. This is accomplished by changing the values of these two Content Manager advanced settings:

- [CM.RETENTIONS_EXPIRATION_CHECK_INTERVAL](#)
- [CM.RETENTIONS_OUT_OF_SCOPE_CHECK_INTERVAL](#)

Upgrade implications

The new retention processing feature requires a higher version of the Content Store schema. As the feature is also available in release 11.2.4 FP3, it is compatible with release 12.0.3. However, the 11.2.4 FP3 schema is *not* compatible with the lower-version schema used in releases 12.0.0, 12.0.1, or 12.0.2.

Important:

Do not upgrade your 11.2.4 FP3 content to release 12.0.0, 12.0.1, or 12.0.2. To upgrade 11.2.4 FP3 content to version 12.0.x, choose release 12.0.3 or later.

Reason:

To support faster processing of content retention rules, schema changes are made in the content store of 12.0.3 (and later) and 11.2.4 FP3 (and later). Therefore, when you upgrade from 11.2.4 FP3 (or later), you must upgrade to a release with the same content store enhancements, for example, 12.0.3 (or later).

You can still upgrade any 11.2.x content **other than** 11.2.4 FP3 to any version of 12.0.x.

Setting retention rules on Content Store objects

You can set retention rules for your content by specifying these settings:

- the maximum number of versions of an asset that can be retained
- the maximum number of days or months that an asset is retained

Properties

- Set the maximum number of occurrences of run history or report versions that you can save
- Set the maximum duration that a run history item or report version is retained before it is deleted

Support for Microsoft Analysis Services 2022 (ODBO and XMLA)

Cognos Analytics supports the Microsoft Analysis Services 2022 data server (ODBO and XMLA).

Existing connections that are moved to this server might lose signons.

Reports that were created against previous versions of the data server still work after they are switched to use the new client and server. The client and server versions must match.

Similar to other Microsoft Analysis Services MSOLAP versions, the Microsoft Analysis Services MSOLAP client must be installed to the same location as the report server. For this version of Microsoft Analysis Services, the MSOLAP version 16 client is required.

To create a connection to the new data server from the **Manage > Data server connections** administration interface, select the generic **Microsoft Analysis Services** data server connection type, and then select **2022 (ODBO)**.

Note: The Microsoft Analysis Services 2022 (ODBO) data server type is not available in the Administration console.

For more information, see *Data servers*.

New version of the Salesforce API

As of release 12.0.3, connections to the Salesforce API are now updated to use version 59.0 by default.

When you create a new connection, the URL automatically includes the default instance name `login.salesforce.com` and the API version 59.0, for example:

```
jdbc:sfdc://https://login.salesforce.com/services/Soap/u/59.0;
```

Existing connections continue to use the previous Salesforce API version or you can update them to version 59.0.

For more information, see *Salesforce connection editor*.

Enhanced SSL certificate validation for Planning Analytics data sources

The IBM Cognos Analytics query service now performs an enhanced Planning Analytics data source SSL certificate validation, including hostname verification.

The hostname verification process ensures that the Planning Analytics server hostname matches the hostname in the digital certificate, which the server sends back as a part of the SSL connection handshake. The server identity check confirms that the Cognos Analytics server is communicating with the correct Planning Analytics server and wasn't redirected by a Man-in-the-Middle (MitM) attack.

The certificate validation change does not impact customers who use valid Planning Analytics SSL certificates.

An attempt to establish a connection with a Planning Analytics host, whose domain name doesn't match the certificate Subject Alternative Name (SAN), results in an error message.

For more information, see `javax.net.ssl.SSLPeerUnverifiedException: Certificate doesn't match`.

More secure administration features

Several more Cognos Analytics features have moved from the legacy Administration console to the **Manage** component. As well as adopting a more modern Carbon design, these features now meet stricter security directives that are defined in Content Security Policies.

For more information, see “[Enhanced support for Content Security Policies](#)” on page 1 and “[Carbon design adoption](#)” on page 3.

Note: All of the following features have the same workflow as with their previous, legacy user interface. However, these features are now more secure and have a cleaner look and feel.

Run history details

Actively running background requests or previously run background or scheduled requests now appear in a Carbon user interface.

Run details - 45 second report

View the details of this particular run.

Start time: Mar 22, 2024, 7:54:45 AM Completion time: Mar 22, 2024, 7:55:32 AM

Status: Succeeded [View the parent entry](#)

Messages

Time	Severity	Message
No entries		

Report

Options
Formats: HTML
Languages: English
Save the report: Team Content > reports > 45 second report

Report outputs
[Yes](#)

Drill through definitions

You can now access **Drill-through definitions** via **Manage > Configuration**.

< Configuration

—o System
—o Manage system settings

□ Diagnostic logging
Manage diagnostic logging settings

□ Drill-through definitions
Manage drill-through definitions

□ Routing rules
Define rules and routing tags for server groups

For more information, see [Setting up drill-through access in packages](#).

Running agents and agentViews

Agents and agentViews now use the modern **Run as** window.

Run as

Now
 Later
 Show Run history details window after you click Run
 Prompt me

Tasks

Name	Type	Location
Product line revenue	Report	Team Content > Samples > By feature > Core > Reports
Test Message Subject	Notification request	Team Content > Agents
SamCarterJob	Job	Team Content > Job

Summary
Delivery

[Cancel](#) [Run](#)

Archive versions

To access the archive for an asset, right click and then click **View versions > Archives**

The screenshot shows the 'Archive versions' dialog box. At the top, there are date range inputs: 'Start date' (02/25/2024) and 'End date' (03/25/2024). Below these are two tables. The first table, 'Versions', lists four entries: 'Mar 25, 2024, 2:33:49 PM', 'Mar 22, 2024, 5:51:00 AM', 'Mar 15, 2024, 1:20:13 PM', and 'Mar 8, 2024, 6:51:00 AM'. The second table, 'Formats', lists six entries under 'English': HTML, XML, CSV, Excel 2007, PDF, and Excel 2007 Data. A 'Close' button is in the top right corner.

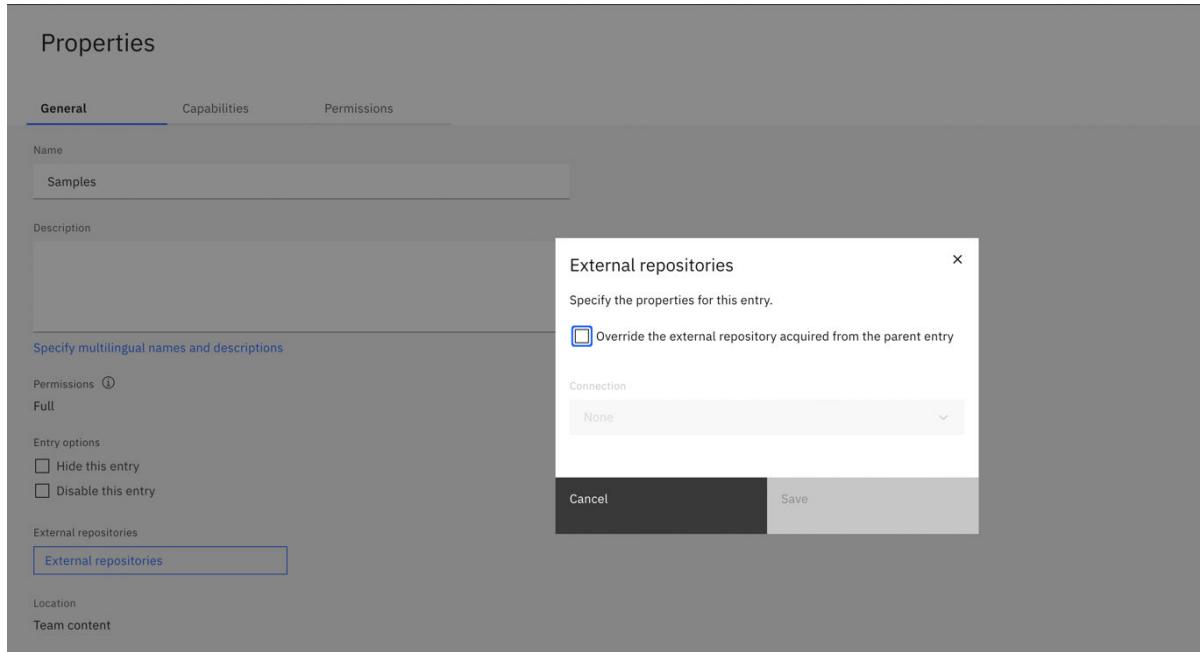
Set Multiple Languages

The **Multilingual names and descriptions** window also now follows Carbon design. Click **Properties > Specify multilingual names and descriptions**.

The screenshot shows the 'Multilingual names and descriptions' dialog box. It has a 'Language' section with a dropdown menu set to 'English'. Below it is a 'Name' section with the value 'New report123'. Under 'Description', there is a text input field with the placeholder 'Enter a description'. At the bottom are 'Cancel' and 'Save' buttons.

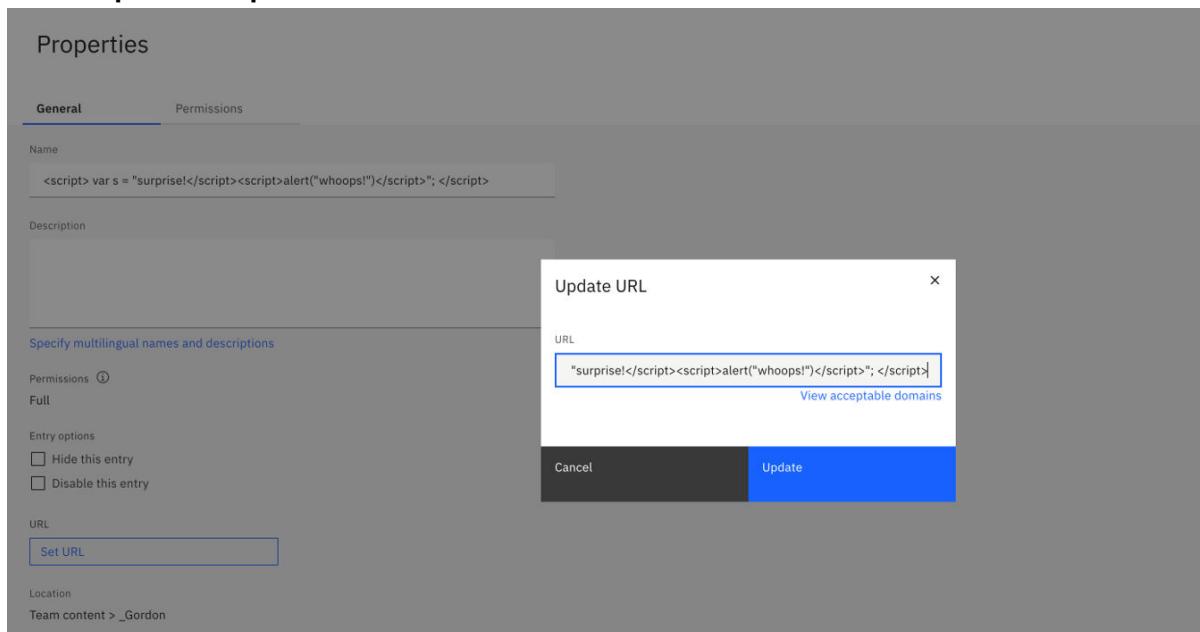
Set external repositories

Properties > External repositories



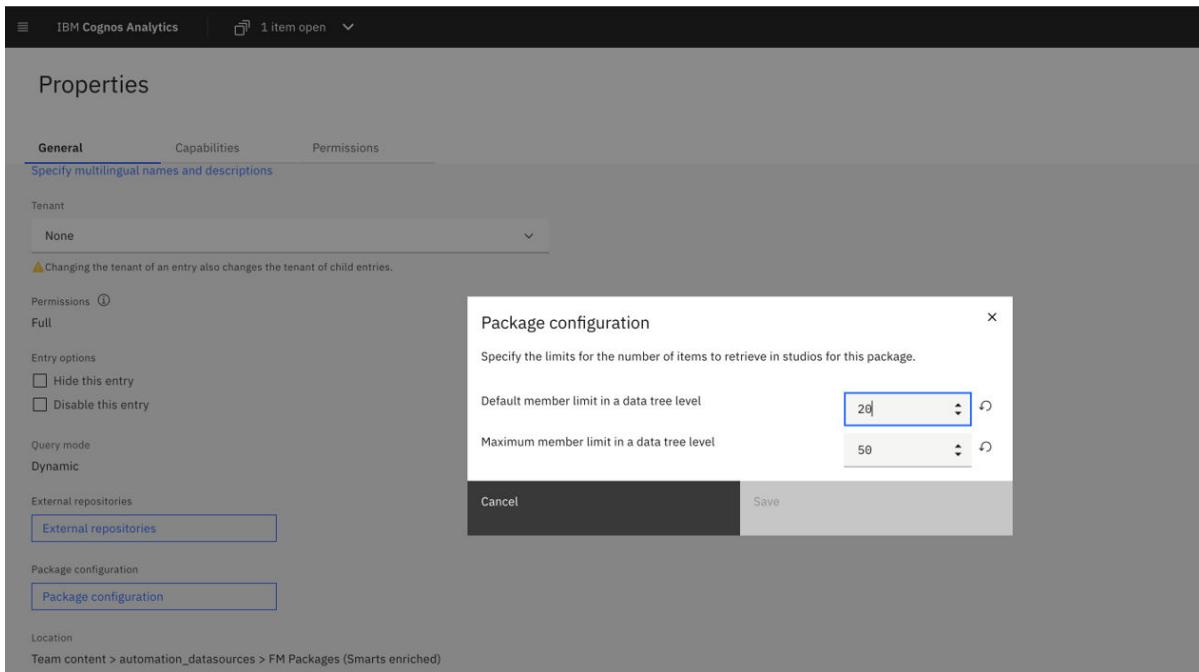
Update URL dialog

Click Properties > Update URL.



Package Configuration dialog

Properties > Package configuration



Managing dynamic namespaces by using REST API

Administrators can now read, create, update, and delete a dynamic namespace instance by using the IBM Cognos Analytics public REST API.

JSON files with configuration object samples can be found in the SDK folder when Cognos Analytics is installed.

You can view the full description on endpoints responsible for managing namespaces in the *REST API reference* section. You can also access the reference directly from your Cognos Analytics instance by entering the following URL:

```
http://<cognos_analytics_server>/api/api-docs
```

Tip: For more information on namespace types and configuration, see these topics:

- [Configuring an LDAP namespace](#)
- [Configuring an OpenID Connect namespace](#)
- [OpenID Connect authentication provider](#)

Exposing user, object, and system settings

As of release 12.0.3, you can download user, object, and system settings in a JSON format.

This feature is disabled by default and you need to enable it to see the download options in the IBM Cognos Analytics UI.

It aims to simplify and speed up the collection of settings for data analysis and comparison. For example, you might encounter a situation when one user is able to view or perform a specific thing, and another user is not. When you enable this feature, you can easily download the JSON file and compare the settings between different users.

For more information, see *Downloading settings*.

Supported Software Environments page for release 12.0.3

Supported Software Environments information is available for IBM Cognos Analytics 12.0.3.

You can find up-to-date information about the supported software, data sources, and minimum requirements for using IBM Cognos Analytics 12.0.3.

Visit the 12.0.x Supported Software Environments page at <https://www.ibm.com/support/pages/node/6966712#12.0.3>.

Samples

Get a deeper understanding of Cognos Analytics capabilities with updated sample content.

New and deprecated themes

A new sample theme named **SampleTheme_12_0_1.zip** was added to the base samples.

The new theme uses the new IBM Carbon X palette ("paletteId": "IBM_Modern").

The following sample themes that used the palette "paletteId": "IBM" are deprecated:

- SampleTheme_11_2.zip
- SampleThemeBlueGreen_11_2.zip
- SampleThemeDarkBlue_11_2.zip
- SampleThemeLight_11_2.zip

For more information, see [Theme and extension samples](#).

Sample support for native custom controls

The base samples deployment includes an extension and a report to support native custom controls.

The **Native Custom Control Popup** report is available in **Team content > Samples > By feature > Custom controls**.

The **Native_Custom_Control_Popup** extension can be downloaded or updated from **Manage > Customization > Extensions**.

For information about the new product feature, see [“Native custom controls in the toolbox” on page 14](#).

Updates to the Great Outdoors data module

The sample **Great Outdoors data module** was modified.

This sample data module uses an uploaded file with multiple tabs derived from the GOSALES DW sample database to emulate the data module best practices against an enterprise data warehouse. This data module employs star schema groupings to organize three areas of the business (Sales, Sales Targets, and Returns). It also demonstrates relative time and navigation paths.

The sample is located in **Team content > Samples > By feature > Core > Data** folder.

For more information, see “Base samples” in the *Cognos Analytics Samples Guide*.

Risk matrix custom visualization

As of release 12.0.3, you can use a risk matrix custom visualization.

Risk matrix is a type of a heat map that shows the probability of a risk event and its impact. It is limited to 4x4 area.

You can find it on GitHub with other custom visualization samples: https://github.com/IBM/ca_customvis/tree/master/code-samples/11.1.x

Probability, Impact, Risk ID



For more information, see *Custom visualizations code samples*.

Installation and configuration

Learn about changes to the IBM Cognos Analytics installation and configuration.

Support for WebView2 authentication for Transformer

Cognos Analytics Transformer now supports using Microsoft Edge WebView2 for authentication through a new feature flag. Enabling this feature flag (which is disabled by default) allows Transformer to be compatible with newer web standards when you authenticate to the Cognos Analytics server.

For more information, see "Configuring Transformer authentication using WebView2" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Upgrade to NodeJS 20.11.1

Cognos Analytics 12.0.3 includes a new version of NodeJS: version 20.11.1.

Important: NodeJS 20.11.1 requires that the gcc library be version 10.x or higher. Some versions of AIX and Linux that are supported by Cognos Analytics 12.0.3 do not include gcc library 10.x or higher by default.

To check which version of the gcc library your AIX or Linux operating system is running, type this command:

```
gcc -v
```

If you do not have gcc 10.x, you can install it by running this command:

- dnf install gcc10 libgcc10
or
• yum install gcc10 libgcc10

For a list of operating systems that Cognos Analytics 12.0.3 supports, see the [CA 12.0.3 Operating System Software Compatibility Report](#) (<https://www.ibm.com/software/reports/compatibility/clarity-reports/html/osForProduct?deliverableId=13F8CDC4A115476FB28374E02DB09473>).

Release 12.0.2 - January 2024

This section describes new and changed features in IBM Cognos Analytics 12.0.2.

Important:

Do not upgrade your 11.2.4 FP3 content to version 12.0.0, 12.0.1, or 12.0.2. If you do so, you may need to run specialized scripts before you can do another upgrade to version 12.0.3 or later. If you want to upgrade 11.2.4 FP3 content to version 12.0.x, you must wait until 12.0.3 or later to do so.

Reason:

Schema changes are made in the content store of 11.2.4 FP3 (and future releases) to support [faster processing of content retention rules](#). Therefore, when you upgrade from 11.2.4 FP3 (or later), you must upgrade to a release with the same content store enhancements, for example, 12.0.3 (or later).

You can still upgrade any 11.2.x content **other than** 11.2.4 FP3 to any version of 12.0.x.

Multiple components

Learn about enhancements to the user interface, training materials, and features that affect multiple IBM Cognos Analytics components.

Stored data management

Both administrators and end users can manage a list of uploaded files and data sets, also referred to as *stored data*. If you're an administrator, you can view all the stored data in your Cognos Analytics environment. If you're an end user, you can manage all the stored data for which you are the owner.

To view a list of stored data, select one of these methods:

- If you're an administrator, select **Manage > People > Stored data** to manage all stored data in your Cognos Analytics environment.

For more information about the administrator function, see "Managing stored data" in the *IBM Cognos Analytics Managing Guide*.

- If you're an end user, click the **Personal menu** icon . Then click **Profile and settings > Profile** and then, next to **My stored data**, click **Manage** to see your own stored data.

For more information about the end-user function, see "Managing your stored data" in the *IBM Cognos Analytics Getting Started Guide*.

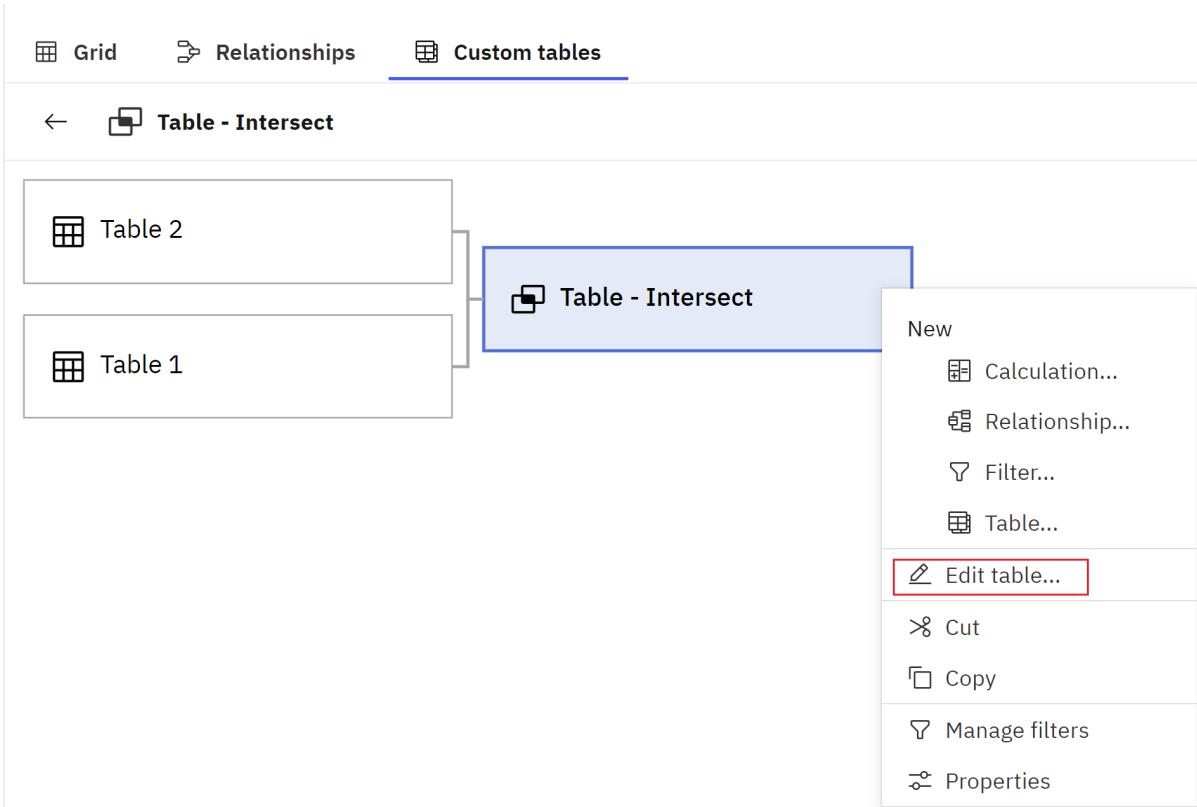
Editing the union, except, and intersect custom tables

You can add and remove tables from an existing union, except, or intersect custom table. You can also update the columns in these custom tables based on column changes in their underlying reference tables.

In previous versions of Cognos Analytics, to make these types of changes you needed to recreate the union, except, or intersect table.

Adding and removing tables

In the data tree, the **Relationships** diagram, or on the **Custom tables** tab, from the union, except, or intersect table context menu, select the **Edit table** option to open the table editor.



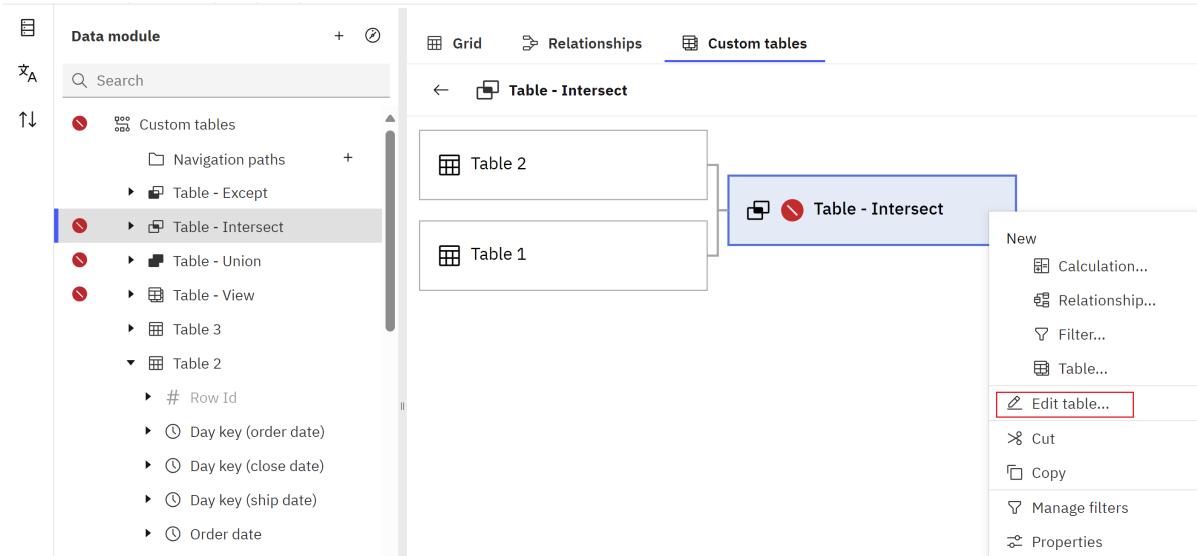
Then, proceed to add or remove tables from these 3 types of custom tables.

For more information, see the "Editing the union, except, and intersect custom tables" topic in the *IBM Cognos Analytics Data Modules Guide*.

Updating columns

You cannot explicitly add, remove, or modify columns in an existing union, except, or intersect custom table. However, you can do these changes in its reference tables, and then synchronize the changes.

When you add, remove, or modify columns in the reference tables, the column changes are not automatically synchronized with the custom table, and validation errors might be generated for the custom table. To apply the column changes to the custom table, select its **Edit table** option (in the data tree, the **Relationships** diagram, or on the **Custom tables** tab) to open the table editor.



Then, proceed to verify and update the custom table with the updated columns. The columns in the reference tables and the union, except, or intersect custom table are now synchronized.

For more information, see the "Editing the union, except, and intersect custom tables" topic in the *IBM Cognos Analytics Data Modules Guide*.

Conditional formatting of data in more visualizations

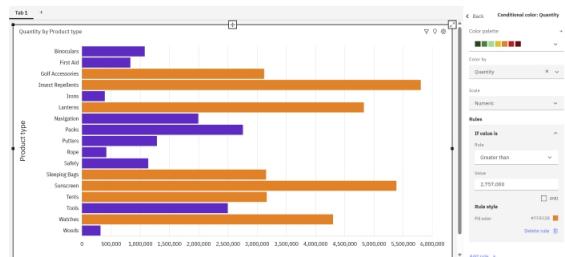
You can conditionally format data with color in more visualizations and set properties to format data which you select with rules.

Previously, conditional formatting with color was available for crosstab, table, and KPI visualizations. For more information, see [Highlighting conditionally formatted data with color](#).

You can use the formatting in the following other visualizations in dashboards, explorations, and stories:

- Area
- Bar
- Bubble
- Bullet
- Column
- Line
- Pie
- Point
- Stacked bar
- Stacked column
- Treemap

The following example of a bar visualization shows Quantities by Product types with orange as the conditional color that highlights quantities greater than 2,757,000.



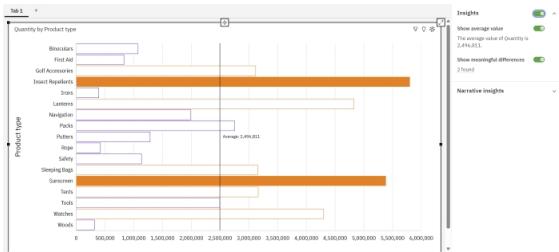
The following properties of conditional formatting are modified or new:

- By default, the value of **Fill color opacity** is set to 100 for the new visualizations.
- More than three rules can be created to conditionally color measures in KPI visualizations.
- When you use the conditional formatting in line visualizations, the **Show markers** property is not available in **Properties > Visualization > Chart**. You cannot make markers invisible.
- The conditional color is also applied to measures when you turn on insights.

Note: The following limitations apply:

- You cannot highlight data elements that are generated by forecasting.
- You can apply the **Conditional color** option to single data item at a time.

The following image shows how a bar visualization with conditionally highlighted measures looks when you turn on **Insights**. Measures greater than 2,757,000 are in orange. Bars of meaningful difference are entirely filled with color. Other bars have only colored borders.



Assistant

Ask questions in natural language to find, explore, and gain quick insights into your data.

Data source selection changes in the Assistant

To get started in the Assistant, when you open the Assistant panel, you can now connect to sample data sources or to your own data source.

The screenshot shows the Assistant interface with the following elements:

- Top Bar:** Includes icons for search, message, camera, help, and user profile.
- Title Bar:** Shows 'Assistant' and standard window controls.
- Middle Panel:**
 - No source:** A status message with a warning icon and a 'Select' button.
 - @Cognos:** A placeholder for a sample data source.
 - Welcome to Assistant:** A welcome message.
 - Select a source to get started:** A main heading.
 - Source Options:**
 - Use a sample data source:** A section with a 'Recommended' button and a 'Select sample data source' button.
 - Use your own data source:** A section with a 'Select my data source' button.
 - Learn more about using the Assistant:** A link.
- Bottom Bar:** Includes an 'Ask a question' input field and a right-pointing arrow.

Sample data sources have been optimized for use with the Assistant and you can select from the following three sources to explore the Assistant's features:

- Call center
- Coffee sales and marketing
- Hospital admissions

Open X

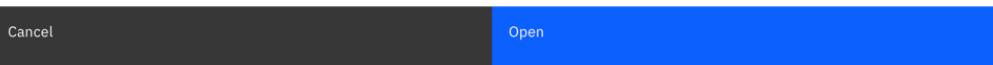
My content Team content

Team content / Samples / By feature / Assistant

⋮ ⌂ ⌃

Name	Type	Tenant	Last Modified
🔗 Shortcut to Call center	Shortcut		10/24/2023, 9:51 AM
🔗 Shortcut to Coffee sales and marketing	Shortcut		10/24/2023, 9:57 AM
🔗 Shortcut to Hospital admissions data module	Shortcut		10/24/2023, 10:03 AM

Cancel Open



When you select a sample data source, the Assistant connects to the selected data source and a list of suggested questions display in the Assistant.

Assistant ⟳ ↻ X

Call center ⓘ Change

Learn more about using the Assistant >

select source Call center

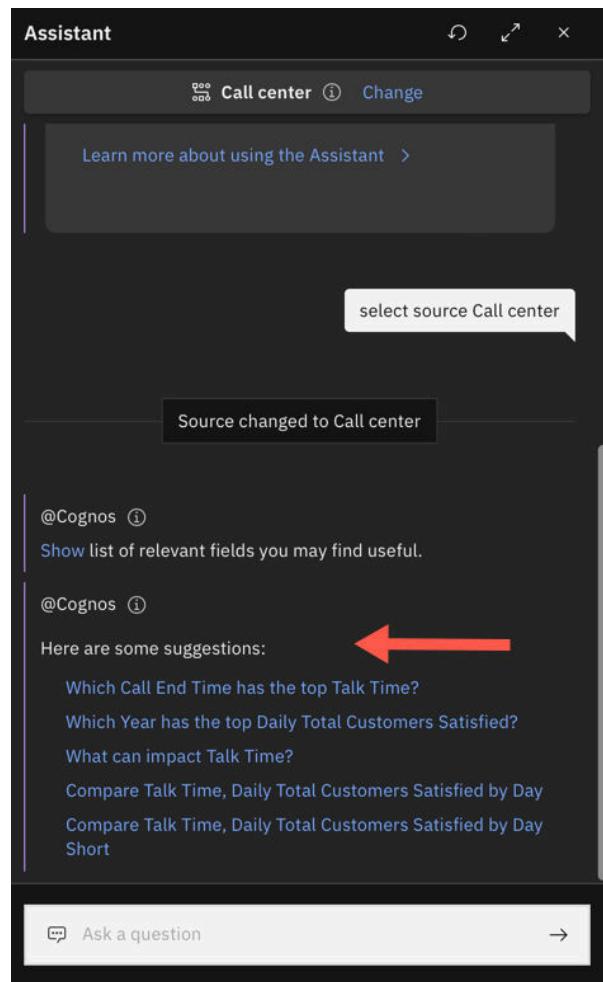
Source changed to Call center

@Cognos ⓘ
Show list of relevant fields you may find useful.

@Cognos ⓘ
Here are some suggestions: ←

Which Call End Time has the top Talk Time?
Which Year has the top Daily Total Customers Satisfied?
What can impact Talk Time?
Compare Talk Time, Daily Total Customers Satisfied by Day
Compare Talk Time, Daily Total Customers Satisfied by Day Short

Ask a question →

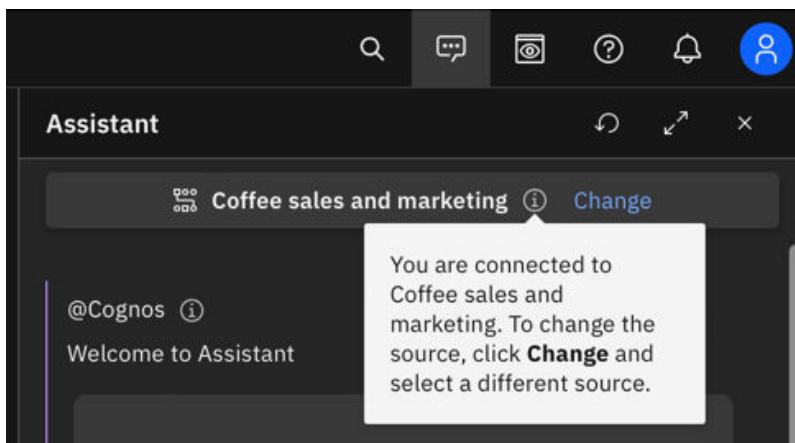


You can choose to connect the Assistant to your own data source to get quick insights about your data.

Note: When you select your own data source, you won't see list of suggested questions. Type **suggest questions** to see a list of suggestions or enter your query directly in the input box.

You can also optimize your own data source for better responses from the Assistant. For more information, see [Optimizing data for the Assistant](#).

To change the data source the Assistant is connected to, click the **Change** link and select a new data source.



At any time, click **Learn more about using the Assistant** to see more information about the Assistant in the Learn pane. Click **Back to Assistant** to go back to your conversation in the Assistant.

Optimized sample data sources for the Assistant

You can now optimize your data for even better responses in the Assistant. While the Assistant successfully understands natural language and can quickly interpret data to return answers to your queries, the quality of these responses depend on the quality of the data.

There are six ways to optimize your data modules for the Assistant. For more information on how to implement each of these optimization methods, refer to [Optimizing data for the Assistant](#).

In Cognos Analytics 12.0.2, you can also [connect to a sample data source](#) which has already been optimized for use with the Assistant.

Hide unneeded columns

You can hide columns that might not be useful in visualizations such as row ID or product code columns. These hidden columns are fully functional in the product but cannot be selected in new visualizations or dashboards. Any columns that you hide, appear in gray in the data module tree.

The screenshot shows the Data module interface. At the top, there's a header with a list icon, the text "Data module", a plus sign, and a delete icon. Below the header is a search bar with a magnifying glass icon and the placeholder text "Search". The main area contains a list of entities, each preceded by a right-pointing arrow and some descriptive text. The entities are:

- Quarter
- Hospital
- Hospital Synonyms
- Department
- Departme...Synonyms
- Age Range
- Gender
- Admissions
- Admissions synonyms
- Target
- Distance from Home
- Distance f...ata Group)
- # Row Id
- State Abbreviated
- Hospital Code

The last three items (# Row Id, State Abbreviated, and Hospital Code) are highlighted with a red rectangular box.

Rename columns

To make sure that column names in the data module reflect the data accurately, you can rename columns. Rename columns that include underscores, dashes, or abbreviations as these can be difficult to use when asking the Assistant a question in natural language. Use proper sentence capitalization and use terms that your end users understand.

Add Synonyms

You can train the Assistant to understand terms in your data that it might not recognize by adding synonyms. Synonyms are also beneficial if end users for your data might use other terms for a column name that mean the same thing.

The screenshot shows a 'Data module' interface with a search bar at the top. Below the search bar is a tree view of data sources. The tree structure includes categories like 'Address', 'Latitude', 'Longitude', 'Hospital', and 'Hospital Synonyms'. Under 'Hospital', there are sub-categories: 'Campus', 'Center', 'Emergency Room', 'ER', 'Facility', 'Institution', and 'Location'. A red arrow points to the 'Hospital Synonyms' node.

- ▶ Ⓜ Address
- Ⓜ Latitude
- Ⓜ Longitude
- ▶ abc Hospital
- ➡ Hospital Synonyms
 - ▶ abc Campus
 - ▶ abc Center
 - ▶ abc Emergency Room
 - ▶ abc ER
 - ▶ abc Facility
 - ▶ abc Institution
 - ▶ abc Location

Create useful calculations

You can create calculations such as a count field which always returns 1. In tables that are lists or logs, a count field that always returns 1 lets you get the count of employees in an employee table or the number of calls in a call log table.

Eliminate duplicate column names across tables

To avoid ambiguity in your data, if you have multiple tables in a data module, make sure that the same column names does not appear in more than one table.

Set data formats

You can set formats for the values in your data module to ensure that the Assistant responses are easy to read and understand. For example, you can choose to display a value as a local currency, or as a number with consistent decimal places.

Dashboards

Use IBM Cognos Analytics dashboards to discover key insights about your data and monitor events or activities at a glance.

Widget connection limit increased

You can now create a maximum of 20 groups of widgets. The previous limit was five groups of widgets.

For more information about creating groups of connections, see "Disconnecting visualizations and filter widgets" in the *IBM Cognos Analytics Dashboards and Stories User Guide*.

Embedding visualization code

You can use a code snippet to easily embed dashboard visualizations in websites or in applications that support HTML.

About this task

You do not need to use public Application Programming Interfaces (APIs) to embed visualizations in websites. Instead, use the **Embed** function that is available in the dashboard toolbar. This function generates a code snippet that can be put into the code of a website.

Important: This function is available only in IBM Cognos Analytics on-premises.

Procedure

1. Open a dashboard from **Content**.
2. After saving changes that you made in the dashboard, select one or more visualizations that you want to embed.

You can only embed visualizations that are available in the **System** section of the **Visualizations** gallery.

3. Click the **Embed** icon  in the toolbar.
4. Click the **Copy** icon  to copy the code snippet.

Note: The next steps require web developer skills.

5. In an HTML editor, create new HTML file or open the file with the code of the website in which you want to embed visualizations.



Attention: The HTML file must start with the `<!DOCTYPE html>` declaration.

6. Paste the snippet into the HTML file.
7. Fit embedded visualization to the website:

- Specify the height of the visualization that you want to embed in pixels for all HTML containers.
- If you want the language of the visualization to be different than the language of the website, define the language of the visualization in the snippet. For example, to set the product language (pl) to French and the content language (cl) to German, add the query string `?pl=fr&cl=de` in the first script element of the snippet:

```
.../bi/dashboard/js/api/CognosDashboardApi.js?pl=fr&cl=de
```

If only one of the languages is set with the string, this language will be used to both the product and the content.

If no language is set, the local language of browser will be used.

Note: The content language is defined by letters and might include a territory variant. For example, use `en-US` to set English that is used in the United States of America.

8. Save the HTML file.
9. If you embed your visualization in a website that is on a domain other than your Cognos Analytics installation, you must enable Cross-Origin Resource Sharing (CORS) for the server in Cognos Analytics. To enable CORS, you can use one of the following ways:
 - Configure the `Configuration.cookieSameSite` advanced setting in Cognos Analytics. For more information, see [Setting the cookieSameSite attribute](#).
 - Add headers to the configuration of your HTTP server. For example, for HTTP Apache server, you need to add the following headers:

```
Header always set Access-Control-Allow-Origin "https://host name:port number"  
Header always set Access-Control-Allow-Headers "Content-Type, Content-Encoding, X-
```

```

Xsrf-Token, X-Audit-Datasearchpath, X-Audit-Type, X-Queryuserid, X-Model-Last-Modified,
X-Audit-Searchpath, X-Qs-Querycontext-Id, X-Ca-Affinity, Etag, X-Ca-Transaction, X-
Compressed-By, X-Qs-Request-Id"
Header always set Access-Control-Expose-Headers "X-Ca-Affinity "
Header always set Access-Control-Allow-Credentials "true"
Header always set Access-Control-Allow-Methods "POST, GET, PUT, DELETE, PATCH, OPTIONS"
Header onsuccess edit Set-Cookie (.*) "$1; SameSite=None; Secure"

```

Results

An embedded visualization is now visible on the website. To interact with an embedded visualization, click the visualization and log in with your Cognos Analytics credentials. Such interactions do not affect original visualizations because they are limited to consumer actions.

Reports

IBM Cognos Analytics- Reporting is a web-based report authoring tool that professional report authors and developers use to build sophisticated reports against multiple databases.

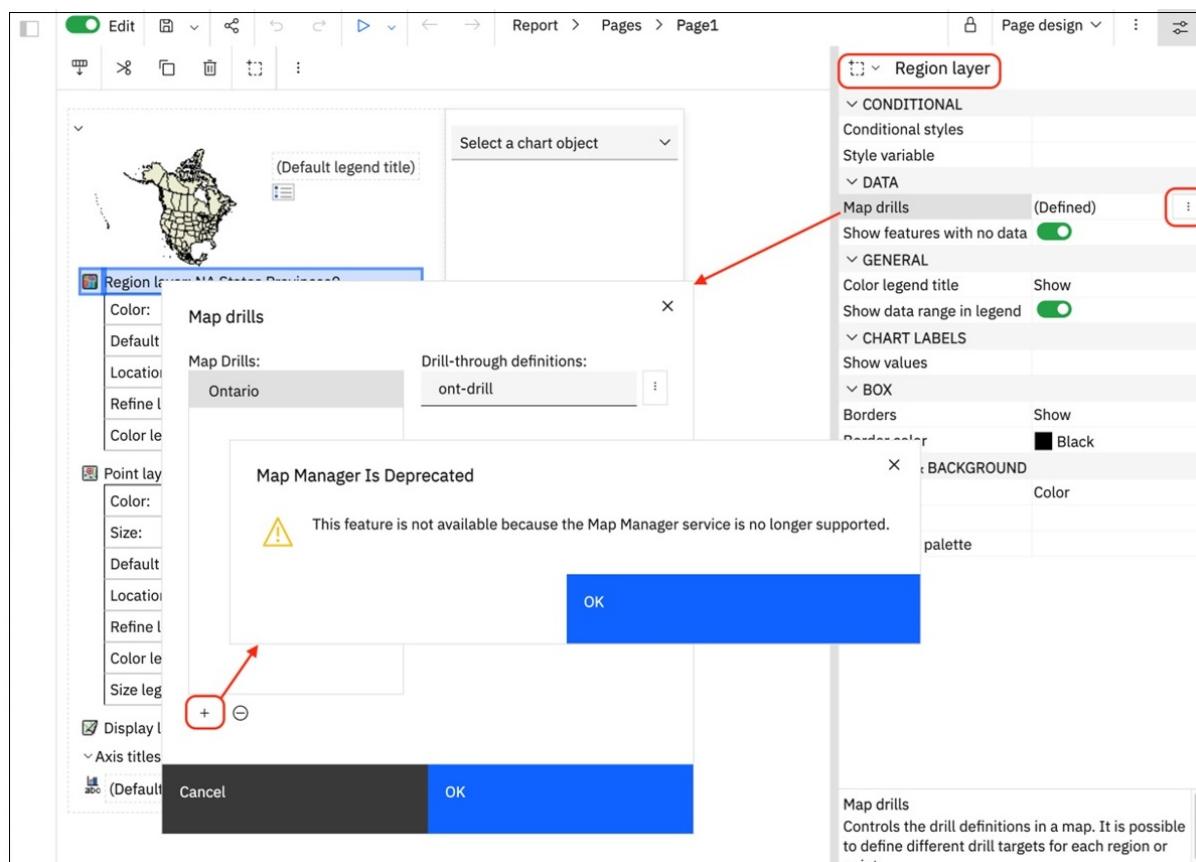
Map Manager removed from Reporting

Map Manager maps are no longer supported in IBM Cognos Analytics - Reporting.

Existing reports that contain Map Manager maps continue to run. However, the reports are impacted in the following way:

- HTML, PDF, and Excel report formats

In these report formats, an informational message is displayed instead of the Map Manager map. This message is located in the same area of the report where the Map Manager map was located, and is of the same size as the map. This way the report layout is not affected.



- CSV, Excel data, and XML report formats

In these report formats, only the query of the first data container in the layout is used to generate the output file. If a Map Manager map is the first data container, the next data container that is not a Map Manager map is used. In this case, a scenario with no data in the report is possible.

The same behavior applies to any saved report output containing Map Manager maps that is generated in Cognos Analytics 12.0.2. Existing saved report outputs continue to display as before.

Users can convert their Map Manager maps by using one of the supported visualization engines. Automatic migration is not available.

Search and select prompt improvements

When you now perform a search in a **Search & select prompt** control, a background request is submitted, and the search results are displayed without reloading the entire page.

The search & select prompt behavior can be controlled by the **Request mode** property on the prompt. This property is available only in interactive reports (where the **Run with full interactivity** property is turned on).

The screenshot shows the configuration interface for a 'Search & select prompt' control. At the top, there is a 'Rows per page' input field set to 5000. Below it is a 'Properties' section with a 'GENERAL' category expanded. Under 'GENERAL', several settings are listed with their current values: 'Required' (on), 'Multi-select' (off), 'Cascade source' (off), 'Hide adornments' (off), 'Parameter' (product), and 'Case insensitive' (on). A dropdown menu for 'Request mode' is open, showing 'Modern' as the selected option. The 'Request mode' dropdown is highlighted with a red border. Below the 'GENERAL' section, another collapsed category 'BOX' is visible, with a 'Box type' input field.

The **Request mode** property has the following values:

Legacy

The search & select prompt reloads the entire page.

This is the default behavior for prompts that were created before Cognos Analytics 12.0.2.

Modern

The search & select prompt works in the new way (without reloading the entire page).

This is the default behavior for new prompts, starting with Cognos Analytics 12.0.2.

In classic reports, the **Request mode** property is not available.

Existing search & select prompts continue to work as in prior versions of Cognos Analytics.

For more information, see the "Changing the search mode in a Search and select prompt" topic in the *IBM Cognos Analytics Reporting Guide*.

Enabling RSVP recordings for specific users, without a server restart

Starting with this release, administrators can enable RSVP recordings for a specific user by using the **Reporting.RecordUser** advanced setting. The IBM Cognos Analytics service does not need to be restarted.

Until this release, to enable RSVP recordings the administrator needed to modify the `rsvpproperties.xml` (or `rsvpproperties.xml.sample` for a new installation) file, and restart the Cognos Analytics server. Using this method, which is still supported, RSVP recordings are enabled for all users and all report executions, with high performance impact.

If the user that is specified in **Reporting.RecordUser** exists in multiple namespaces, RSVP recordings are generated for each matched user, in each namespace.

Performance is impacted when RSVP recordings are enabled. Ensure that they are disabled when no longer needed. To turn off the recordings, set **Reporting.RecordUser** to blank.

For more information, see the "Enabling RSVP recordings for specific users" topic in the *IBM Cognos Analytics Manage Guide*.

Removing Excel sheet numbering

As a result of product improvements, the **RSVP.EXCEL.NUMBEREDSHEETNAMES** advanced server property that was used to configure Excel sheet numbering is no longer needed and was removed.

For customers who used the **RSVP.EXCEL.NUMBEREDSHEETNAMES** property set to `false` there is no difference in the product behavior, except for some improvements (consistency and defect fixes) that are delivered in this release. The product behavior when the **RSVP.EXCEL.NUMBEREDSHEETNAMES** property was set to `true` is no longer supported.

The **RSVP.EXCEL.XLS2007_SUFFIX_PAGENUMBER** is also removed. This property was introduced in Cognos Analytics 12.0.1 to support the **RSVP.EXCEL.NUMBEREDSHEETNAMES** property, and was intended as a temporary solution ("Excel sheet naming improvements" on page 77).

For more information, see the "Naming duplicate sheets in Excel 2007 reports" topic in the *IBM Cognos Analytics Administration and Security Guide*.

Dashboards and reports

Learn about new features that are common for dashboards and reports.

Dual line visualization

The dual line visualization is a combined visualization that shows relationships between data sets.

You can use the dual line visualization to show the relationship between two data sets that are represented by lines.

Unlike the line visualization, the dual line visualization has two value axes of different ranges that are related to each data set.

For more information, see [Dual line](#).

Negative values and item labels as percentage

You can now use two properties to show negative values and item axis labels as percentage.

These properties are available for [Marimekko](#) visualizations.

Display negative values

Use this property to show negative bars. To apply the property, perform the following steps:

1. Click the **Properties** icon.

2. In the **Chart** section of the **Properties** pane, turn off the **Display as stacked percent chart** property.
3. Turn on the **Display negative values** property.

Show item axis labels as percentage

Apply this property to show the percent contribution of each item to the total width of the items. To use the property in your visualization, perform the following steps:

1. Click the **Properties** icon.
2. In the **Properties** pane, go to the **Item axis label** subsection of the **Axis** section.
3. Click the **Show item axis labels as percentage** property.

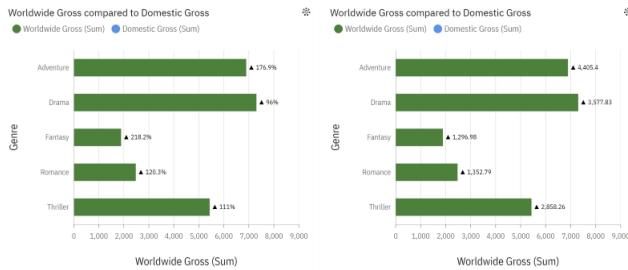
Additional formats of value labels in bullet visualizations

You can now use additional formats of value labels, percentage delta of target and value delta of target, in bullet visualizations.

To use the formats in the visualizations, perform the following steps:

1. Click the **Properties** icon.
2. In the **Chart** section of the **Properties** pane, turn on the **Show value labels** option.
3. Select the format of the value label in the **Value label format** drop-down list.

The example of bullet visualizations that show worldwide gross profit (bar length) compared to domestic gross profit (target) for movie genres. Value labels in the format of percentage delta of target are displayed in the visualization on the left side of the image. Value labels in the format of value delta of target are displayed in the visualization on the right side of the image.



Show value axis zero grid line in visualizations

You can place a custom line at the zero point of the value axis.

To display a custom value axis zero grid line in visualizations, perform the following steps:

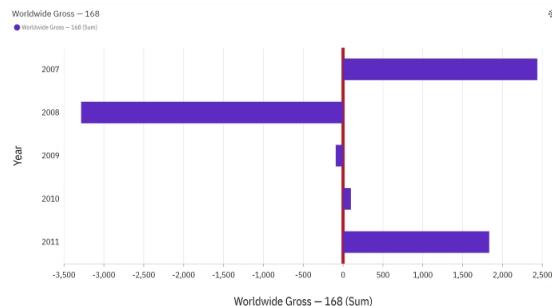
1. Click the **Properties** icon.
2. In the **Axis** section of the **Properties** pane, click the **Show value axis zero grid line**.
3. Style the line with two zero grid line properties:
 - Column value axis zero grid line color** to adjust the color of your custom line.
 - Column value axis zero grid line width** to adjust the thickness of your custom line.

The **Show value axis zero grid line** property is available in the following visualizations:

- Area
- Bar
- Bubble
- Bullet
- Column

- Dual line
- Line
- Line and column

The example of a custom value axis zero grid line (vertical red line) in the bullet visualization of the worldwide gross profit - 168 for years.



Modeling

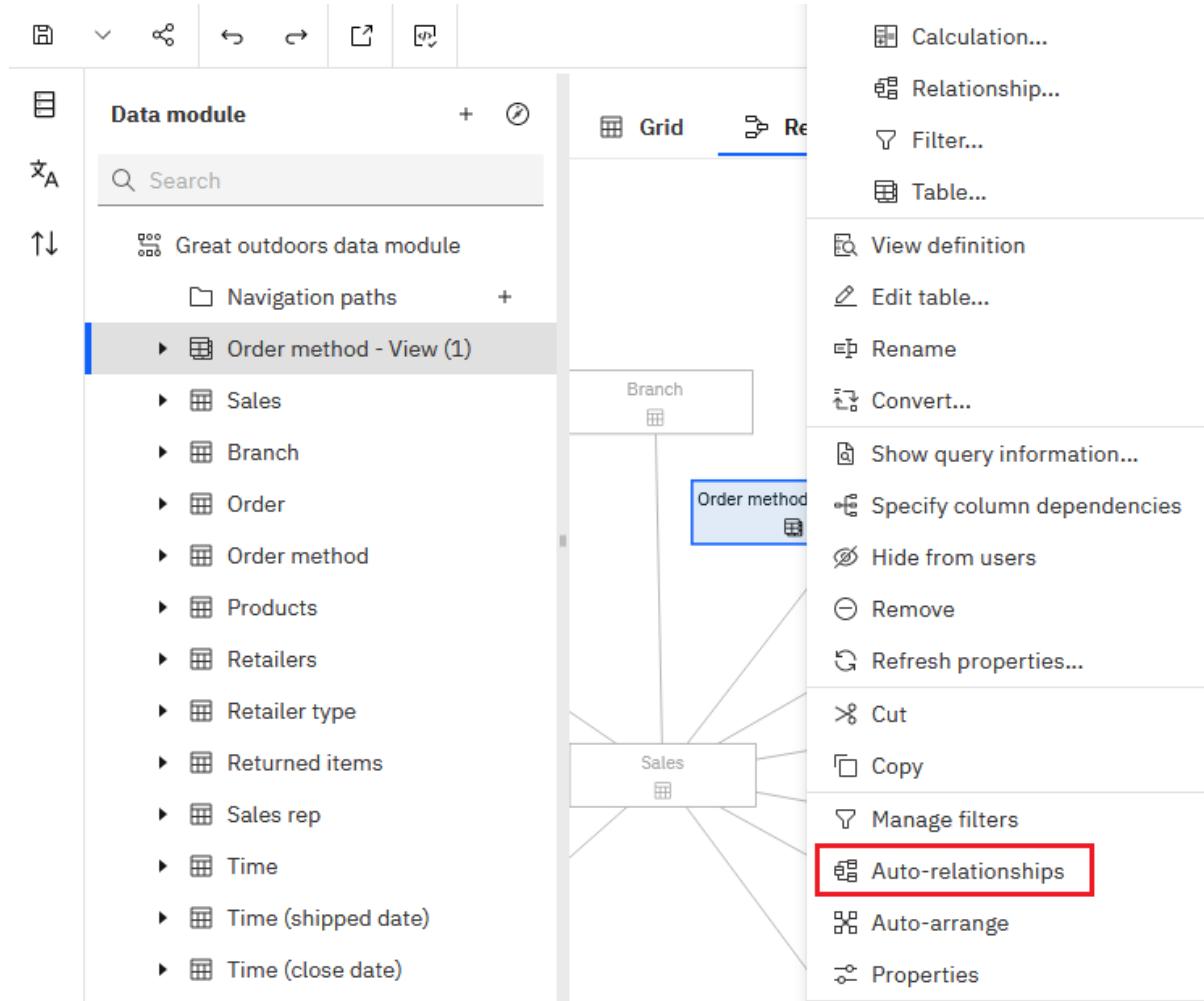
Learn about new features and changes to the IBM Cognos Analytics modeling components, primarily data modules.

Auto-relationships

Data modules now support automatic creation of new relationships, called auto-relationships, between tables from different data sources. The auto-relationships are discovered and generated with minimal effort from the modeler.

By using auto-relationships, you can avoid the manual effort of identifying the related tables and connecting them. For example, when adding new uploaded files to a schema-based data module, you can establish relevant relationships throughout the data module with just a single click.

You can initiate the discovery action from the **Relationships** diagram or from the metadata tree. Select one or multiple tables, and from their context menu , click **Auto-relationships**.



When the relationship discovery is successfully completed, a toast message shows the number of generated relationships, and the new relationships are visible in the relationship diagram. To accept the auto-generated relationships, save the data module.

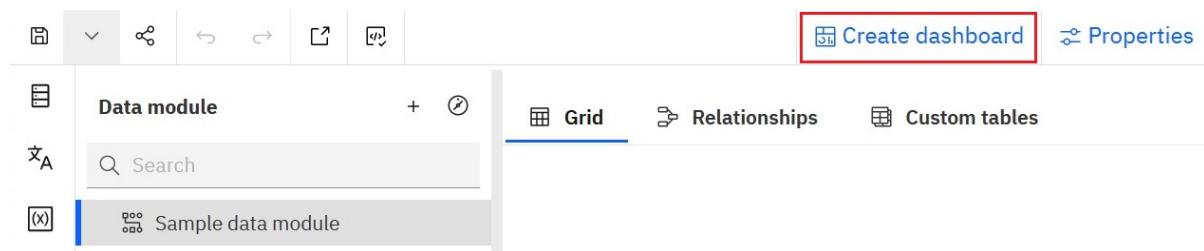
Tip: You can use the undo and redo buttons in the application bar to revert or restore your changes.

For more information, see the "Generating auto-relationships" topic in the *IBM Cognos Analytics Data Modules Guide*.

Creating a dashboard within a data module

You can start creating a dashboard in the data module user interface.

A new button **Create dashboard** is now available in data modules.



Clicking this button opens the dashboard user interface with the **Sources** panel showing the data from that data module.

When you create a new data module, clicking this button before the data module is saved prompts you to save the data module. Only then the dashboard user interface is displayed.

For more information, see the "Creating a dashboard within a data module" topic in the *IBM Cognos Analytics Data Modules Guide*.

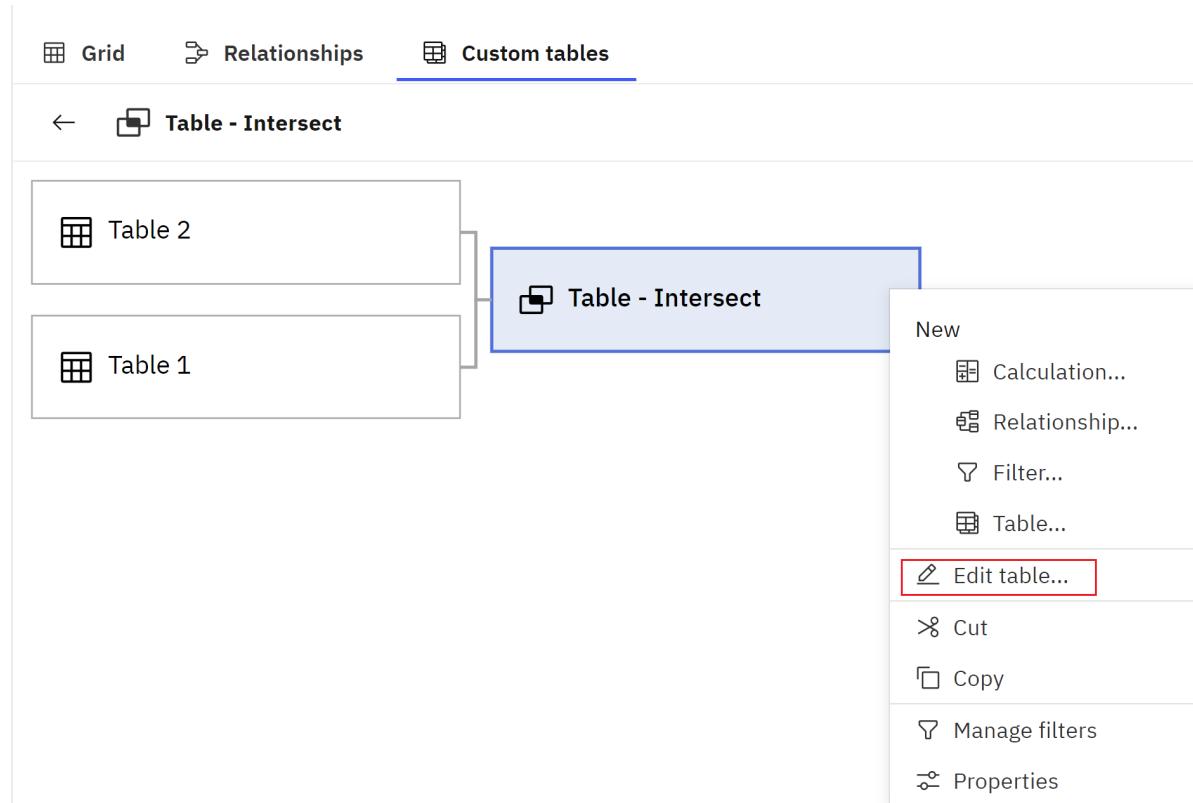
Editing the union, except, and intersect custom tables

You can add and remove tables from an existing union, except, or intersect custom table. You can also update the columns in these custom tables based on column changes in their underlying reference tables.

In previous versions of Cognos Analytics, to make these types of changes you needed to recreate the union, except, or intersect table.

Adding and removing tables

In the data tree, the **Relationships** diagram, or on the **Custom tables** tab, from the union, except, or intersect table context menu, select the **Edit table** option to open the table editor.



Then, proceed to add or remove tables from these 3 types of custom tables.

For more information, see the "Editing the union, except, and intersect custom tables" topic in the *IBM Cognos Analytics Data Modules Guide*.

Updating columns

You cannot explicitly add, remove, or modify columns in an existing union, except, or intersect custom table. However, you can do these changes in its reference tables, and then synchronize the changes.

When you add, remove, or modify columns in the reference tables, the column changes are not automatically synchronized with the custom table, and validation errors might be generated for the custom table. To apply the column changes to the custom table, select its **Edit table** option (in the data tree, the **Relationships** diagram, or on the **Custom tables** tab) to open the table editor.

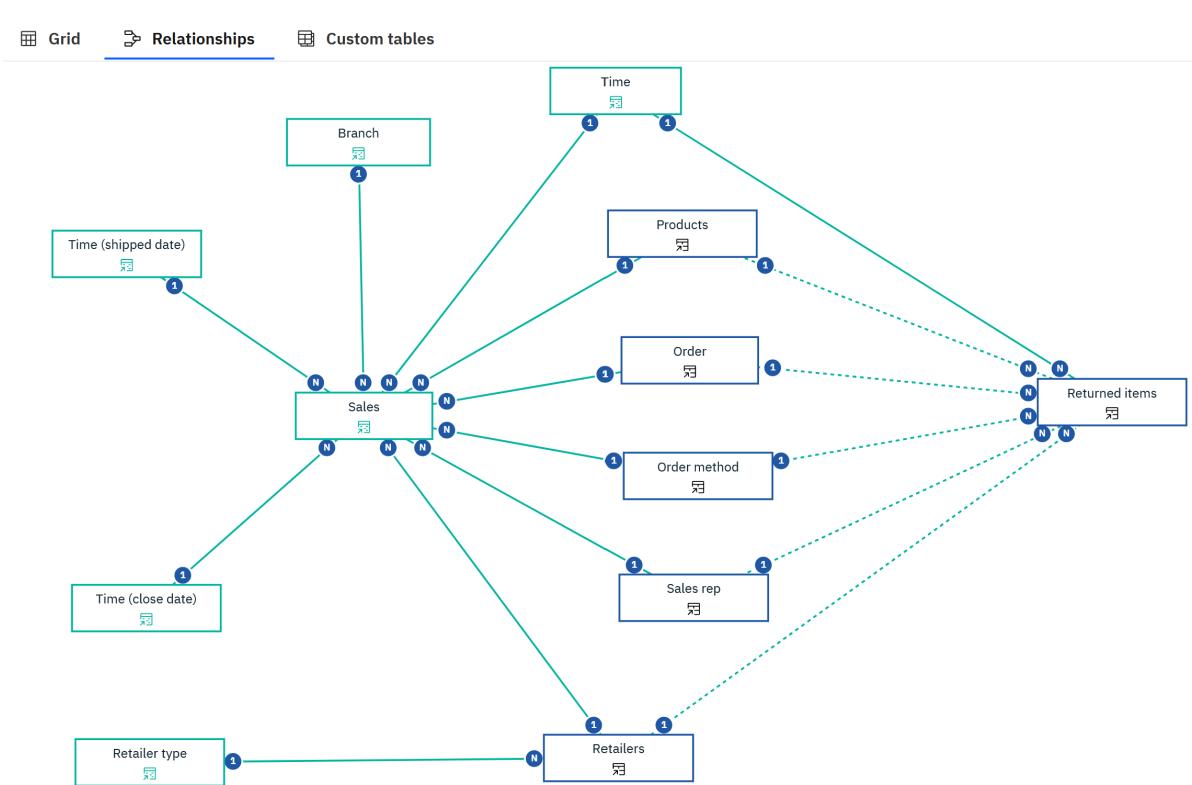
The screenshot shows the Data module interface with the 'Custom tables' tab selected. On the left, there's a sidebar with a search bar and a tree view of custom table types: 'Table - Intersect', 'Table - Union', 'Table - View', 'Table 2', and 'Table 3'. Under 'Table 2', several columns are listed: '# Row Id', 'Day key (order date)', 'Day key (close date)', 'Day key (ship date)', and 'Order date'. In the center, there are two boxes labeled 'Table 2' and 'Table 1'. To the right, a context menu is open over a 'Table - Intersect' object, listing options like 'New', 'Calculation...', 'Relationship...', 'Filter...', 'Table...', 'Edit table...', 'Cut', 'Copy', 'Manage filters', and 'Properties'. The 'Edit table...' option is highlighted with a red border.

Then, proceed to verify and update the custom table with the updated columns. The columns in the reference tables and the union, except, or intersect custom table are now synchronized.

For more information, see the "Editing the union, except, and intersect custom tables" topic in the *IBM Cognos Analytics Data Modules Guide*.

Showing relationships from the source data module

In data modules that are based on other data modules, some relationships between shortcut tables are shown as dotted lines in the **Relationships** diagram. The dotted line can be considered a shortcut to a relationship in the source data module.



The dotted line appears between the shortcut tables whose target tables in the source data module have a relationship. This way, different users of the data module know that the shortcut tables are related through their targets. Both ends of the relationship must be shortcuts for the dotted line to appear.

The dotted line appears between the shortcut tables in the following situations:

- The targets of the shortcut tables are custom tables.
- The shortcut tables were created by converting linked tables.

In previous versions of Cognos Analytics, the dotted line was not shown in the diagram.

For more information, see the topics "Relationships" and "Converting referenced tables" in the *IBM Cognos Analytics Data Modules Guide*.

Mobile

Use the IBM Cognos Analytics for Mobile app to quickly see how your business and organization is performing.

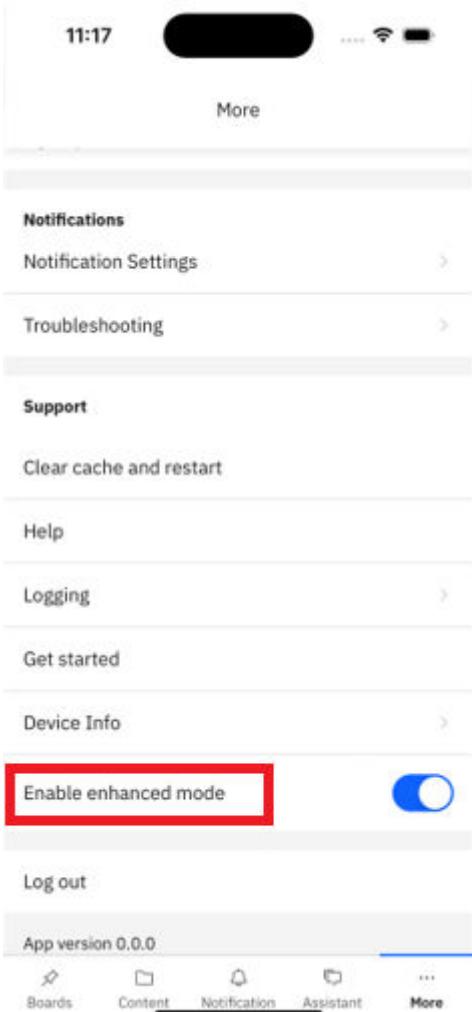
Enhanced mode enabled by default

Starting with this release, the enhanced mode in the IBM Cognos Analytics for Mobile app is enabled by default.

The enhanced mode uses the existing dashboard APIs to render visualizations on the **Boards** tab. The classic mode, which was the default mode in previous versions of the app, used the native API to manage and render visualizations from existing dashboards.

The enhanced mode significantly improves the performance of visualization rendering and provides greater consistency in the appearance of visualizations between the Cognos Analytics portal and the Cognos Analytics for Mobile app.

Users have the option to revert to the classic mode by using the **Enable enhanced mode** toggle switch that is located on the **More** tab.



For more information, see the "Disabling the enhanced mode" topic in the *Cognos Analytics for Mobile Guide*.

Microsoft Intune support

Cognos Analytics for Mobile now supports **Microsoft Intune**, a management system that allows system administrators to control end user access, protect data, and manage access to external systems and applications.

Intune administrators can control the following basic app features:

- Enable PIN for access.
- Restrict cut, copy, and paste between other apps.
- Disable iOS push notifications.

A user must install the **Microsoft Intune Company Portal app** as a broker. This will allow automatic installation of provision profiles, app installation, and general administrative control over the device.

The **Intune** SDK is included in the Cognos Analytics for Mobile app, which gives administrators fine-grained control of the app or device by using the **App Protection Policies** that are defined through the **Intune** portal. When a user logs in to Cognos Analytics for Mobile, the SDK enrolls that user with **Intune**, and checks against any associated **Intune** protection policies.

Microsoft Intune is supported only for **iOS v 14+** devices.

For more information about Cognos Analytics for Mobile, see the Cognos Analytics for Mobile documentation.

Administration

Manage the security, access, and functionality of IBM Cognos Analytics components.

Dynamic namespaces

Administrators can now create and maintain a namespace via the Manage component. This type of namespace is called a *dynamic* namespace.

Namespaces created via Cognos Configuration are called *classic* namespaces. The term *dynamic* is used because the namespace is managed within the Cognos Analytics product and the Cognos Analytics service does not need to be restarted.

For more information, see "Creating a dynamic namespace" in the *IBM Cognos Analytics Managing Guide*.

Using Db2 to store data in uploaded files and data sets

Data in uploaded files and data sets can now be stored as relational tables in a supported Db2 instance. A **Data sets store** connection to Db2 must be defined in Cognos Analytics to enable this functionality.

In previous versions of Cognos Analytics, data in uploaded files and data sets was always stored as Parquet files in a Content Manager database or an external Content Manager store. This storage option is still available, and is the default option when there is no **Data sets store** connection that can be used.

For more information, see the "Data storage options for uploaded files and data sets" topic in the *IBM Cognos Analytics Manage Guide*.

Supported Db2 versions and products

The Db2 instance that can be used with the **Data sets store** connections must be configured for analytic workloads. For more information, see [Creating and setting up your database configuration for analytic workloads](#).

The Db2 versions that can be used with the **Data sets store** connections are the same as the Db2 versions supported by Cognos Analytics for query databases. For more information, see [supported software environments](#) (www.ibm.com/support/pages/node/6966712).

Db2 Z, Db2 I, or other products that are based on the Db2 common engine, such as Big SQL, are not supported.

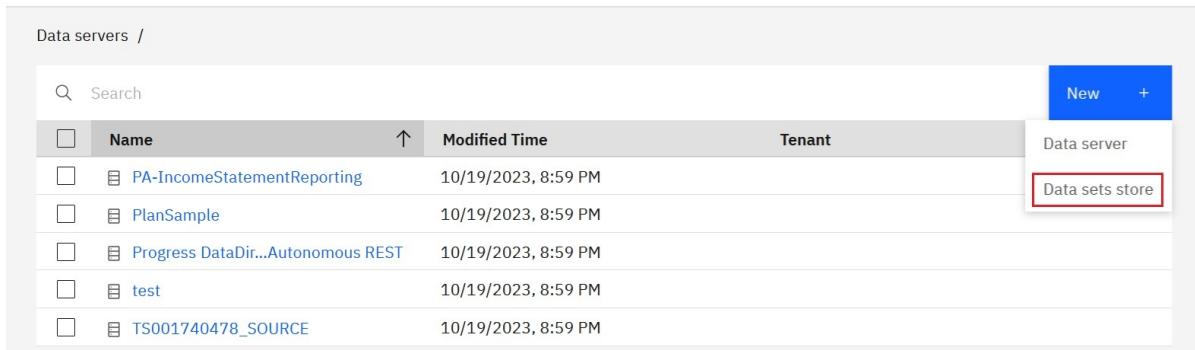
For more information, see the "Storing data from uploaded files and data sets in Db2" topic in the *IBM Cognos Analytics Manage Guide*.

Creating a data sets store connection

To use the new storage option, create a **Data sets store** connection to a supported version of a Db2 instance.

Data server connections

Manage existing connections to data sources or create new connections that can be used across the platform.



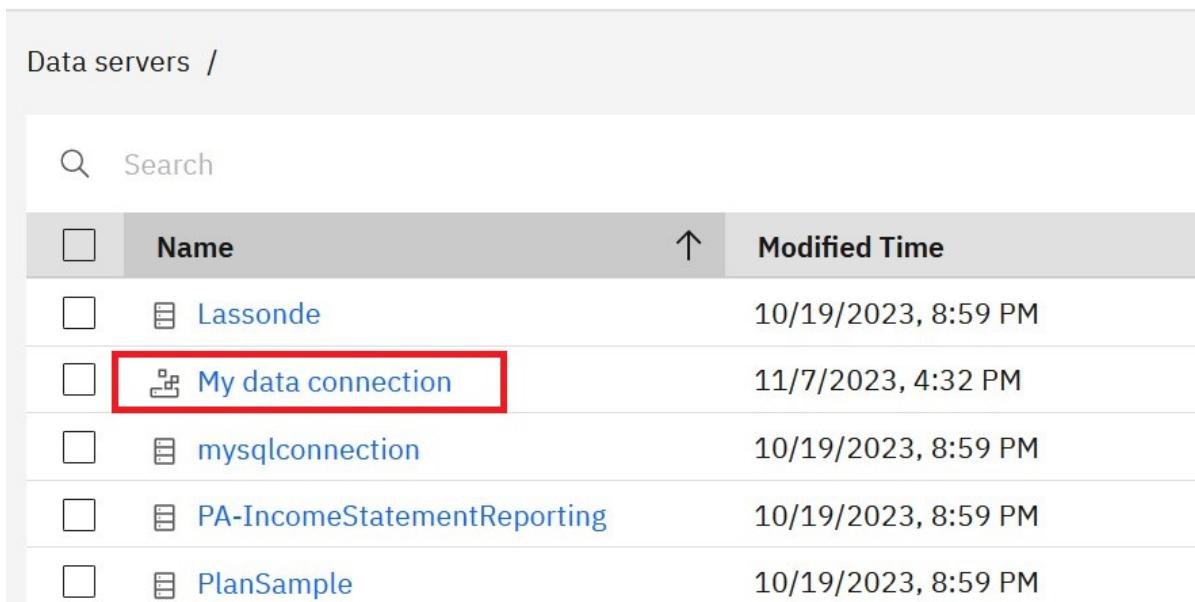
The screenshot shows a table of data server connections. The columns are Name, Modified Time, and Tenant. The 'Name' column includes a checkbox and a small icon. The 'Modified Time' column shows dates from October 19, 2023, at 8:59 PM. The 'Tenant' column shows 'Data server'. A red box highlights the entry for 'Data sets store'.

Name	Modified Time	Tenant
PA-IncomeStatementReporting	10/19/2023, 8:59 PM	Data server
PlanSample	10/19/2023, 8:59 PM	
Progress DataDir...Autonomous REST	10/19/2023, 8:59 PM	
test	10/19/2023, 8:59 PM	
TS001740478_SOURCE	10/19/2023, 8:59 PM	
Data sets store		

In the following example, My data connection is a **Data sets store** connection that was created in **Manage > Data server connections**.

Data server connections

Manage existing connections to data sources or create new connections that can be used across the platform.



The screenshot shows a table of data server connections. The columns are Name and Modified Time. The 'Name' column includes a checkbox and a small icon. The 'Modified Time' column shows dates from October 19, 2023, at 8:59 PM, except for 'My data connection' which is from July 11, 2023, at 4:32 PM. A red box highlights the entry for 'My data connection'.

Name	Modified Time
Lassonde	10/19/2023, 8:59 PM
My data connection	11/7/2023, 4:32 PM
mysqlconnection	10/19/2023, 8:59 PM
PA-IncomeStatementReporting	10/19/2023, 8:59 PM
PlanSample	10/19/2023, 8:59 PM

For more information, see the "Creating a data sets store connection" topic in the *IBM Cognos Analytics Manage Guide*.

Upgrading from previous versions of Cognos Analytics

The storage location of uploaded files and data sets depends on whether they are created before or after a Db2 **Data sets store** connection is defined.

Before the Db2 Data sets store connection is defined

Existing uploaded files and data sets continue to be stored as Parquet files, even after the Db2 **Data sets store** connection is defined. No automatic conversion to Db2 tables is provided. Append, refresh

and deployment imports continue to use Parquet, and queries performed by the dynamic query mode are sent to the Compute Service.

After the Db2 Data sets store connection is defined

After a **Data sets store** connection is defined to use Db2, any new file upload or new dataset you define and execute uses Db2, and is not stored as a Parquet file. Queries performed by the dynamic query mode are sent to Db2.

To copy data from Parquet to Db2, you can create a new data set in Cognos Analytics, using the Parquet data as the input. The new data set will automatically be stored in Db2. Be aware that you may have more columns, data types, or data type precision that exceeds the Db2 limits. For more information, see [Data types used to store data from uploaded files and data sets in Db2](#).

Cognos Analytics on Cloud offerings

If you are a Cognos Analytics on Cloud customer who wants to use the new storage option for uploaded files and data sets, you must purchase the corresponding part to have this feature enabled.

The database will be managed and configured by the IBM SRE team.

If you do not purchase the corresponding part, you can continue to store your uploaded files and data sets in Parquet files and use the Compute service.

Stored data management

Both administrators and end users can manage a list of uploaded files and data sets, also referred to as *stored data*. If you're an administrator, you can view all the stored data in your Cognos Analytics environment. If you're an end user, you can manage all the stored data for which you are the owner.

To view a list of stored data, select one of these methods:

- If you're an administrator, select **Manage > People > Stored data** to manage all stored data in your Cognos Analytics environment.

For more information about the administrator function, see "Managing stored data" in the *IBM Cognos Analytics Managing Guide*.

- If you're an end user, click the **Personal menu** icon . Then click **Profile and settings > Profile** and then, next to **My stored data**, click **Manage** to see your own stored data.

For more information about the end-user function, see "Managing your stored data" in the *IBM Cognos Analytics Getting Started Guide*.

Manage Namespaces secured function

A new secured function, **Manage Namespaces**, is available under the **Administration** capability in Cognos Analytics 12.0.2.

The Manage Namespaces secured function, when combined with the Users, Groups, and Roles secured function, allows the assignee to create and manage dynamic namespaces in the Manage component.

For more information, see these topics:

- "Creating a dynamic namespace" in the *IBM Cognos Analytics Managing Guide*
- "Initial access permissions for capabilities" in the *IBM Cognos Analytics Managing Guide*
- "Default permissions based on licenses" in the *IBM Cognos Analytics Managing Guide*

dls.max.output.size.bytes

A new advanced setting, `dls.max.output.size.bytes`, specifies the maximum size of a report output, in bytes, that the delivery service will allow.

For more information, see "Delivery service advanced settings" in the *IBM Cognos Analytics Administration and Security Guide*.

JWT authentication for SingleStore connections

Cognos Analytics now supports passing JWT access tokens to SingleStore connections.

To pass access tokens, you must use the following:

- SingleStore JDBC driver 1.2.0 or higher
- SingleStore server 8.1.20 or higher

A connection must include the SingleStore name-value pairs `credentialType=JWT&useSsl=true`.

For more information, see [Connections that support JWT authentication](#).

Supported Software Environments page for release 12.0.2

Supported Software Environments information is available for IBM Cognos Analytics 12.0.2.

You can find up-to-date information about the supported software, data sources, and minimum requirements for using IBM Cognos Analytics 12.0.2.

Visit the 12.0.x Supported Software Environments page at <https://www.ibm.com/support/pages/node/6966712#12.0.2>.

Vendor-supported driver versions tested with 12.0.2

IBM Cognos Analytics 12.0.2 supports an updated list of client driver versions.

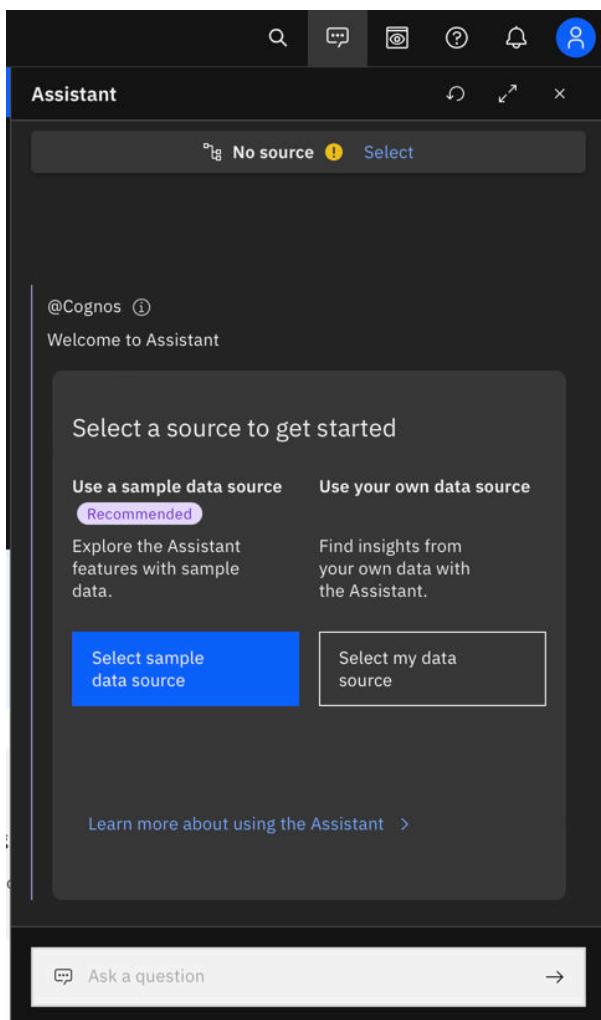
For more information, see *Vendor-supported client driver versions that were tested with Cognos Analytics on Premises 12.0.2 [Relational] [OLAP]* (<https://www.ibm.com/support/pages/node/6989513#12.0.2r>).

Samples

Get a deeper understanding of Cognos Analytics capabilities with updated sample content.

Data source selection changes in the Assistant

To get started in the Assistant, when you open the Assistant panel, you can now connect to sample data sources or to your own data source.



Sample data sources have been optimized for use with the Assistant and you can select from the following three sources to explore the Assistant's features:

- Call center
- Coffee sales and marketing
- Hospital admissions

Open X

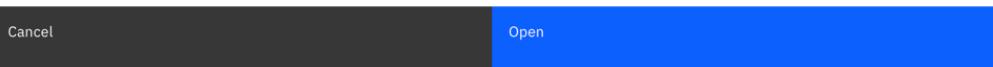
My content Team content

Team content / Samples / By feature / Assistant

⋮ ⌂ ⌃

Name	Type	Tenant	Last Modified
🔗 Shortcut to Call center	Shortcut		10/24/2023, 9:51 AM
🔗 Shortcut to Coffee sales and marketing	Shortcut		10/24/2023, 9:57 AM
🔗 Shortcut to Hospital admissions data module	Shortcut		10/24/2023, 10:03 AM

Cancel Open



When you select a sample data source, the Assistant connects to the selected data source and a list of suggested questions display in the Assistant.

Assistant ⟳ ↻ X

Call center ⓘ Change

Learn more about using the Assistant >

select source Call center

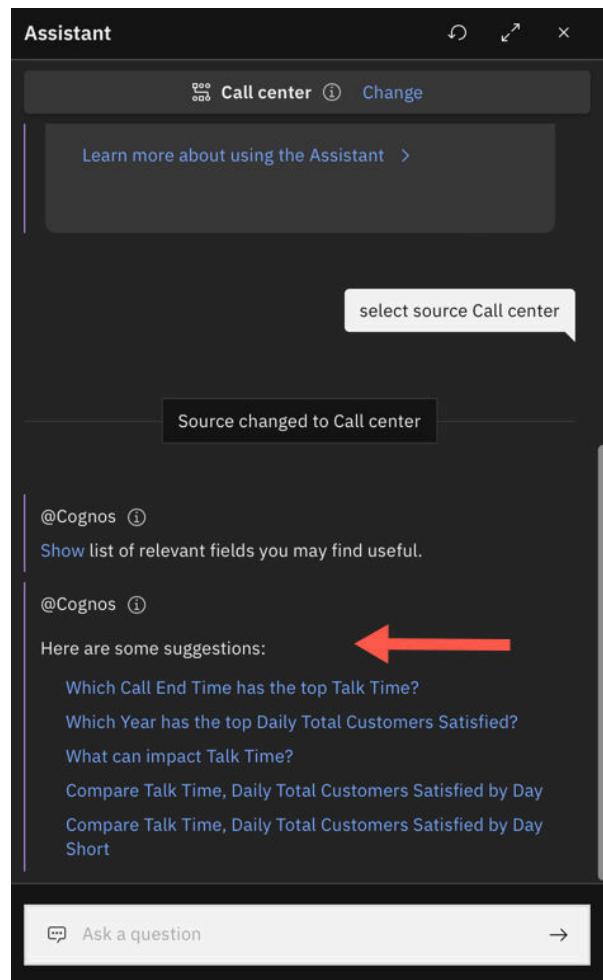
Source changed to Call center

@Cognos ⓘ
Show list of relevant fields you may find useful.

@Cognos ⓘ
Here are some suggestions: ←

Which Call End Time has the top Talk Time?
Which Year has the top Daily Total Customers Satisfied?
What can impact Talk Time?
Compare Talk Time, Daily Total Customers Satisfied by Day
Compare Talk Time, Daily Total Customers Satisfied by Day Short

Ask a question →

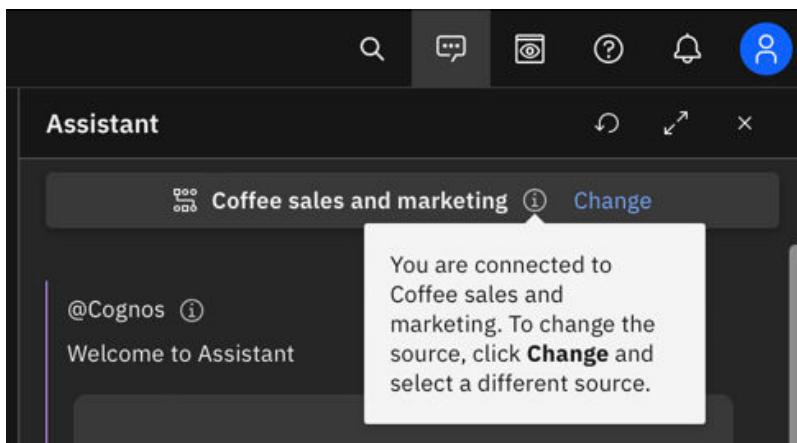


You can choose to connect the Assistant to your own data source to get quick insights about your data.

Note: When you select your own data source, you won't see list of suggested questions. Type **suggest questions** to see a list of suggestions or enter your query directly in the input box.

You can also optimize your own data source for better responses from the Assistant. For more information, see [Optimizing data for the Assistant](#).

To change the data source the Assistant is connected to, click the **Change** link and select a new data source.



At any time, click **Learn more about using the Assistant** to see more information about the Assistant in the Learn pane. Click **Back to Assistant** to go back to your conversation in the Assistant.

Optimized sample data sources for the Assistant

You can now optimize your data for even better responses in the Assistant. While the Assistant successfully understands natural language and can quickly interpret data to return answers to your queries, the quality of these responses depend on the quality of the data.

There are six ways to optimize your data modules for the Assistant. For more information on how to implement each of these optimization methods, refer to [Optimizing data for the Assistant](#).

In Cognos Analytics 12.0.2, you can also [connect to a sample data source](#) which has already been optimized for use with the Assistant.

Hide unneeded columns

You can hide columns that might not be useful in visualizations such as row ID or product code columns. These hidden columns are fully functional in the product but cannot be selected in new visualizations or dashboards. Any columns that you hide, appear in gray in the data module tree.

The screenshot shows the Data module interface. At the top, there are icons for creating a new module (+) and deleting an existing one (trash can). Below that is a search bar with the placeholder "Search". The main area displays a hierarchical list of entities and their associated columns:

- ▶ ⓘ Quarter
- ▶ abc Hospital
- ▶ ☐ Hospital Synonyms
- ▶ abc Department
- ▶ ☐ Departme...Synonyms
- ▶ abc Age Range
- ▶ abc Gender
- ▶ ↴ Admissions
- ▶ ☐ Admissions synonyms
- ▶ ↴ Target
- ▶ ↴ Distance from Home
- ▶ abc Distance f...ata Group)
- ▶ # Row Id
- ▶ ⓘ State Abbreviated
- ▶ abc Hospital Code

The last three items in the list (# Row Id, ⓘ State Abbreviated, and abc Hospital Code) are highlighted with a red rectangular box.

Rename columns

To make sure that column names in the data module reflect the data accurately, you can rename columns. Rename columns that include underscores, dashes, or abbreviations as these can be difficult to use when asking the Assistant a question in natural language. Use proper sentence capitalization and use terms that your end users understand.

Add Synonyms

You can train the Assistant to understand terms in your data that it might not recognize by adding synonyms. Synonyms are also beneficial if end users for your data might use other terms for a column name that mean the same thing.

The screenshot shows the 'Data module' interface with a search bar at the top. Below the search bar is a tree view of data sources. The tree structure includes categories like 'Address', 'Latitude', 'Longitude', 'Hospital', and 'Hospital Synonyms'. Under 'Hospital Synonyms', there are several sub-items: 'Campus', 'Center', 'Emergency Room', 'ER', 'Facility', 'Institution', and 'Location'. A red arrow points to the 'Hospital Synonyms' node.

- ▶ Ⓜ Address
- Ⓜ Latitude
- Ⓜ Longitude
- ▶ abc Hospital
- ➡ ▶ Ⓜ Hospital Synonyms
 - ▶ abc Campus
 - ▶ abc Center
 - ▶ abc Emergency Room
 - ▶ abc ER
 - ▶ abc Facility
 - ▶ abc Institution
 - ▶ abc Location

Create useful calculations

You can create calculations such as a count field which always returns 1. In tables that are lists or logs, a count field that always returns 1 lets you get the count of employees in an employee table or the number of calls in a call log table.

Eliminate duplicate column names across tables

To avoid ambiguity in your data, if you have multiple tables in a data module, make sure that the same column names does not appear in more than one table.

Set data formats

You can set formats for the values in your data module to ensure that the Assistant responses are easy to read and understand. For example, you can choose to display a value as a local currency, or as a number with consistent decimal places.

Learn pane opens with sample dashboards and stories

When you open any sample dashboard or story in **Team content > Samples**, the **Learn** pane opens automatically.

For more information, see "Base samples" in the *IBM Cognos Analytics Samples Guide*.

Installation and configuration

Learn about changes to the IBM Cognos Analytics installation and configuration.

CJAP namespace for Easy Install

As of release 12.0.2, Cognos Analytics no longer uses Apache Directory (ApacheDS) to create the **Cognos Users** namespace provided with Easy Install. Instead, this namespace is created using a Custom Java Authentication Provider (CJAP), which is included with the Cognos Analytics installer.

This change affects Easy Install only. If you install the product using a custom installation or if you install on a platform other than Windows, the installation is the same as before.

New installations via Easy Install

For a new installation, the steps are the same as in previous releases. During Windows Easy Install, you are prompted for an administrator user ID and password. This user ID is the initial account created in the **Cognos Users** namespace. You can add additional users to this namespace using the Manage component, as before.

Upgrading a previous Easy Install instance

If you are upgrading a previous Easy Install instance, the entire process is performed automatically. Because ApacheDS is being removed, Easy Install instances with a version prior to 12.0.2 have their data exported to an LDAP Interchange Format (LDIF) file before installation begins. After version 12.0.2 is installed, the user accounts are restored from the LDIF File.

All accounts created in the ApacheDS-based **Cognos Users** namespace and any data they created will be available in the CJAP-based namespace exactly as they were prior to the upgrade.

For more information, see "Easy Install" in the *IBM Cognos Analytics Installation and Configuration Guide*.

New prerequisite for Easy Install

Before you run a Cognos Analytics Easy Install, ensure that you run Windows Update to apply the latest updates and then restart your computer.

For more information, see "Easy Install" in the *IBM Cognos Analytics Installation and Configuration Guide*.

New prerequisite for Transformer installation

Before you install IBM Cognos Transformer, ensure that Microsoft Visual C++ Redistributable 2015-2022 (or later) is installed.

For more information, see "System requirements for Cognos Transformer" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Install Transformer by using the InstallAnywhere wizard

IBM Cognos Transformer can now be installed by using the **InstallAnywhere** wizard.

The same wizard is used to install IBM Cognos Analytics server.

You cannot upgrade a previous (11.0.0.704 or earlier) version of Transformer with this installation.

As with the previous versions, the new Transformer kits cannot be installed to the same directory as the Cognos Analytics server.

The choice of locale is handled right at the start. After the installation location is set, the installation process starts. Component selection is not available in this version. The process ends with automatic post-installation scripts and confirmation that the process has completed.

For more information, see "Installing IBM Cognos Transformer" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Alternate web technology support for Framework Manager authentication (Microsoft Edge WebView2)

Cognos Analytics Framework Manager now supports using Microsoft Edge WebView2 for authentication through a new feature flag. Enabling this feature flag allows Framework Manager to be compatible with newer web standards when you authenticate with the Cognos Analytics server.

To use WebView2 for authentication in Framework Manager version 12.0.2, follow these steps:

1. Download and install [Microsoft Edge WebView2 Runtime](https://developer.microsoft.com/en-us/microsoft-edge/webview2/) (<https://developer.microsoft.com/en-us/microsoft-edge/webview2/>).

Note: WebView2 might already be installed on your computer. To check if you have WebView2 Runtime installed, go to **Apps & features** (Start > Settings > Apps) and search for WebView2.

2. Enable WebView2.

- a. Go to *installation_location\configuration*
- b. Open fm.ini in a text editor.
- c. In the webview2 section, change this text:

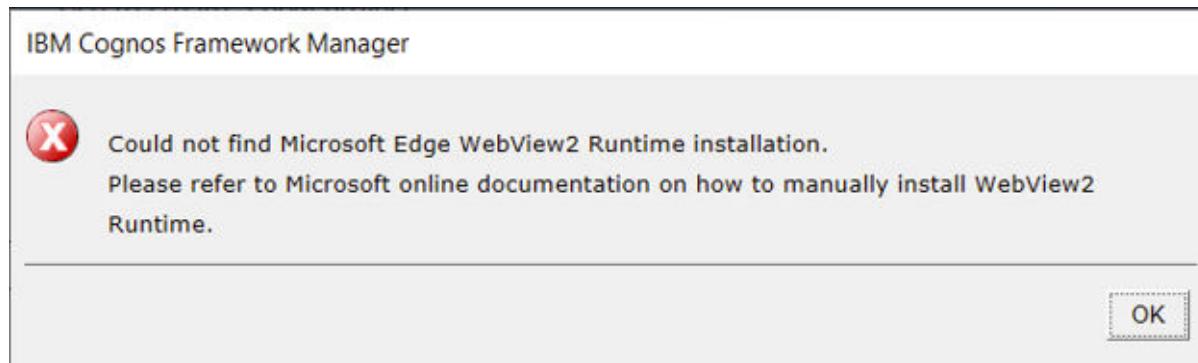
```
<Preference Name="logonPage">FALSE</Preference>
```

to this text:

```
<Preference Name="logonPage">TRUE</Preference>
```

3. Restart Framework Manager if it is open.

If you do not have WebView2 Runtime installed on your computer and you enable WebView2 in Framework Manager, the following message appears:



Click **OK** and install the appropriate Microsoft Edge WebView2 Runtime to use WebView2.

For more information, see "IBM Cognos Framework Manager" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Release 12.0.1 - September 2023

This section describes new and changed features in IBM Cognos Analytics 12.0.1.

Important:

Do not upgrade your 11.2.4 FP3 content to version 12.0.0, 12.0.1, or 12.0.2. If you do so, you may need to run specialized scripts before you can do another upgrade to version 12.0.3 or later. If you want to upgrade 11.2.4 FP3 content to version 12.0.x, you must wait until 12.0.3 or later to do so.

Reason:

Schema changes are made in the content store of 11.2.4 FP3 (and future releases) to support faster processing of content retention rules. Therefore, when you upgrade from 11.2.4 FP3 (or later), you must upgrade to a release with the same content store enhancements, for example, 12.0.3 (or later).

You can still upgrade any 11.2.x content **other than** 11.2.4 FP3 to any version of 12.0.x.

Multiple components

Learn about enhancements to the user interface, training materials, and features that affect multiple IBM Cognos Analytics components.

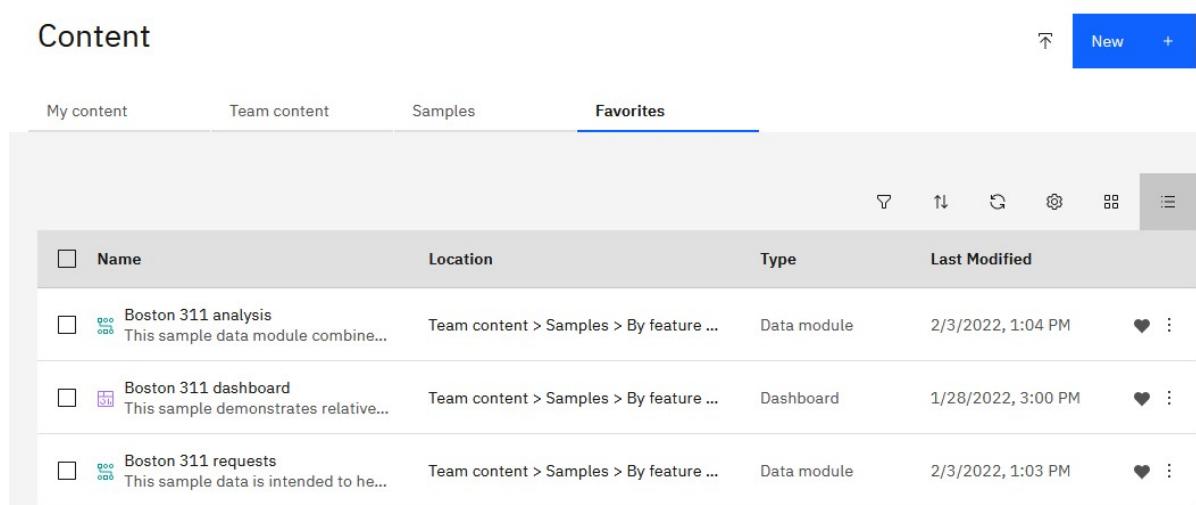
Favorites

In the **Content** view, you can mark items that you access often as your favorites.

In any of the folders in the **Content** view, mark an item as your favorite in one of the following ways:

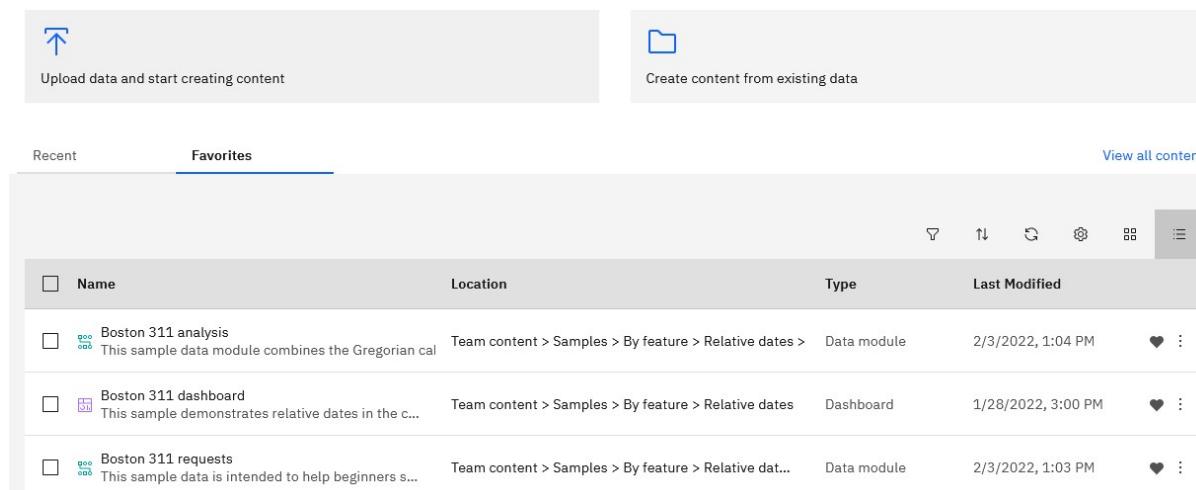
- Click the unfilled heart icon  for the item. The icon changes to the filled heart .
- From the item context menu , click **Add to favorites**.

The marked items are added to the **Favorites** tab in the **Content** view.



Name	Location	Type	Last Modified
Boston 311 analysis This sample data module combine...	Team content > Samples > By feature ...	Data module	2/3/2022, 1:04 PM
Boston 311 dashboard This sample demonstrates relative...	Team content > Samples > By feature ...	Dashboard	1/28/2022, 3:00 PM
Boston 311 requests This sample data is intended to he...	Team content > Samples > By feature ...	Data module	2/3/2022, 1:03 PM

The **Favorites** tab is also available in the **Welcome** page.



Name	Location	Type	Last Modified
Boston 311 analysis This sample data module combines the Gregorian cal...	Team content > Samples > By feature > Relative dates >	Data module	2/3/2022, 1:04 PM
Boston 311 dashboard This sample demonstrates relative dates in the c...	Team content > Samples > By feature > Relative dates	Dashboard	1/28/2022, 3:00 PM
Boston 311 requests This sample data is intended to help beginners s...	Team content > Samples > By feature > Relative dat...	Data module	2/3/2022, 1:03 PM

You can also sort  items in the **Content** view by favorites.

[Reset sort](#)

Sort by	Order
<input checked="" type="radio"/> Favorite	<input checked="" type="radio"/> Ascending
<input type="radio"/> Name	<input type="radio"/> Descending
<input type="radio"/> Modified	
<input type="radio"/> Type	

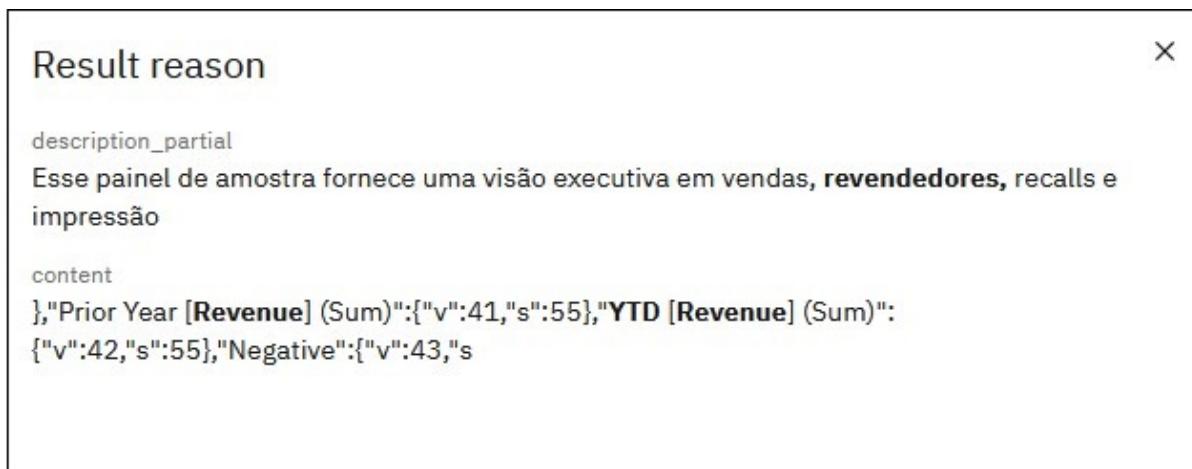
For more information, see the "Content view" topic in the *IBM Cognos Analytics Getting Started Guide*.

Search results enhancements

IBM Cognos Analytics search now provides detailed explanation of the search results. The keywords in the search results are emphasized by using the bold font style.

Sometimes you might want to know why certain items appear in the search results, and where exactly is the keyword found. With this information, you can also verify if the search result is applicable.

You can find information about each search result in the **Result reason** dialog box.



To view this information, select the item check box in the search results, and in the toolbar that appears, click **Result reason**.

Search results in: All Content

Showing 4 items

1 item selected		More +	Details ⓘ	Result reason ⓘ	Delete ⚡	Cancel
Name	Location	Type	Last Modified			
<input type="checkbox"/> QTD revenue This sample report is intended to be used with the sample extensions.	Team content > Samples > By feature > Exten...	Report	2/15/2022, 2:16 PM			
<input type="checkbox"/> Auto group MTD dealer sales This sample report displays information about month-to-date dealer...	Team content > Samples > By industry > Auto...	Report	4/13/2023, 8:39 PM			
<input checked="" type="checkbox"/> Auto group executive dashboard This sample dashboard provides an executive view into sales, dealer...	Team content > Samples > By industry > Auto...	Dashboard	4/13/2023, 7:45 PM			
<input type="checkbox"/> Q3 sales action plan This sample story presents the reason behind a sales decline and a ...	Team content > Samples > By industry > Auto...	Story	4/13/2023, 6:22 PM			

You can also access the **Result reason** dialog box from the item context menu by clicking **Result reason**.

For more information, see the "Search" topic in the *IBM Cognos Analytics Getting Started Guide*.

File upload enhancements

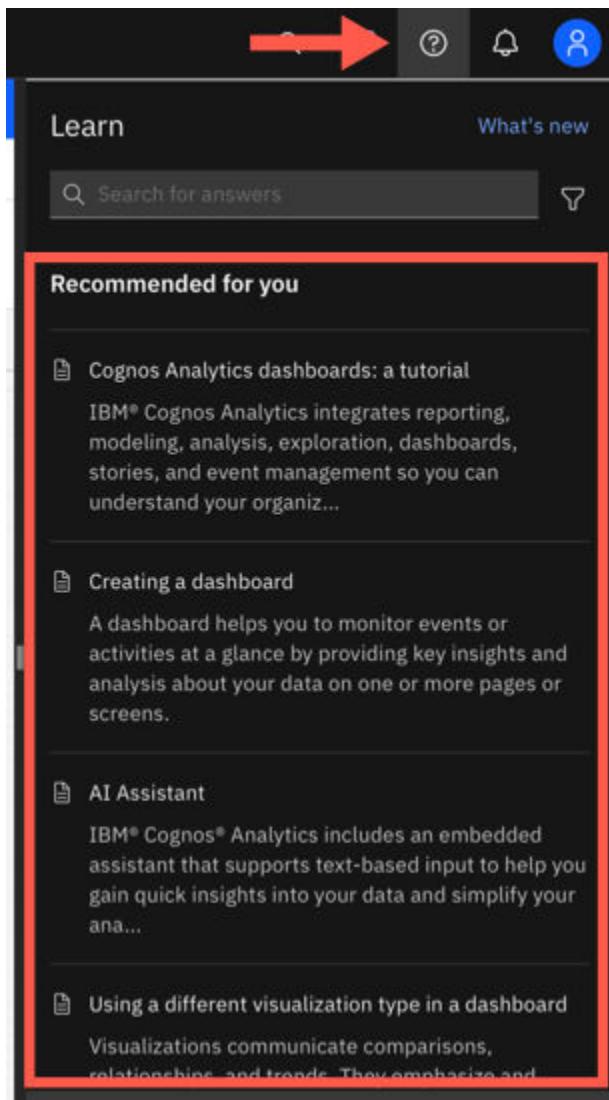
You can drag and drop files onto the **Upload data and start creating content file** tile in the **Welcome** page.

For more information, see the "Uploading files" topic in the *IBM Cognos Analytics Getting Started Guide*.

AI-generated recommendations available in the Learn Pane

The Learn Pane now provides dynamic AI-generated recommendations as well as static recommendations.

When you interact with the content inside the Learn Pane, the recommendation engine makes daily updates based on what you and other users are viewing. If no content was viewed inside the Learn Pane, the recommendations remain unchanged. For example, if you and other users use dashboards more often, more content about dashboards is generated in the Learn Pane.

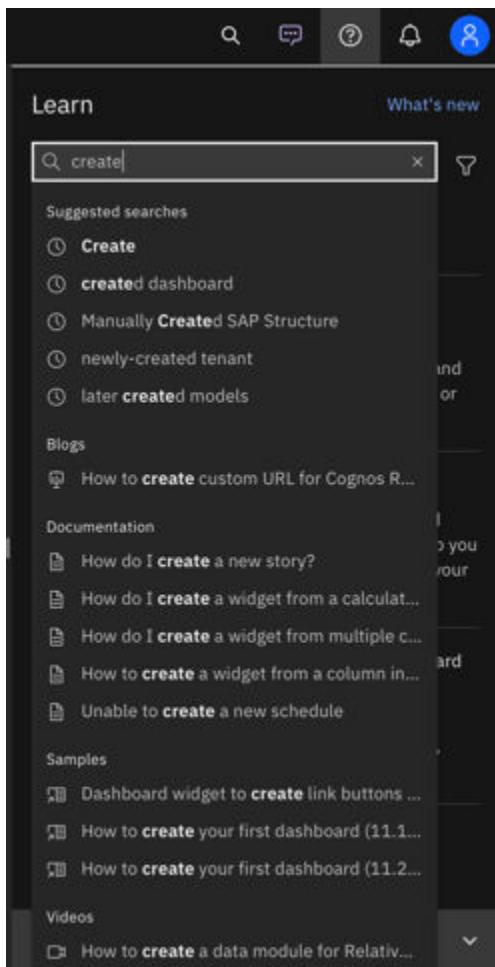


Previously, the Learn Pane provided suggestions based on where you are in the product. The new update makes it convenient to find helpful topics that are more tailored to your current needs.

Auto-complete and popular search suggestions in the Learn pane

Find answers to your Cognos Analytics questions faster! The Learn pane now predicts your search query as you type keywords in the **Search** field and displays a list of search suggestions from all content types.

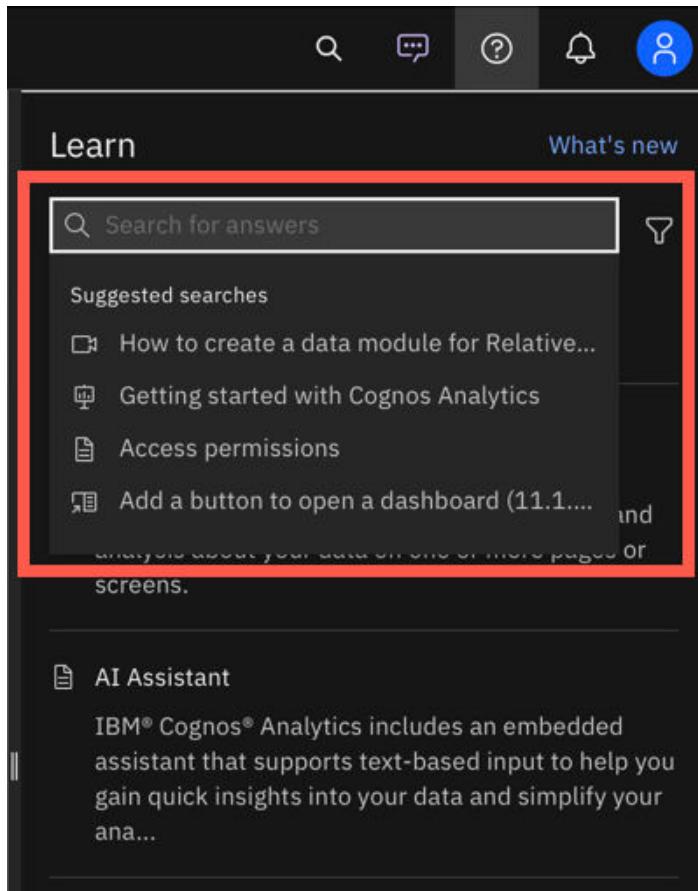
This auto-complete feature makes it easy to complete your search quickly. Simply select a search suggestion to see related help content.



When you search in any supported language other than English, the auto-complete feature returns translated documentation in your search suggestions. You also see blogs and videos that match your search query, however, blogs and videos aren't translated.

As you type a keyword, notice that spell check suggests the correct spelling for a misspelled word. Search suggestions are displayed based on the correct spelling of the keyword. However, the Learn pane also gives you the option to search for misspelled keyword instead.

Not sure what to search for in the Learn pane? Click the **Search** field to see a list of popular search suggestions.



Assistant

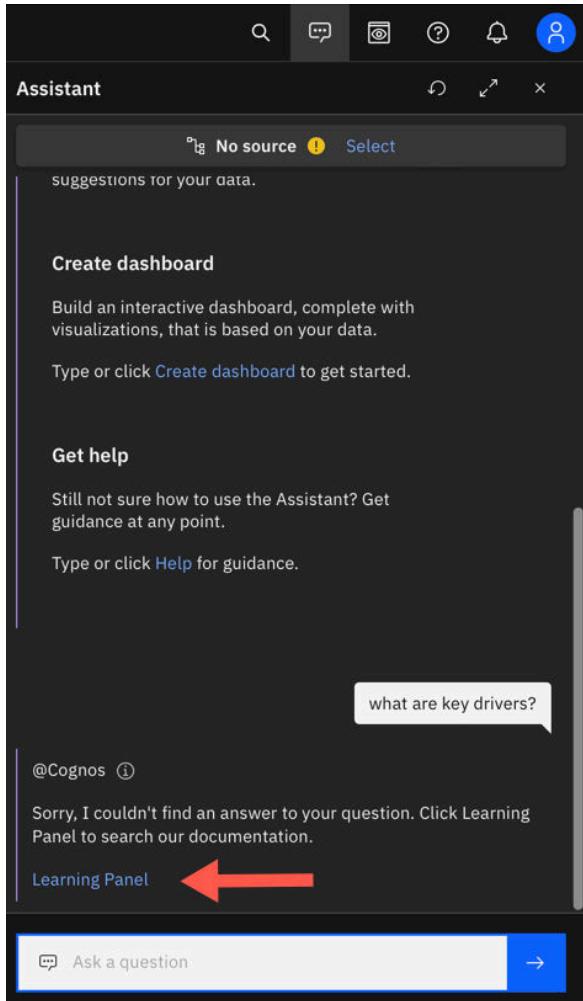
Ask questions in natural language to find, explore, and gain quick insights into your data.

Assistant and Learn pane integration

The Assistant now gives you the option to jump to the **Learn pane** if it cannot find an answer to a general usage question. You can use the **Learn pane** to find help in the product documentation, blogs, and videos.

You might be prompted to search in the **Learn pane** if you are looking for general usage information on Cognos Analytics. For example, if you ask the Assistant any of the following questions, you will see a link to go to the Learning panel to find an answer:

- How do I create a dashboard?
- What are key drivers?
- How do I use the Assistant?



Once you click the link in the Assistant, the **Learn pane** opens and displays search results in response to your query.

The screenshot shows the IBM Cognos Analytics interface. At the top, there is a navigation bar with icons for search, message, refresh, help, and user profile. Below the navigation bar, the word "Learn" is displayed next to a red downward-pointing arrow. To the right of "Learn" is the text "What's new". Below this, there is a search bar containing the text "what are key drivers?". To the right of the search bar are a close button ("x") and a magnifying glass icon. Underneath the search bar, there are two buttons: "[← Back to Assistant](#)" and "[Search results](#)". The main content area displays a list of search results:

- [**Key driver**](#)
A key driver is an input field or combination of input fields that has a statistically significant effect on a target field. This effect is more than a me...
- [**Driver analysis visualization in a dashboard**](#)
A driver analysis visualization shows you the key drivers, or predictors, for a target. The closer the driver is to the right, the stronger that driver is...
- [**Spiral visualization**](#)
A driver analysis visualization shows you the key drivers, or predictors, for a target. The closer the driver is to the right, the stronger that driver is...
- [**Spiral visualization in an exploration**](#)
A spiral visualization shows you the key drivers, or predictors, for a given target. The closer the driver is to the center, the stronger that driver is.

At any time, you can click **Back to Assistant** in the Learn pane to return to your conversation in the Assistant.

Share narrative insights from the Assistant

You can now share insights with or without a visualization from the Assistant via email, Slack, and Microsoft Teams. Your administrator must configure a mail server and/or a collaboration platform before you can use this feature.

Important: To share visualizations and insights through the Assistant, you need to have access permission for [Collaborate capabilities](#).

Previously, you could only share visualizations from the Assistant. Now, when the Assistant returns a visualization with top insights, you can not only share the visualization but can also share insights from the Assistant. You can send insights with or without the visualization and can choose which insights you want to share.

Click **Share** to select the platform through which you want to share the visualization and/or insights.

Assistant

@Cognos ⓘ

Here are the visualizations from source April Sales.zip:

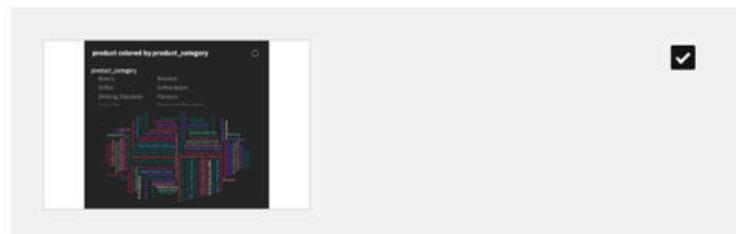
The screenshot shows the Cognos Assistant interface. At the top, there's a navigation bar with icons for refresh, search, and close. Below it, a message says '@Cognos' with a help icon. A main message says 'Here are the visualizations from source April Sales.zip:'. Below this, there's a visualization titled 'product colored by product_category' which is a bubble chart. The legend includes: Coffee (teal), Drinking Chocolate (red), Loose Tea (green), Tea (pink), Coffee beans (purple), Flavours (light purple), and Packaged Chocolate (blue). The chart consists of many small bubbles of varying sizes and colors. Below the chart, there's a section titled 'Top Insights' with a single entry: 'product_category Coffee beans has the highest average current_retail_price due to product Civet Cat.' At the bottom, there are three buttons: 'Share' (highlighted with a red box), 'Add to', and 'More'.

Then, select what you want to share. By default, both the visualization and insights are selected. If you have more than one insight, you can choose the ones you want to share.

Select a platform / X

Select content to be shared

Visualization



Insights (1/1)

product_category Coffee beans has the highest average **current_retail_price** due to **product Civet Cat**.



Cancel

Next

Before you send the visualization and/or insights, you can add a message. If you're sharing a visualization, you can also annotate and edit the visualization.

New option for adding visualizations to dashboards from the Assistant

A new **Add to** option in the Assistant is now available for visualizations that are generated by the Assistant. You can use this option to add a visualization to the current dashboard that you are working on or a new one.

A screenshot of the IBM Cognos Analytics Assistant interface. On the left, there is a visualization titled "product colored by product_category" showing a circular treemap. To the right of the visualization is a panel titled "Top Insights" containing the text: "product_category Coffee beans has the highest average current_retail_price due to product Civet Cat.". At the bottom of the screen, there is a navigation bar with several icons. Below this, a dropdown menu is open with the title "Add to". The dropdown menu contains two options: "Current dashboard" and "New dashboard". The "New dashboard" option is highlighted with a red rectangular box. The entire screenshot is set against a dark background.

You can also drag a visualization from the Assistant and add it to an already open dashboard. The Assistant panel collapses automatically when you start dragging the visualization, letting you easily place the visualization where you want on the dashboard canvas.

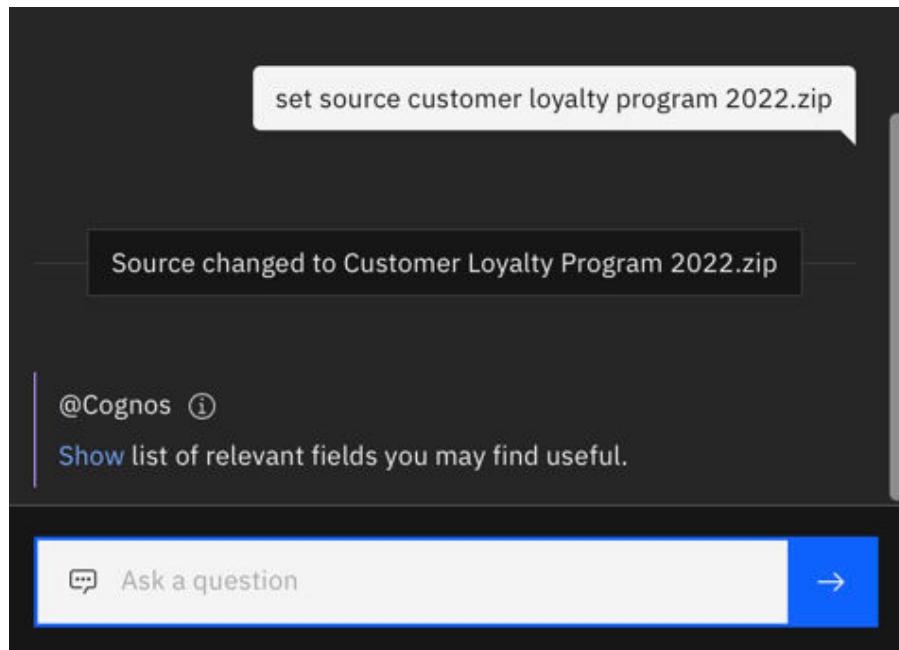
The Assistant panel reopens after you drop the visualization in place.

Usability improvements and natural language enhancements in the Assistant

In Cognos Analytics 12.0.1, there are several usability and natural language enhancements in the Assistant that provide a better user experience.

Data source selection enhancements

The Assistant now understands choose source, set source, change source, and select source when you want to change the Assistant's data source.



You'll notice that after the source changes, a new message in the Assistant panel displays confirming the change.

The screenshot shows the IBM Cognos Assistant interface. At the top, there is a message bubble containing the text "change source customer loyalty program 2022.zip". Below this, a list of sources is displayed, with the first item, "Source changed to Customer Loyalty Program 2022.zip", highlighted by a red rectangular box. To the left of the list, there is a purple vertical bar with the text "@Cognos" and an information icon. Below the list, there is a link "Show list of relevant fields you may find useful.". At the bottom of the interface, there is a button labeled "Ask a question" with a speech bubble icon and a blue arrow pointing to the right.

If you want to see a list of available sources, enter `select source` with a space after the phrase and select one from the list that displays.

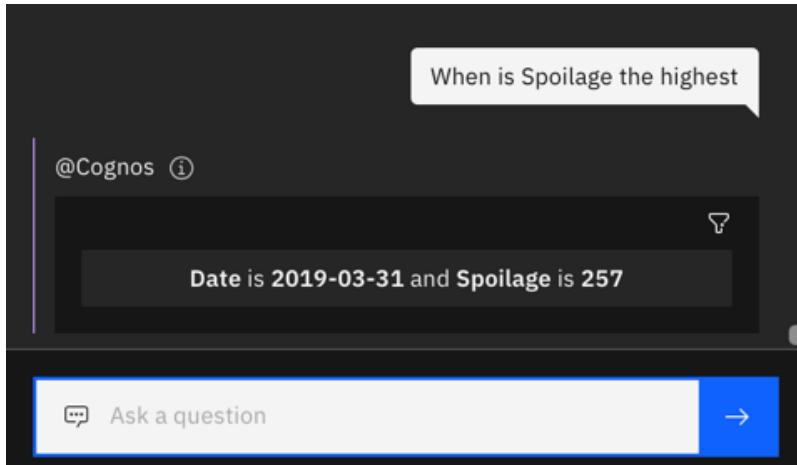
The screenshot shows a command-line interface with a list of source options. The options listed are: "select source Customer Loyalty Program 2022.zip", "select source RP_HiddenGC", and "select source GoSales_12_sheets_fixed.xlsx". The third option, "select source GoSales_12_sheets_fixed.xlsx", is highlighted with a blue rectangular box. At the bottom of the interface, there is a text input field containing the text "select source |" and a blue arrow pointing to the right.

Improved responses to questions that don't require visualizations

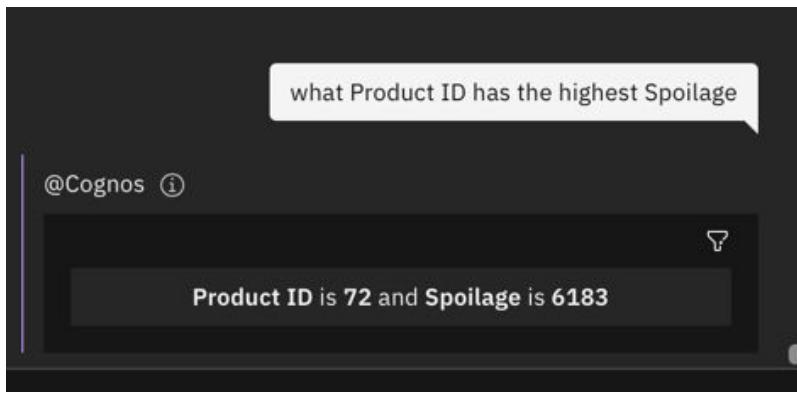
When you ask the Assistant a question that doesn't require a visualization, the Assistant now responds with just the relevant values.

The Assistant recognizes the following question styles and responds with values in text format.

- What is
- When is
- Where is
- Who is



In certain cases, you might need to provide a column name for the Assistant to return a response.



Dashboards

Use IBM Cognos Analytics dashboards to discover key insights about your data and monitor events or activities at a glance.

Automatic sorting in month, weekday, and season columns

In newly loaded database schemas and uploaded files, the members in the month, weekday, or season columns are automatically sorted in chronological order, no matter in which order they are listed originally.

For example, in the month column, the sort order is January, February, March, and so on.

The automatic sort order is shown in the data tree in data modules, dashboards, and explorations that use the new file or schema as their source.

In the following example of an XLSX file, the month names are sorted in alphabetical order.

1	Month
2	April
3	August
4	December
5	February
6	January
7	June
8	July
9	March
10	May
11	November
12	October
13	September

When you upload this file to Cognos Analytics 12.0.1, the month names are automatically sorted in chronological order, and the **Members display** property on the Month column is set to **Custom**.

The screenshot shows the IBM Cognos Analytics interface. On the left, there's a navigation pane with icons for selected sources, data modules, and reports. A data module named 'automatic_sorting_month.xlsx' is selected. Under it, a dimension named 'Month' is expanded, showing its members: January, February, March, April, May, June, July, August, September, October, November, and December. To the right is the 'Properties' panel. In the 'Members display' section, the 'Custom' option is selected and highlighted with a red box.

Note: In dashboards, the automatically generated custom sorting is different than the preexisting **Custom** sorting that is available in visualizations.

In a data module, you see that the **Custom sort order** is automatically defined for the Month column.

The screenshot shows the Cognos Analytics interface with two main panes. On the left is the 'Custom sort order' pane, which contains a search bar and a list of items with a sorting icon: '↑↓ January;February;March;April;May;'. On the right is the 'Data module' pane, which also has a search bar. It lists 'New data module' and 'Navigation paths'. Under 'Navigation paths', there is an item named 'automatic_sorting_month.xlsx' with a sub-item '# Row Id' and another sub-item 'Month' which is expanded to show 'January', 'February', and 'March'.

Values that are not defined in the custom sort are appended at the end of the list of sorted items.

You can modify the auto-generated sorting definitions. For more information, see [“Custom sorting” on page 80](#).

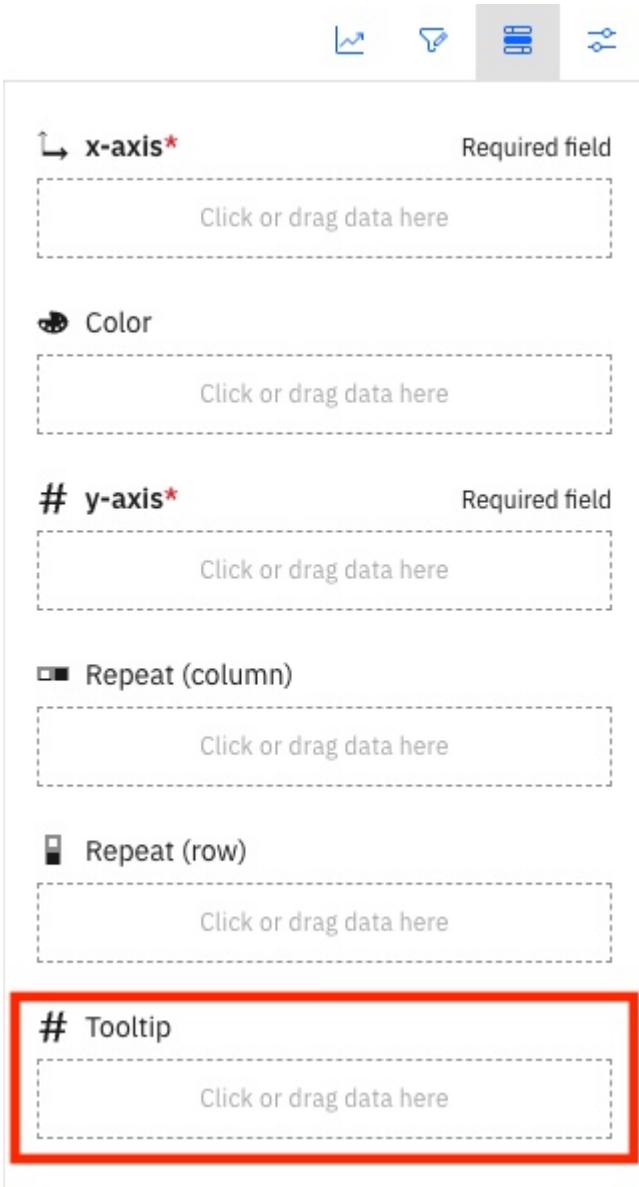
Note: Automatic sorting is not applied to the month, weekday, and season columns in files and schemas that were imported in previous versions of Cognos Analytics.

Auto-generated sorting definitions are created for the locale of the user who uploaded the file or loaded the schema. For example, if a German user uploads a file that has the month columns for English, German, and French, the custom sorting is applied to the German month column only. The custom sorting definition that is shown in the data module, dashboard, or report, which use this file as their source, has values of the German months. The English and French columns do not have custom sorting defined.

Showing additional data values in tooltips

You can display additional measures as tooltips when hovering over a point in the visualization.

Click the **Fields** icon to open the **Fields** pane, then drag the one or more measures with the corresponding values you want to show to the **Tooltip** data field. You can also click an empty **Tooltip** data field and select the measures that you want to display.



For more information, see "Showing additional data values in tooltips" in the *IBM Cognos Analytics Dashboards and Stories User Guide*.

Expanding visualization content in PDF output

You can configure crosstab, table, or list visualizations in a dashboard to export expanded visualization content into the PDF output.

Some visualizations on the dashboard canvas display limited information. To find more details, you normally use the scroll bars to zoom in or scroll through the information. When you export your dashboard to PDF, the information that the visualization displays on your screen is what you see in the PDF output in the main canvas.

You can configure crosstab, table, or list visualizations on the dashboard to export detailed information into new pages in the PDF output. A hyperlink at the visualization on the main canvas in the PDF file directs you to the new page where the detailed visualization information appears.

Click a visualization that you want to configure, then click the **Properties** icon.

~

Click **General**, then select the **Print options** setting under **PDF print settings**. Change the setting to **New page** to enable the visualization to export detailed information in a new page on the PDF output.

Visualization properties

Visualization General

Appearance

PDF print settings

In view

Print options

New page

Layout

For more information, see "Exporting a dashboard to PDF" in the *IBM Cognos Analytics Dashboards and Stories User Guide*.

Showing and styling stack labels in stacked visualizations

Starting with release IBM Cognos Analytics 12.0.1, you can use the **Show stack label** property to show the sum of each item's contributions to the length of a stacked bar or stacked column.

The **Show stack label** option is available in the following visualizations:

- [Stacked bar](#)
- [Stacked column](#)

To show stack labels in the visualizations:

1. Select the visualization in a dashboard.
2. Click the **Properties** icon to open the **Visualization properties** menu.
3. Click **Visualization > Chart** to expand the list of chart properties.
4. Turn on **Show stack label**.

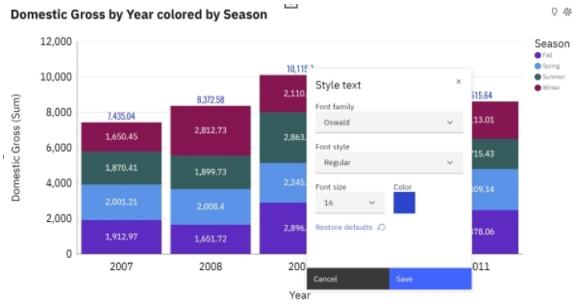
Note: You can use **Show stack label** together with **Show label value**.

Two ways of styling the **stack label** are available:

- You can adjust the properties of the stack in **Properties > Visualization > Chart**.



- You can use the **Style text** window that pop ups within a visualization. To open the window, right-click a **stack label** and select **Style text**.



Note: To change the color of the **stack label**, you must turn off **Contrast stack label color** in **Properties > Visualization > Chart**.

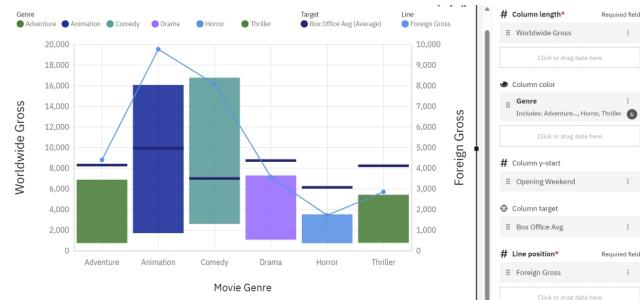
Additional fields in line and column visualization

Additional fields are available in the line and column visualization in dashboards.

These additional fields are the following:

- Column y-start
- Column target

The following example of the line and column visualization shows Worldwide gross revenue as **Column length** and Foreign gross revenue as **Line position** for Movie genres. Box office average is **Column target** and opening weekend revenue is **Column y-start**.



Styling titles of repeated columns and rows in visualizations

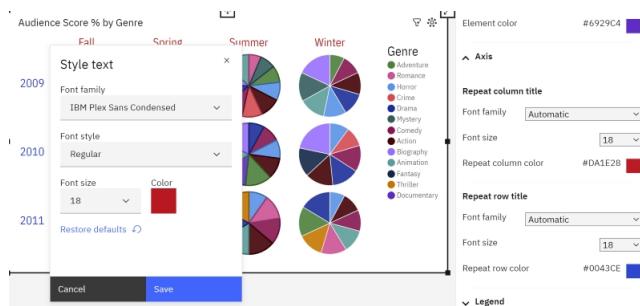
Starting with IBM Cognos Analytics 12.0.1, you can style titles of repeated visualizations.

When you repeat a visualization in the column or row, you can now style the titles of visualizations.

You can adjust the style of the titles in two ways:

- You can navigate to **Properties > Visualization > Axis > Repeat column title** or **Repeat row title** and set values for the following title properties: **Font family**, **Font size**, and **Color**.
- Right-click a title to open a context menu and select **Style text** to open a window with title properties..

The following image shows the two ways of styling the titles of repeated visualizations



Icon visibility in the visualization header

Starting with Cognos Analytics 12.0.1, you can hide or show icons in the visualization header.

You can apply your changes on two levels:

- to all visualizations in the dashboard
- to selected visualizations

For more information, see [Hiding or showing icons in the visualization header](#)

More consistent documentation about visualization types

Documentation of visualization types is structured more consistently than in previous releases.

For more information, see [Visualization types](#).

Reports

IBM Cognos Analytics- Reporting is a web-based report authoring tool that professional report authors and developers use to build sophisticated reports against multiple databases.

Excel sheet naming improvements

The **RSVP.EXCEL.XLS2007_SUFFIX_PAGENUMBER** advanced property is added for the report service to provide a consistent way of naming Excel sheets. By default, this property is set to `true`.

This new property, with its default value, introduces the following changes to naming duplicate sheets in Excel reports:

- The suffix `_duplicate_increment` is added to duplicate sheet names, where the `duplicate_increment` always starts with 2 for the first duplicate of a given name, and increments by 1 for each subsequent duplicate. For example: Camping Equipment, Camping Equipment_2, Camping Equipment_3 or Products, Products_2, Products_3.
- The prefix `s_duplicate_increment` (previous behavior) is no longer added to the sheet names.
- The sheet names never exceed the Excel 31 character limit, including the situations when the duplicate sheet naming logic is applied.

The new naming behavior affects the preexisting property **RSVP.EXCEL.NUMBEREDSHEETNAMES** in the following ways:

- When **RSVP.EXCEL.NUMBEREDSHEETNAMES** is set to `true`, its behavior is overwritten.
- When **RSVP.EXCEL.NUMBEREDSHEETNAMES** is set to `false`, there are no significant changes in behavior, only fixes and improvements.

Starting with this release, the default value for the **RSVP.EXCEL.NUMBEREDSHEETNAMES** property is changed to `false`.

The new duplicate names handling applies also to the **RSVP.EXCEL.PAGEGROUP_WSNAME_ITEMVALUE** property.

The following two tables show the properties, with their default values, that are used to manage duplicate names in Excel 2007 reports in Cognos Analytics:

Table 1. Cognos Analytics 12 and prior releases	
Advanced report service property	Default value
RSVP.EXCEL.NUMBEREDSHEETNAMES	<code>true</code>
RSVP.EXCEL.PAGEGROUP_WSNAME_ITEMVALUE	<code>false</code>

Table 2. Cognos Analytics 12.0.1	
Advanced report service property	Default value
RSVP.EXCEL.NUMBEREDSHEETNAMES	false
RSVP.EXCEL.PAGEGROUP_WSNAME_ITEMVALUE	false
RSVP.EXCEL.XLS2007_SUFFIX_PAGENUMBER	true

Note: The **RSVP . EXCEL . NUMBEREDSHEETNAMES** property will be deprecated in the next release.

For more information, see [Naming duplicate sheets in Excel 2007 reports](#) the "Naming duplicate sheets in Excel 2007 reports" topic in the *IBM Cognos Analytics Administration and Security Guide* and the "Page breaks, page sets, and page layers" topic in the *IBM Cognos Analytics Reporting Guide*.

Rendering schematics to PDF with the Image service

You can render schematics in reports to PDF format.

The [schematics](#) are in the **Custom** section of the **Visualization gallery**, together with custom visualizations. You can identify the schematics by the icon .

To be able to render schematics to PDF, you must [configure IBM Cognos Analytics](#) to use the Image service.

Dashboards and reports

Learn about new features that are common for dashboards and reports.

Expanded IBMid support for embedded reports and dashboards in Microsoft Teams

If you are using the Microsoft Teams desktop application, you can now access your embedded report or dashboard using your IBMid.

Note: This new capability builds on the 12.0.0 feature ["Enhancements to embedded reports and dashboards in Microsoft Teams"](#) on page 93, in which IBMid access is supported for embedded reports and dashboards in the Teams Web application.

For more information, see these topics:

- "Embedding a report in Microsoft Teams" in the *IBM Cognos Analytics Reporting Guide*
- "Embedding a dashboard in Microsoft Teams" in the *IBM Cognos Analytics Dashboards and Stories Guide*

Mapbox street map data in Japanese maps

Due to a licensing restriction, street map data in maps powered by Mapbox is not available in Cognos Analytics for Japanese regions.

You can still use Japanese maps. However, when you select a map layer that previously contained street map data, the street map data does not display for Japanese locations.

Note: Legacy maps are unaffected by this change.

For more information, see "Setting up Mapbox to work with Cognos Analytics" in the *IBM Cognos Analytics Dashboards and Stories Guide*.

Modeling

Learn about new features and changes to the IBM Cognos Analytics modeling components, primarily data modules.

Multilingual metadata

You can now translate the metadata of a data module. Labels, descriptions, and screen tips can be translated. The users can view the metadata, such as table and column names, in their language. At this moment, the localized data module can be used in Reporting only.

With a localized data module, a report can be created in one language and viewed in other languages.

This functionality can be used not only to translate strings to different languages, but also to provide different versions of the string in the same language. A string can be translated in different ways, depending on the context, by using the identifier of the object and matching the case of the string.

A modeler specifies the list of locales for which translated metadata needs to be provided, and sends the selected tables to an external service for translation. The translated data is stored externally, in uploaded files or databases. Updates and refinements to translations do not require editing of the data module.

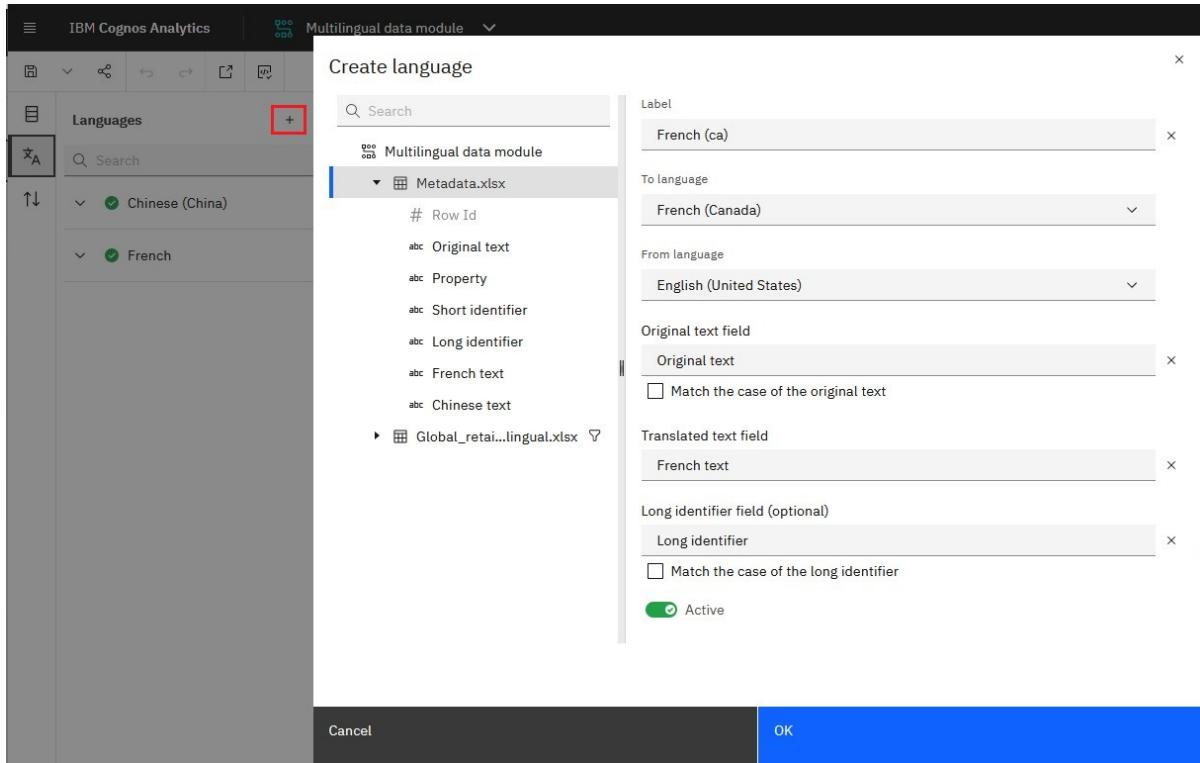
You can control and refine the scope of translation by including either all tables in the data module, or only selected tables.

Note: Data localization is different than metadata localization. For a data module to fully support multiple locales, localized data must also be provided. Multilingual data is supported by Cognos Analytics for a long time.

The following image shows an example of a data module with multilingual metadata:

Row Id	Original text	Property	Short identifier	Long identifier	French text	Chinese text
1	Global_retail_sales_multilingual.xlsx	Label	Global_retail_sales_multilingual	page.Global_retail_sales_multilingual	Ventes au détail mondiales	全球零售销售
2	Metadata.xlsx	Label	Metadata	page.Metadata	Médonnées	元数据
3	Product language	Label	Product_language	page.Product_language	Langue du produit	产品语言
4	Gross profit	Label	Gross_profit	page.Gross_profit	Profit brut	毛利润
5	Order method code	Label	Order_method_code	page.Order_method_code	Cd de mode de commande	订购方法代码
6	Order method type	Label	Order_method_type	page.Order_method_type	Type de mode de commande	订购方法类型
7	Planned revenue	Label	Planned_revenue	page.Planned_revenue	Revenu prévu	计划收入
8	Product	Label	Product	page.Product	Produit	产品
9	Product cost	Label	Product_cost	page.Product_cost	Coût du produit	产品成本
10	Product line	Label	Product_line	page.Product_line	Lignes de produits	产品系列
11	Product line code	Label	Product_line_code	page.Product_line_code	Cd ligne de produits	产品系列代码
12	Product number	Label	Product_number	page.Product_number	Numéro de produit	产品编号

To add a new translation definition, click the **Languages** icon in the vertical toolbar. Then, click the **Add metadata conversion** icon , and in the **Create language** dialog box, specify the required settings.



To learn how to create a new translation definition, you can download two sample .xlsx files, provided by IBM, that support multilingual data and multilingual metadata, and use them to create a multilingual data module. For more information, see the "Using the sample files to create a multilingual data module" topic in the *IBM Cognos Analytics Data Modules Guide*.

As part of the multilingual metadata support, two new data module properties are added:

Design language

The language in which the data module was created. By default, the design language is the same as the user content language.

Translate content

When this property is turned off, the metadata cannot be translated.

For more information, see the "Multilingual metadata" topic in the *IBM Cognos Analytics Data Modules Guide*.

Custom sorting

You can specify custom sorting for columns in a data module and use it in dashboards, reports, explorations, and stories that are based on this module.

To view or define custom sorting definitions, click the vertical arrows icon ↑↓ to open the **Custom sort order** panel, as shown in the following image.

The screenshot shows the Data Studio interface with three main panels:

- Custom sort order** panel (left): Displays a list of sort definitions, including "Month", "Week start - Sunday", and "Season start - Winter".
- Data module** panel (center): Shows a tree structure of data modules, with "automatic_sorting.xlsx" expanded to show "Row Id", "Month", "Weekday", and "Season" nodes.
- Grid** view (right): A table with columns "Month", "Weekday", and "Season". The "Season" column is highlighted with a blue border. The data rows are:

Month	Weekday	Season
April	Friday	Fall
August	Monday	Spring
December	Saturday	Summer
February	Sunday	Winter
January	Thursday	Null
June	Tuesday	Null
July	Wednesday	Null
March	Null	Null
May	Null	Null
November	Null	Null

The custom sort order definitions are displayed in the **Custom sort order** panel. To specify a new definition, click the add icon . In the **Data module** panel, the column values are sorted in the custom order. However, in the **Grid** view, the column values are sorted according to the source sort order.

The column **Members display** property now includes the **Custom** option, where you can select the specified **Custom sort order**.

Members display

Display options

Custom

Sort members by

Season

Members order

Ascending

NULL values

First

Last

Custom sort order

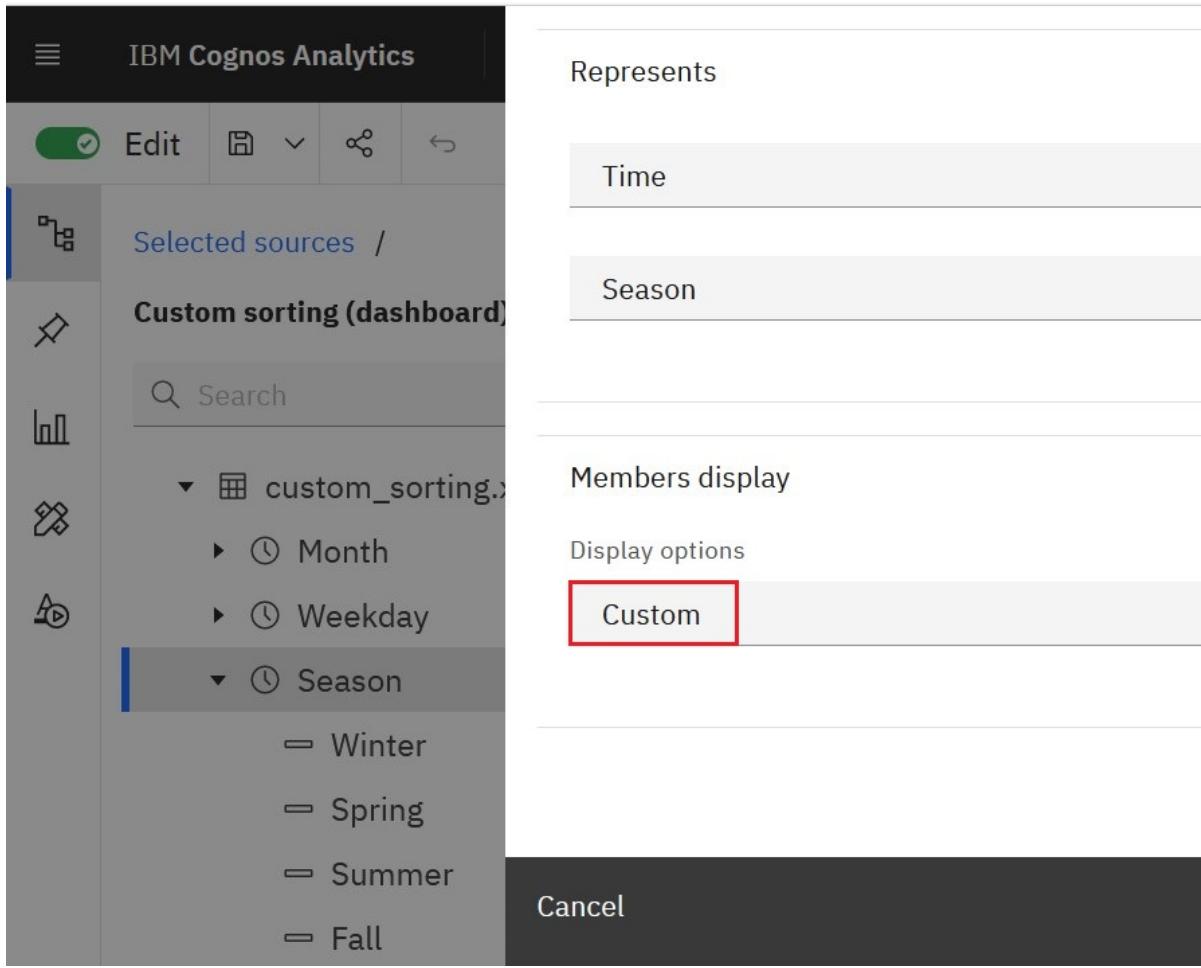
Season start - Win

Advanced

Identifier

Season

In dashboards, the column members in the data tree are sorted in the custom order, and the column **Members display** property is set to the **Custom** option.



For more information, see the "Defining custom sort order" topic in the *IBM Cognos Analytics Data Modules Guide*.

Automatic sorting in month, weekday, and season columns

In newly loaded database schemas and uploaded files, the members in the month, weekday, or season columns are automatically sorted in chronological order, no matter in which order they are listed originally.

For example, in the month column, the sort order is January, February, March, and so on.

The automatic sort order is shown in the data tree in data modules, dashboards, and explorations that use the new file or schema as their source.

In the following example of an XLSX file, the month names are sorted in alphabetical order.

1	Month
2	April
3	August
4	December
5	February
6	January
7	June
8	July
9	March
10	May
11	November
12	October
13	September

When you upload this file to Cognos Analytics 12.0.1, the month names are automatically sorted in chronological order, and the **Members display** property on the Month column is set to **Custom**.

The screenshot shows the Cognos Analytics interface with the following details:

- Selected sources:** automatic_sorting_month.xlsx
- Properties Panel:**
 - Usage:** Identifier
 - Aggregate:** Count Distinct
 - Data type:** Text
 - Represents:** Time
 - Members display:** Month (highlighted with a red box)
 - Display options:** Custom (highlighted with a red box)
- Navigation Path:** automatic_s..._month.xlsx > Month > January, February, March, April, May, June, July, August, September, October, November, December

Note: In dashboards, the automatically generated custom sorting is different than the preexisting **Custom** sorting that is available in visualizations.

In a data module, you see that the **Custom sort order** is automatically defined for the Month column.

The screenshot shows the Cognos Analytics interface with two main panels: 'Custom sort order' and 'Data module'.
The 'Custom sort order' panel on the left has a search bar and a sorting icon. It displays the custom sort definition: `↑↓ January;February;March;April;May;`.
The 'Data module' panel on the right also has a search bar. It lists 'New data module' and 'Navigation paths'. Under 'Navigation paths', there is a file named 'automatic_sorting_month.xlsx' which contains:

- # Row Id
- Month
 - January
 - February
 - March

The 'Month' item is currently selected.

Values that are not defined in the custom sort are appended at the end of the list of sorted items.

You can modify the auto-generated sorting definitions. For more information, see “[Custom sorting](#)” on page 80.

Note: Automatic sorting is not applied to the month, weekday, and season columns in files and schemas that were imported in previous versions of Cognos Analytics.

Auto-generated sorting definitions are created for the locale of the user who uploaded the file or loaded the schema. For example, if a German user uploads a file that has the month columns for English, German, and French, the custom sorting is applied to the German month column only. The custom sorting definition that is shown in the data module, dashboard, or report, which use this file as their source, has values of the German months. The English and French columns do not have custom sorting defined.

Adding or removing tables from a view

You can add or remove tables from an existing view custom table.

In previous versions of Cognos Analytics, you could only add or remove columns from the view tables.

In the data tree, the **Relationships** diagram, or on the **Custom tables** tab, from the view context menu, select the **Edit table view** (or **Edit table**) option to open the view editor.

Edit a view of tables

Select items to be included in the table.

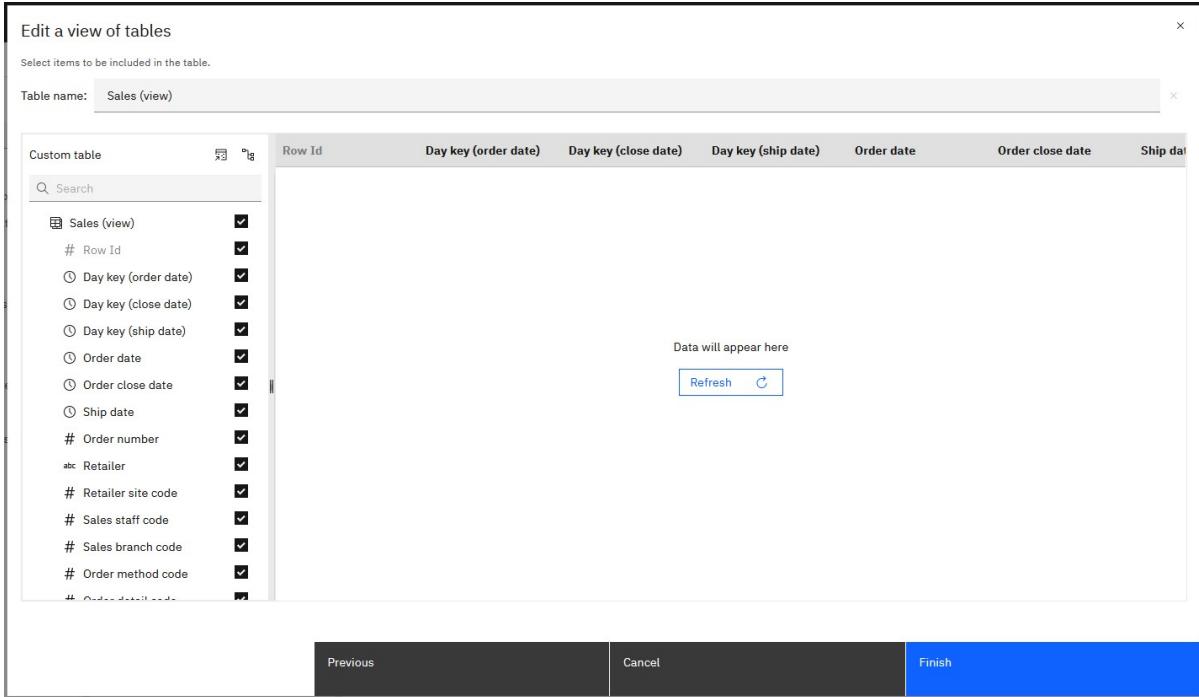
Table name: Sales (view)

Custom table	Row Id	Day key (order date)	Day key (close date)	Day key (ship date)	Order date	Order close date	Ship date
Sales (view)	<input checked="" type="checkbox"/>						
# Row Id	<input checked="" type="checkbox"/>						
① Day key (order date)	<input checked="" type="checkbox"/>						
① Day key (close date)	<input checked="" type="checkbox"/>						
① Day key (ship date)	<input checked="" type="checkbox"/>						
① Order date	<input checked="" type="checkbox"/>						
① Order close date	<input checked="" type="checkbox"/>						
① Ship date	<input checked="" type="checkbox"/>						
# Order number	<input checked="" type="checkbox"/>						
abc Retailer	<input checked="" type="checkbox"/>						
# Retailer site code	<input checked="" type="checkbox"/>						
# Sales staff code	<input checked="" type="checkbox"/>						
# Sales branch code	<input checked="" type="checkbox"/>						
# Order method code	<input checked="" type="checkbox"/>						
# Order detail code	<input checked="" type="checkbox"/>						

Data will appear here

Refresh 

Previous Cancel Finish



To add or remove tables, click the **Previous** button in the table editor. Ensure that the view is switched to **All tables**. Now, you can select the tables to add or remove from the view.

Edit table

Create a custom table in the data module. This table is not added to your data source.

The screenshot shows the 'Edit table' interface. On the left, there's a sidebar with a 'Search' bar and a list of tables. The 'All tables' tab is selected. On the right, a context menu is open with several options:

- View of tables (selected)
- Shortcut to a table
- Alias of a table
- Copy of a table
- Joined view
- Union of tables
- Intersect of tables
- Except of tables

The 'Product Forecast' table is selected in the list, indicated by a checked checkbox next to it. Other tables listed include Product - Co... - Union (1), Product - Cop... - Join (1), Product - Except (1), Product, Product, Product - Intersect (1), Product - Copy (1), Product - View, Product Forecast (selected), Inventory Levels, Product Type, Product Color Lookup, Product Size Lookup, Product, and Product Brand.

For more information, see the "Editing the view custom tables" topic in the *IBM Cognos Analytics Data Modules Guide*.

Event agent

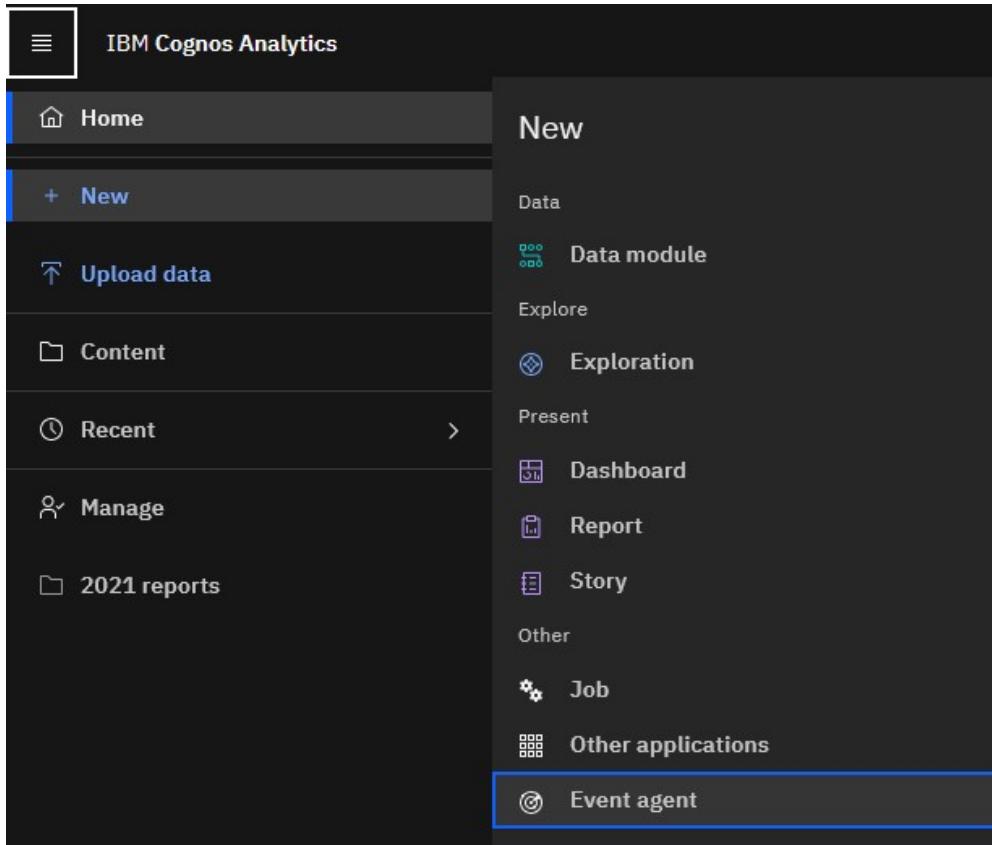
Create agents that monitor your IBM Cognos Analytics data and notify decision-makers of events as they happen.

Event Studio reinstated as a standard component and renamed to Event agent

As of Cognos Analytics 12.0.1, in response to continuing demand, Event Studio is reinstated as a core component. It also has a new name: **Event agent**.

A change to the **New** menu allows you to create an agent more easily. To launch the newly renamed Event agent, follow these steps:

1. Click the **Open menu** icon , and then click **+ New**.
2. In the **Other** section, click **Event agent**.



Notes:

- Prior to release 12.0.1, you would select **New > Other applications > Event Studio**.
- The title *Event Studio Guide* is renamed to *Event Agent Guide*. However, some component references in the guide continue to refer to *Event Studio*. For more information, see the *IBM Cognos Analytics Event Agent Guide*.

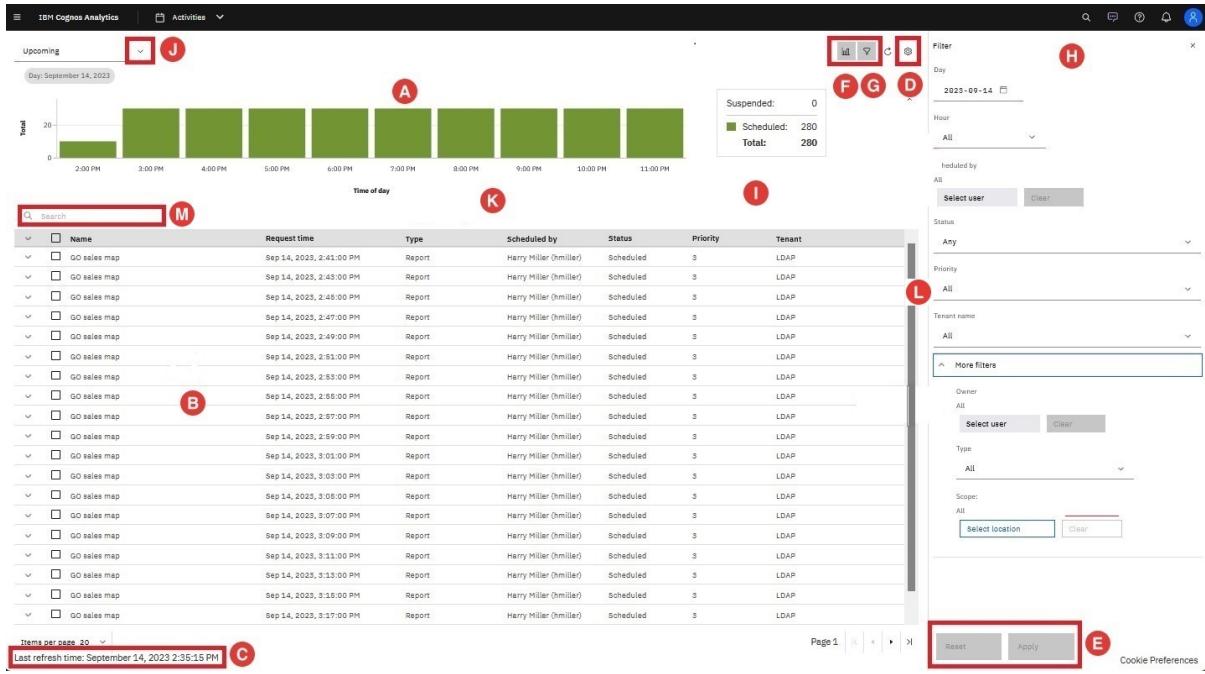
Administration

Manage the security, access, and functionality of IBM Cognos Analytics components.

Activities page enhancements

The **Activities** page contains several changes to improve your user experience.

Match a letter in the following figure to see a [description of the enhancement](#).



User interface improvements

- ① Higher quality visualizations are rendered by the Cognos Analytics Image service.
 - ② Data tables have a cleaner look.
- Note:** Data tables now meet [IBM's Carbon Design System](#) standard, allowing them to interact with other Carbon design components.
- ③ The **Last refresh time** value now appears in the bottom-left corner of the page.

Customization options

- ④ A new Settings menu
 - Choose to show or hide the visualization on the default page.
 - Choose to show or hide the **Filter** panel on the default page.
 - You can auto submit values in the **Filter** panel.
- ⑤ When **Auto submit filter values** is enabled, the **Apply** button no longer appears.
- ⑥ For the current session, you can toggle the show/hide setting for the visualization.
- ⑦ For the current session, you can toggle the show/hide setting for the **Filter** panel.

Filtering improvements

- ⑧ The **Filter** pane can remain open. When you click **Apply**, the panel doesn't close. This allows you to interact with different filter values and see their effects.
- ⑨ When you open the **Filter** panel, the chart and table move to the left so that they are no longer partially hidden.
- ⑩ When you switch views, the filter values you applied in the previous view are preserved.

Interactivity

- ⑪ When you select a chart element, the data table refreshes to reflect your selection.
- ⑫ When you change a filter value, the data table and visualization are updated for the new results.
- ⑬ A new Search box above the data table continuously refines your results as you type.

For more information, see the "Schedules and activities" topic in the *IBM Cognos Analytics Managing Guide*.

New settings for size limits on data sets and uploaded files

Administrators can now use the Manage component to configure size limits for uploaded files and for data sets.

These limits can be applied to two groups of users:

- all users, via **Manage > Configuration > System > Data**
- all members of a tenant, via **Manage > Multitenancy > *tenant_name* > Configuration**

For both the system and the tenant settings, the field names are the same:

- **Size limit per data set (MB)**
- **Maximum rows allowed for an uploaded file**
- **Maximum columns allowed for an uploaded file**
- **Maximum rows allowed for a data set**
- **Maximum columns allowed for a data set**

The following figure shows the new fields in both the System panel and the tenant panel:

The figure displays two side-by-side screenshots of the IBM Cognos Analytics interface. Both screenshots show the 'Configuration' tab selected under the 'System' and 'my_tenant' sections respectively. In both panels, a red box highlights the 'Data' configuration section, which contains fields for setting size limits on data sets and uploaded files. The 'Size limit per data set (MB)' field is set to 0 in both cases. Below it, there are four pairs of fields for 'Maximum rows' and 'Maximum columns' for both 'uploaded file' and 'data set'. All these fields are also set to 0. At the bottom of each panel are 'Apply' and 'Reset' buttons.

For more information about file uploads, see these topics in the *IBM Cognos Analytics Managing Guide*:

- "Uploaded files"
- "Setting limits for data file uploads"

For more information about data sets, see these topics in the *IBM Cognos Analytics Managing Guide*:

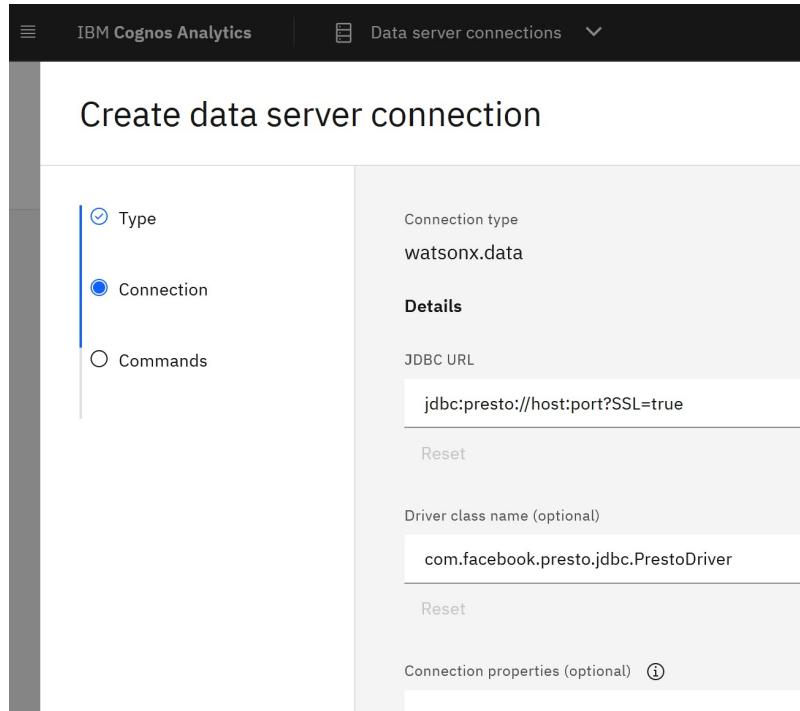
- "Data sets"
- "Setting size limits on data sets"

New **watsonx.data** connection editor

A new connection editor, **watsonx.data**, is available for creating data source connections.

The **watsonx.data** connection uses the driver class `com.facebook.presto.jdbc.PrestoDriver`

Note: Connections that provide credentials must include `SSL=true` in the URL.



For more information, see "Creating a data server connection" in the *IBM Cognos Analytics Managing Guide*.

Schedule by week for On cloud On-Demand Premium users

If you are a Premium user of IBM Cognos Analytics On cloud On-Demand, you can now select a frequency of **Weekly** when you schedule a report.

For more information, see these references:

- "Scheduling a report" in the *IBM Cognos Analytics Managing Guide*
- "On-Demand subscription roles" in the *IBM Cognos Analytics Managing Guide*

Supported Software Environments page for release 12.0.1

Supported Software Environments information is available for IBM Cognos Analytics 12.0.1.

You can find up-to-date information about the supported software, data sources, and minimum requirements for using IBM Cognos Analytics 12.0.1.

Visit the 12.0.x Supported Software Environments page at <https://www.ibm.com/support/pages/node/6966712#12.0.1>.

Vendor-supported driver versions tested with 12.0.1

IBM Cognos Analytics 12.0.1 supports an updated list of client driver versions.

For more information, see *Vendor-supported client driver versions that were tested with Cognos Analytics on Premises 12.0.1 [Relational] [OLAP]* (<https://www.ibm.com/support/pages/6989513#12.0.1r>).

New paletteId property in themes

A new property, paletteId, is added to the default spec.json schema used for themes.

paletteId can have two possible values: "IBM" or "IBM_Modern" (the default value).

Note: If you upgraded customized themes to release 12.0.1, you may notice visual differences in Cognos Analytics compared to your previous release. To solve the issue, follow the workaround in [Upgraded customized themes give unexpected results](#).

For more information, see "The default schema for themes" in the *IBM Cognos Analytics Managing Guide*.

New DQM connection property

To support Dynamic Query Mode (DQM), a new connection property, qs.queryExecution.defaultIdleConnectionTimeout, allows you to change the default timeout for connections that are added to the connection pool.

For more information, see the following topics:

- [Database connection pooling](#)
- [qs.queryExecution.defaultIdleConnectionTimeout in Query service advanced settings](#)

Generated spec.json documentation for extensions

Documentation is now generated automatically that describes the spec.json file that you use to create extensions. Because this topic is generated directly from the Cognos Analytics code, it always describes the latest version of the spec.json schema.

For more information, see the generated topic "spec.json description" in the *IBM Cognos Analytics Managing Guide*.

Samples

Get a deeper understanding of Cognos Analytics capabilities with updated sample content.

Changes to base samples

Some of the base samples were modified in this release.

Here is a list of the modified samples:

Hospital admissions executive dashboard

This sample dashboard includes a new tab named **Distance From Home**. On this tab, you can view a heat map visualization that demonstrates how to use the data groups that were created in the underlying data module.

Sample location: **Team content > Samples > By industry > Healthcare > Dashboards > Hospital admissions executive dashboard**

Auto group MTD dealer sales

This sample report includes 3 new parameters, pDate, pModel, and pRecall, to demonstrate the default parameter values feature. Two new report pages were added to utilize these new parameters.

Sample location: **Team content > Samples > By industry > Automotive > Reports > Auto group MTD dealer sales**

Hospital admissions data module

This sample data module was modified to include a data group named **Distance from Home (Data Group)** based on the values in the **Distance from Home** column.

Sample location: **Team content > Samples > By industry > Healthcare > Data > Hospital admissions data module**

For more information, see "Base samples" in the *Cognos Analytics Samples Guide*.

Release 12.0.0 - June 2023

This section describes new and changed features in IBM Cognos Analytics 12.0.0.

Important:

Do not upgrade your 11.2.4 FP3 content to version 12.0.0, 12.0.1, or 12.0.2. If you do so, you may need to run specialized scripts before you can do another upgrade to version 12.0.3 or later. If you want to upgrade 11.2.4 FP3 content to version 12.0.x, you must wait until 12.0.3 or later to do so.

Reason:

Schema changes are made in the content store of 11.2.4 FP3 (and future releases) to support faster processing of content retention rules. Therefore, when you upgrade from 11.2.4 FP3 (or later), you must upgrade to a release with the same content store enhancements, for example, 12.0.3 (or later).

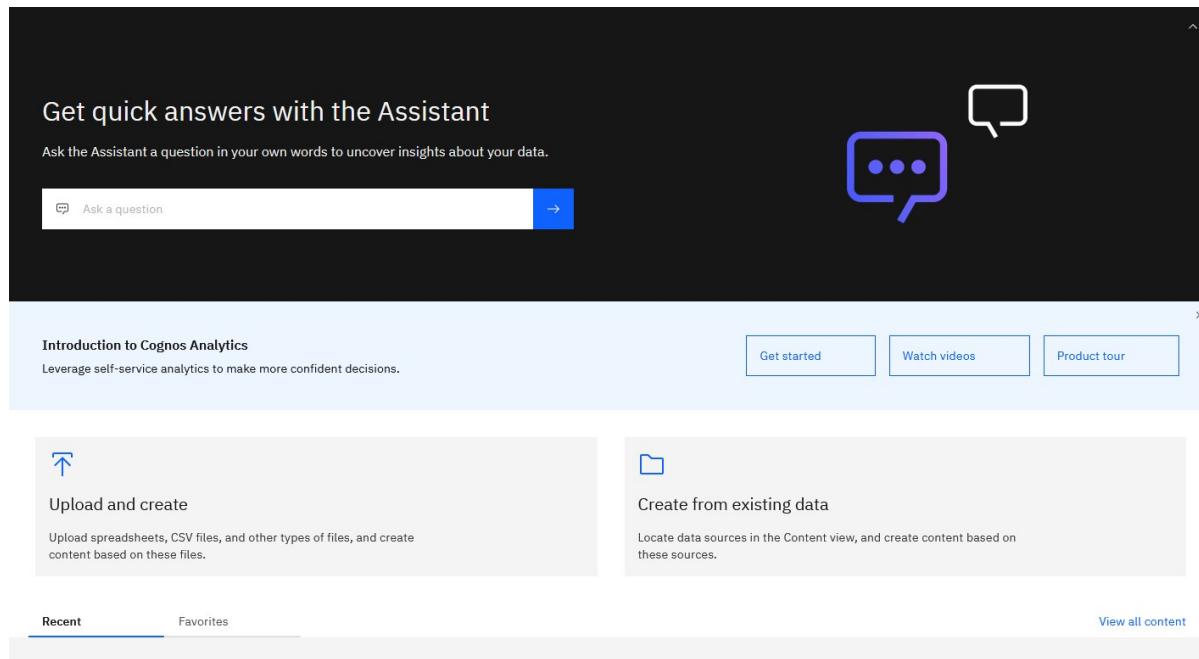
You can still upgrade any 11.2.x content **other than** 11.2.4 FP3 to any version of 12.0.x.

Multiple components

Learn about enhancements to the user interface, training materials, and features that affect multiple IBM Cognos Analytics components.

Changed Welcome page user experience

The Welcome page was redesigned to focus on the Cognos Analytics AI and self-service capabilities, and quick access to data.



The Welcome banner now includes the **Assistant** input box where you can ask questions about your data to gain insights quickly.

The tiles **Upload data and start creating content** and **Create content from existing data** support the two most basic use cases for creating content in Cognos Analytics. In the first case, the user is guided to upload data files and create content based on these files. In the second case, the user is guided to select a data source from the **Content** view and use this source to create content. In both cases, the system recommends the most suitable type of content to create based on the data source and user's access permissions.

The **View all content** link opens the **Content** view where you can browse or search for all content that's available to you in Cognos Analytics.

For more information, see the "Welcome page" topic in the *IBM Cognos Analytics Getting Started Guide*.

Custom tabs in the Content view

Administrators can add multiple custom tabs to the **Content** view by using extensions.

The default **Content** view includes two tabs, **Team content** and **My content**. In previous releases, administrators could add one extra tab to this view. Starting with this release, administrators can add multiple folders that exist in **Team content** as tabs in the **Content** view. The folders can include any type of content, such as reports, dashboards, stories, subfolders. Sort and filter options can be set up for these folders.

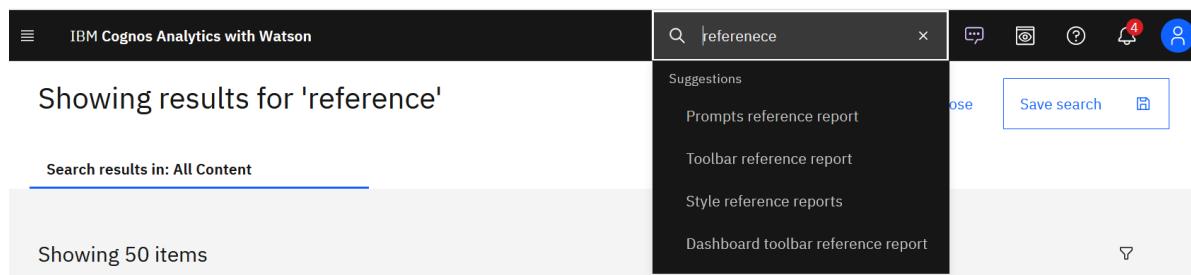
To implement this functionality, an extension must be created, and then uploaded in **Manage > Customizations > Extensions**.

For more information, see "Adding custom tabs in the Content view" in the *Cognos Analytics Manage Guide*.

Support for fuzzy search

The Cognos Analytics search now supports fuzzy searches. The results provided by a fuzzy search match the search term closely instead of exactly. This type of search finds relevant results even when you don't know the exact search term or misspell the term.

In the following example, the user misspelled the word "reference" by typing "referenece". The search still returned relevant results. In previous versions of Cognos Analytics, no search results would be returned in such case.



The screenshot shows the search interface of IBM Cognos Analytics. The search bar at the top contains the misspelled term 'referenece'. Below the search bar, the main area displays the message 'Showing results for \'reference\''. A sub-header 'Search results in: All Content' is visible. On the right side, a sidebar titled 'Suggestions' lists several items: 'Prompts reference report', 'Toolbar reference report', 'Style reference reports', and 'Dashboard toolbar reference report'. A blue button labeled 'Save search' is located in this sidebar. At the bottom of the main search area, it says 'Showing 50 items'.

Fuzzy search is used only with user searches. Applications that make search API queries continue to use exact queries, unless a fuzziness parameter is specified.

For more information, see the "Search" topic in the *IBM Cognos Analytics Getting Started Guide*.

Enhancements to embedded reports and dashboards in Microsoft Teams

Cognos Analytics reports and dashboards that are embedded in Microsoft Teams have the following enhancements:

- If you are using the Microsoft Teams Web application, you can now log in to your embedded report or dashboard using your IBM ID.
- A new link in your embedded report or dashboard tab in Microsoft Teams allows you to open Cognos Analytics in a new browser window.

For more information, see these topics:

- "Embedding a report in Microsoft Teams" in the *IBM Cognos Analytics Reporting Guide*
- "Embedding a dashboard in Microsoft Teams" in the *IBM Cognos Analytics Dashboards and Stories Guide*

Interactive Performance Assistant (IPA)

Cognos Analytics 12.0 includes a new performance analysis tool, Interactive Performance Assistant (IPA). IPA allows report and dashboard authors to gather and analyze performance details about their reports and dashboards.

An earlier version of IPA existed, but was not part of the Cognos Analytics installation and was not fully supported. However, this new version of IPA is enhanced and supported.

Note: The performance detail reports that are included in Cognos Analytics are in English only.

For more information, see the following topics:

- "Collecting and analyzing performance data about a report" in the *IBM Cognos Analytics Reporting Guide*
- "Collecting and analyzing performance data about a dashboard" in the *IBM Cognos Analytics Dashboards and Stories Guide*
- "Setting up Interactive Performance Assistant (IPA)" in the *IBM Cognos Analytics Managing Guide*

Improved interface to address cross-site scripting errors

Some browsers now block cross-site cookies by default. Cognos Analytics 12.0 detects third-party cross-site scripting errors, then shows you an error message with a direct link to documentation that tells you how to resolve the issue.

In previous Cognos Analytics releases, you would see a different error message, depending on which browser you were using. You might not know what the issue was or how to fix it.

For more information, see "Error due to cross-site cookie restrictions" in the *IBM Cognos Analytics Troubleshooting Guide*.

Videos about Cognos Analytics 12.0

Seven in-product videos demonstrate the power of Cognos Analytics 12.0. To watch the new video playlist in Cognos Analytics, click **Watch video** on the Home page.

The screenshot shows the IBM Cognos Analytics home page. At the top, there's a dark header with the IBM Cognos Analytics logo and a search bar. Below the header, a large central area has a dark background with white text. It says "Get quick answers with the Assistant" and "Ask the Assistant a question in your own words to uncover insights about your data." There are two blue speech bubble icons. Below this, there's a white input field with a microphone icon and the placeholder text "Ask a question". At the bottom of the main content area, there's a light blue footer bar. On the left side of the footer, there's a section titled "Introduction to Cognos Analytics" with the subtext "Leverage self-service analytics to make more confident decisions.". On the right side of the footer, there are two buttons: "Get started" and "Watch video". A large green arrow points upwards from the bottom towards the "Watch video" button.

You can also watch the videos from here:

- [Get started in Cognos Analytics](#)

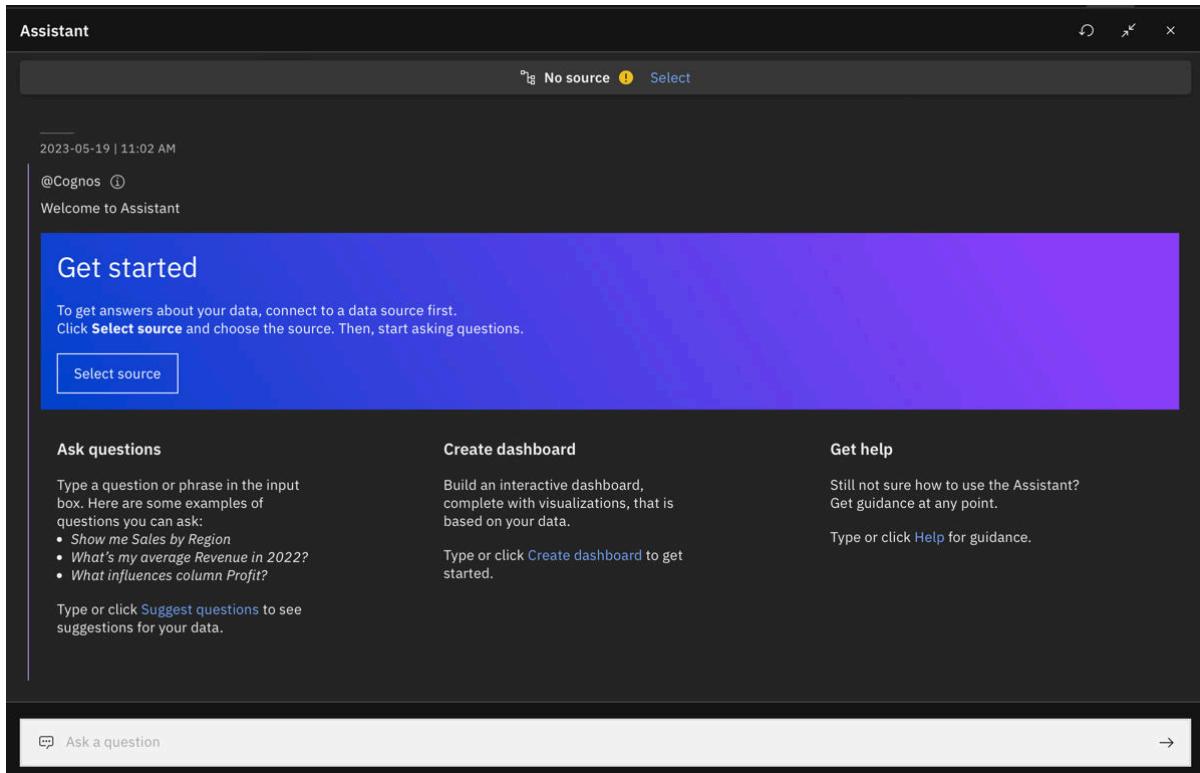
- [Create your first Cognos Analytics dashboard](#) 
- [Ask the Cognos Analytics Assistant](#) 
- [Build operational reports in Cognos Analytics](#) 
- [Experience the power of Cognos Analytics in the palm of your hand](#) 
- [Prepare your data in Cognos Analytics](#) 
- [Explore your data in Cognos Analytics](#) 

Assistant

Ask questions in natural language to find, explore, and gain quick insights into your data.

Design and usability improvements in the Assistant

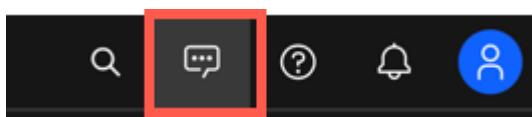
In Cognos Analytics version 12.0.0, the Assistant features a new look and feel and a more intuitive and guided experience. Clear instructions and quick links now display in the user interface to get you started with the Assistant faster.



Open the Assistant from anywhere

The first significant change you'll notice is that you can now open the Assistant from any view in Cognos Analytics, including the Home page. Previously, you could open the Assistant from only Dashboards, Explorations, and Stories.

Click the **Assistant** icon in the navigation bar to access the assistant panel.

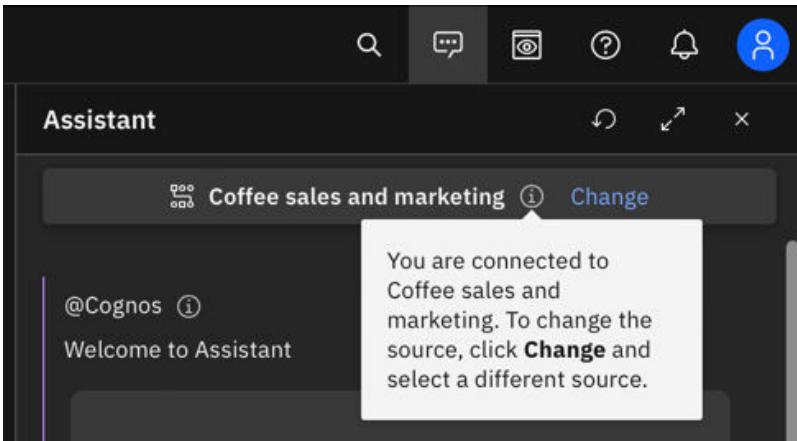


Note: To use the **Assistant** you must have the [Use Assistant](#) capability.

Select your data source

You can quickly set the context for the Assistant with by clicking **Select source** to select a data source. The name of the data source then displays in the Assistant.

When you launch the Assistant, if it is already connected to a data source, the data source name displays in the Assistant. To change the data source, click **Change**.



In Dashboards, Explorations, and Stories, the Assistant can detect if there is a conflict between the connected data source and an active data source and lets you change the data source accordingly. For example, if you are connected to one data source but open a dashboard from another data source, the Assistant lets you know that there are multiple data sources in the view, allowing you to change your connection.

Expand to full screen mode

You can now expand the Assistant to full screen mode by clicking the **Enter full screen** button in the Assistant toolbar and take advantage of ample workspace. Previously, the Assistant opened only in a side panel.



By default, the Assistant opens in side panel mode in Dashboards, Exploration, Stories, and Data module views. For all other views, the Assistant opens in full screen mode.

Clear chat and reset to default source

You can clear your conversation with the Assistant and reset the Assistant to connect to the default data source with one simple click.



Note: Administrators can select a default data source for users under **Manage > People > Accounts > Cognos**. Open the context menu for a user group and click **Properties**. On the **Customization** tab, select a default data source.

When you clear the chat in Dashboard, Exploration, or Stories view, if a default source is not configured, the Assistant connects to the active data source in the current active view. In other views, if you do not have a default data source, when you clear the chat, the Assistant disconnects from the active data source. You can click **Select source** to reconnect the Assistant to a data source of your choice.

Natural language enhancements to the Assistant

The Assistant now understands comparatives and additional filters. You can also associate a term to a field name so that the Associate recognizes the term to be a synonymous word for the field name.

Important: Text input is supported in English only.

Comparatives

You can ask the Assistant to compare multiple columns or two data values with or without a timeline. For example, you can ask the Assistant:

- How do marketing costs for the last two years compare?
- What is the difference in marketing costs between the last two years?
- Compare the average ticket of Store A and Store B

When there is one data value and a timeline, the Assistant compares the same data value at different times. If you want to compare multiple measure columns with a timeline, the timeline only works as filter value.

For more information, refer to [Comparing data in the Assistant](#).

Filters and modifiers

The Assistant now understands additional filters and modifiers such as above, highest, most, best and worst. For example, you can ask the Assistant the following:

- What city has average ticket above 90,000?
- Which product has the highest revenue today?
- Which product has the worst NPS Score?

Previously, the Assistant understood only certain filters such as top and bottom. When you asked the Assistant to show the top product by sales, it returned the top five results. In Cognos Analytics 12.0.0, the Assistant returns the top result only.

Another update to filters in Cognos Analytics 12.0.0 is that the Assistant now applies filters after any aggregation is applied to the data. Previously, the Assistant applied filters to the data before aggregations.

For more information, refer to [Filtering in the Assistant](#).

Synonymous terms

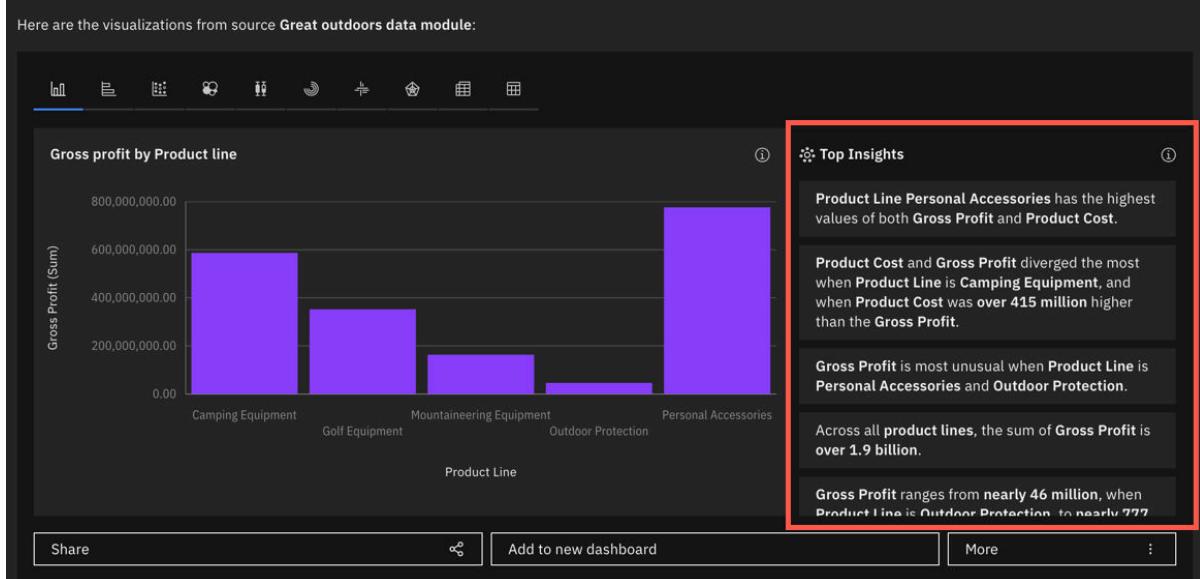
You can associate terms to field names in your data so that the Assistant recognizes these terms as synonymous terms. For example, if you tell the Assistant that revenue means sales, then when you ask the Assistant to show revenue, it returns results related to the sales in your data.

View narrative insights in the Assistant

You can now see narrative insights for your data in the Assistant, with or without a chart. Narrative insights are auto-generated and help you see meaningful aspects of your data in natural language. Before Cognos Analytics 12.0.0, narrative insights were available only on the **Analytics** panel for dashboard visualizations.

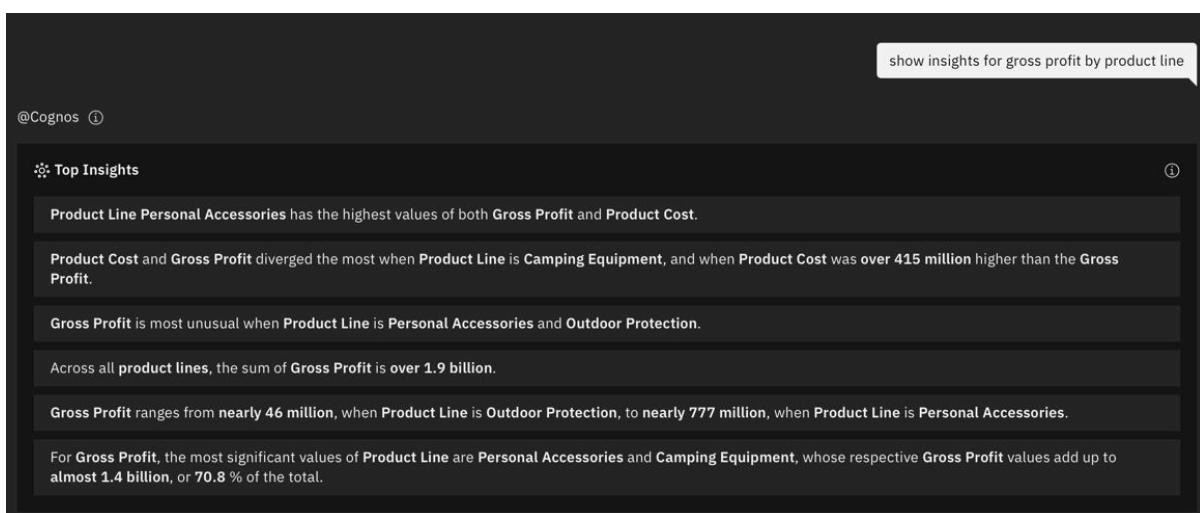
The Assistant displays narrative insights automatically when it renders a chart or a visualization. Any filters in the chart are also applied to the insights.

Here are the visualizations from source **Great outdoors data module**:



You can also ask the Assistant to show you narrative insights without a chart by using commands such as:

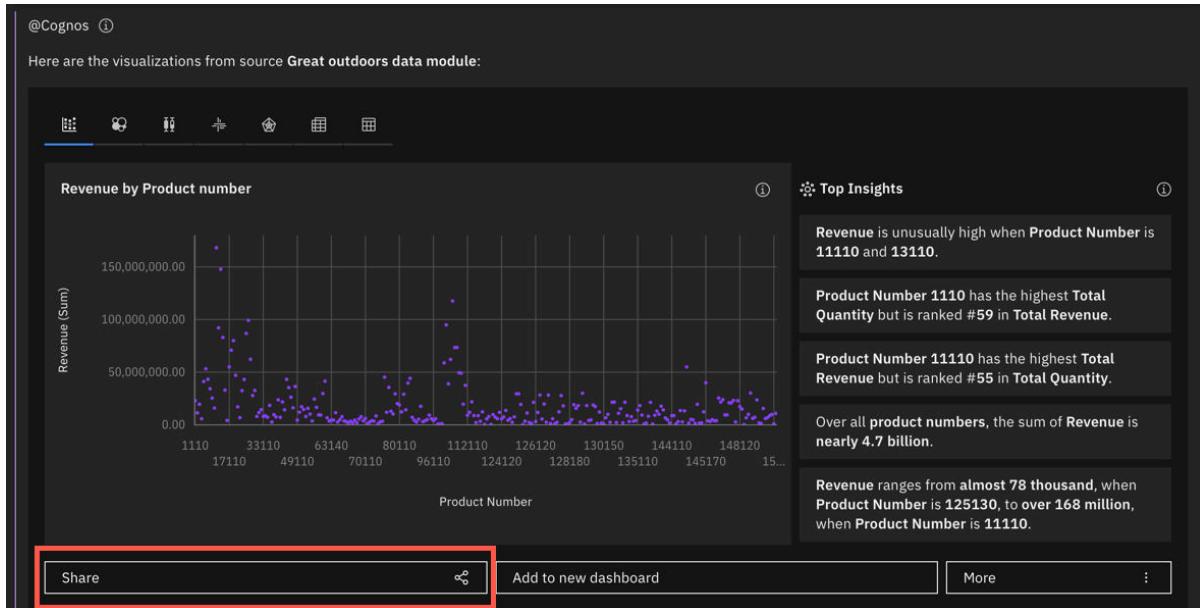
- show insights for <column name>
- explain <column name>
- analyze <column name>



For more information, see [Narrative insights in the Assistant](#).

Share visualizations from the Assistant

A new **Share** option in the Assistant allows you to select a visualization that was returned by the Assistant in response to your question and share it via Email, Microsoft Team, or Slack. Your administrator must configure a mail server and/or a collaboration platform before you can use this feature.



Note: To share visualizations through the Assistant, you also need to have access permission for [Collaborate capabilities](#).

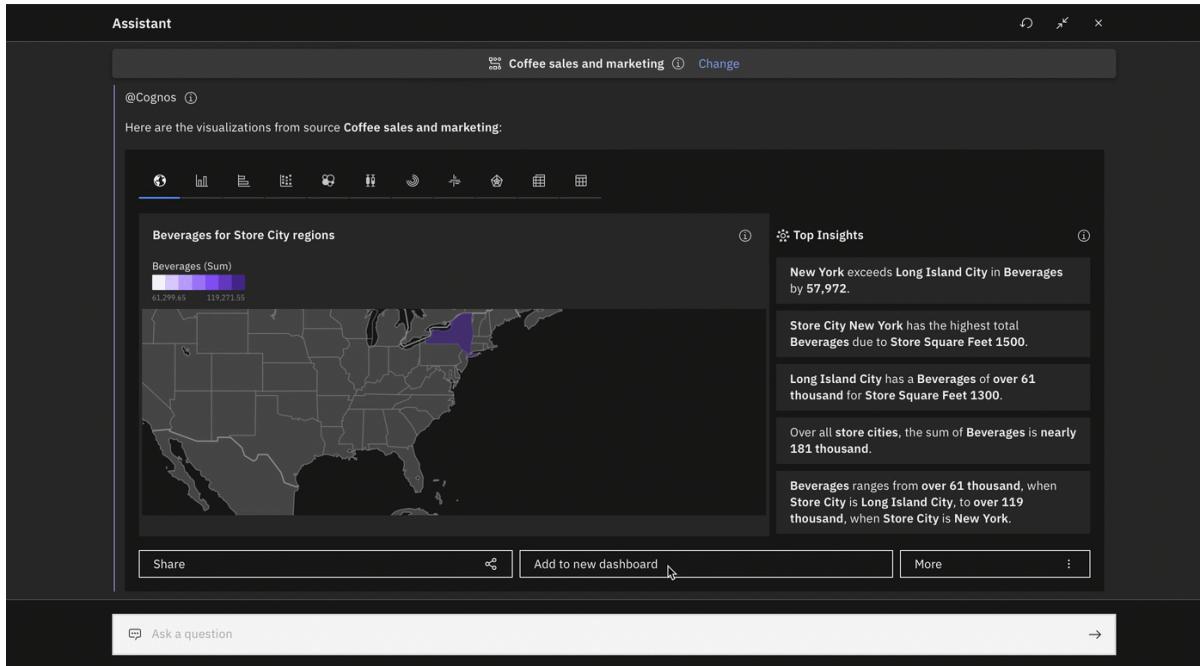
Click the **Share** button to select the platform through which you want to share the visualization. Before you send the visualization, you can add a message and annotate and edit the visualization.

For more information, refer to [Sharing visualizations from the Assistant](#).

Create a simple dashboard from the Assistant

You can now create a simple dashboard from a visualization that the Assistant returns that includes only the selected visualization. This feature is useful if you want to manually build a dashboard around the selected visualization. Previously, creating a dashboard from a visualization in the Assistant, generated a full dashboard with multiple related analytic charts and widgets.

Click **Add to new dashboard** for the visualization that you want to add to a dashboard.



Important: The **Add to new dashboard** option is available only if you have access permissions for Dashboard capabilities.

After the dashboard is created, you can continue to build the dashboard by adding other sophisticated visualizations and widgets.

Note: You can still create a full dashboard with multiple charts and widgets from a visualization in the Assistant. For more information, refer to [Create a dashboard in the Assistant](#).

Embed Assistant in any web page or web application

The Assistant is now embeddable using the Cognos URL in an iFrame. With this feature, you can embed an Assistant text field in your web page or web application and interact with Assistant.

To embed the Assistant, use the following Cognos URL in an iFrame:

`https://<cognos server>:<port>/bi/?perspective=assistant`

Dashboards

Use IBM Cognos Analytics dashboards to discover key insights about your data and monitor events or activities at a glance.

Configuration of local data caching

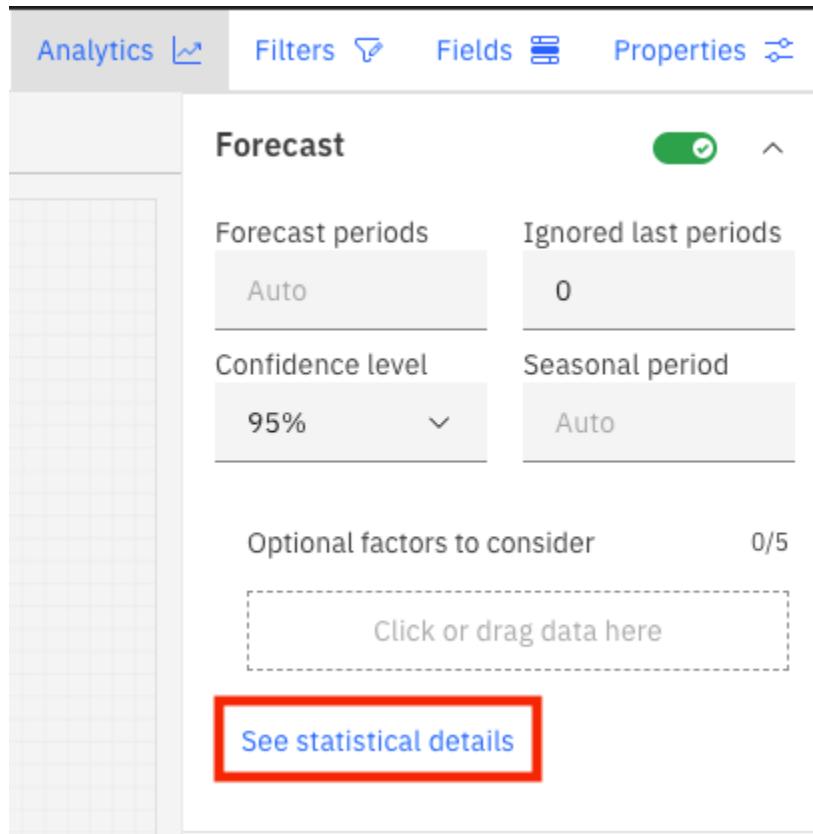
Dashboard authors can now configure specific data to be cached locally. This helps them to optimize the performance of their dashboard's widgets.

For more information, see "Specifying data elements for local data caching" in the *IBM Cognos Analytics Dashboards and Stories Guide*.

Statistical details for multivariate forecasting

You can now view more statistical details on multivariate forecasting. This allows you to better understand the forecasting results.

When the dashboard is in **Edit** mode, select a visualization that has **Forecast** enabled. From the **Analytics** icon, click **See statistical details** to view the statistical details on the forecasting results.



For multivariate forecasts, the new **Model influencers** section explains how much factor weight each field contributed to the forecast. A higher value indicates that the field was more relevant to the forecast.

For more information, see "Forecasting statistical details" in the *IBM Cognos Analytics Dashboards and Stories User Guide*.

Nested dashboards

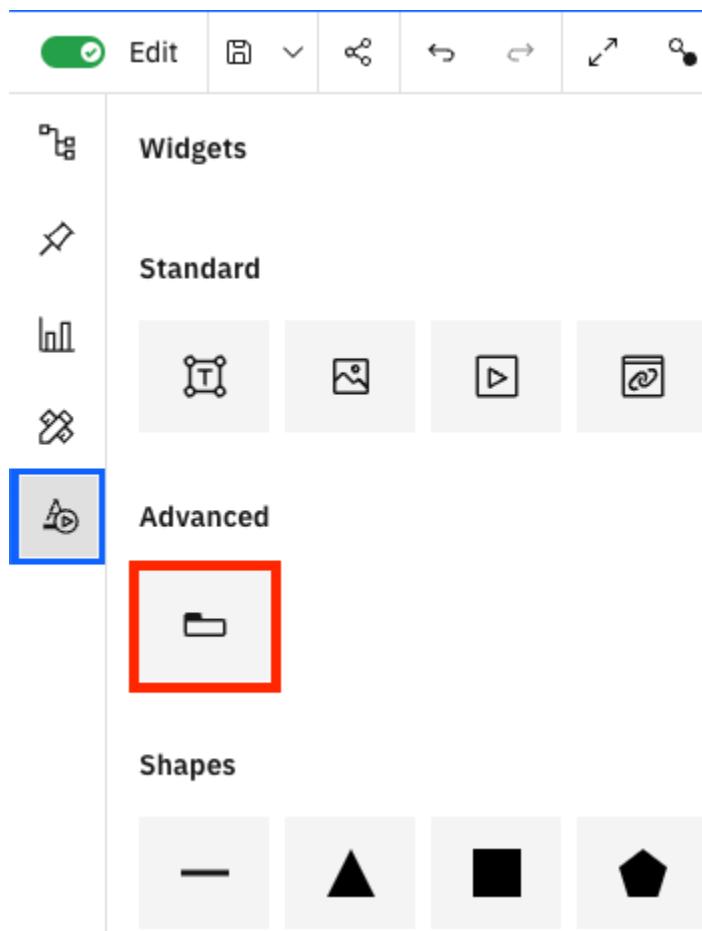
You can now use the **Nested dashboards** widget to include multiple sets of content in a section of the dashboard canvas.

A nested dashboard is a dashboard canvas that is embedded inside another dashboard canvas. This embedded dashboard can contain multiple visualizations and widgets just like any other dashboard canvas. You can nest two additional levels of nested dashboards, for a total of three levels of nesting. That is, your main dashboard canvas can have a first level nested dashboard, which can have a second level nested dashboard, which can then have a third level nested dashboard.

Use nested dashboards to switch between related visualizations, different visualization types, or between visual information and tabular information.

Note: The nested dashboards widget is not available in Cognos Analytics for Mobile

When the dashboard is in **Edit** mode, click the **Widgets** icon . The **Nested dashboards** icon  is in the **Advanced** section.



For more information, see "Adding a nested dashboard widget" in the *IBM Cognos Analytics Dashboards and Stories User Guide*.

Video

This video demonstrates the nested dashboards feature: [video](https://www.youtube.com/watch?v=QGrZsTRj9o) (<https://www.youtube.com/watch?v=QGrZsTRj9o>)

Customized Map charts in dashboards

In dashboards, you can now provide your-style maps and your-style icons for the Map charts.

For more information, see "Custom maps and icons in Map charts" topic in the *IBM Cognos Analytics Dashboards and Stories Guide*.

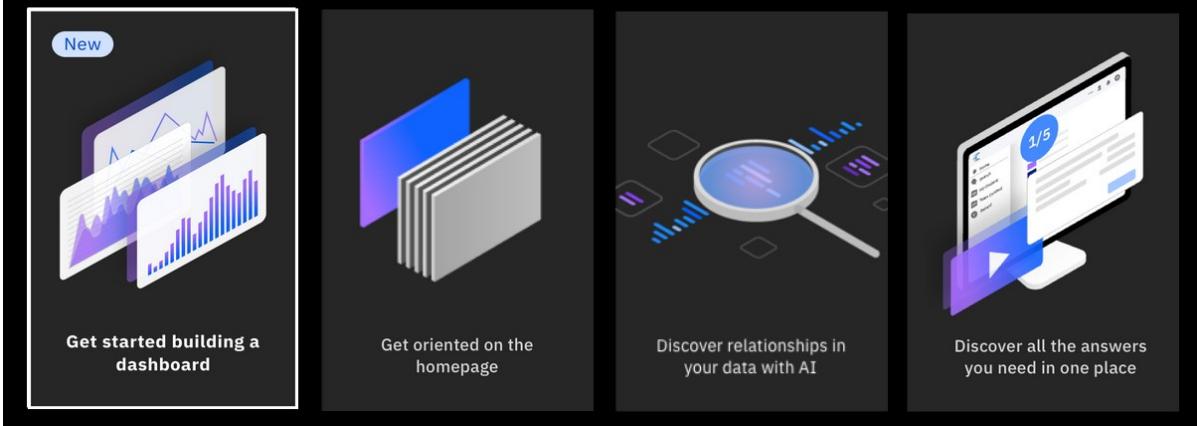
New Dashboard tour for the Cloud offerings

Cognos Analytics on Cloud offerings invite you to take a new Dashboard tour.

To start, click **Product tour** in the welcome page, and then click **Get started building a dashboard**.

Welcome to Cognos Analytics

Unlock your potential with data in a seamless manner. Select a path to begin:



The tour guides you to perform the following tasks in a dashboard:

- Apply filters.
- Learn from narrative insights.
- Customize a visualization.
- Apply conditional formatting.

Note: The **Product tour** link is not available in the on-premises offering.

Zoom bar in more visualizations

The zoom bar allows for horizontal scrolling in a visualization.

You can use the zoom bar in the following additional visualizations:

- Boxplot
- Bullet
- Column
- Driver analysis
- Line
- Waterfall

To turn on the zoom bar, go to **Properties > Visualization > Chart** and click **Enable zoom bar**.

Reporting

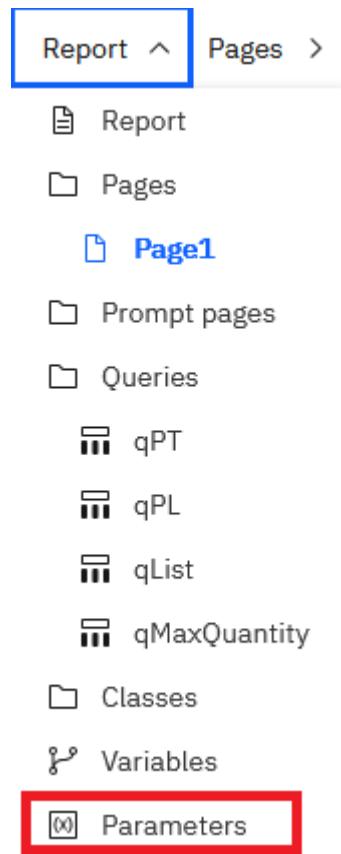
IBM Cognos Analytics- Reporting is a web-based report authoring tool that professional report authors and developers use to build sophisticated reports against multiple databases.

Defining default parameter values

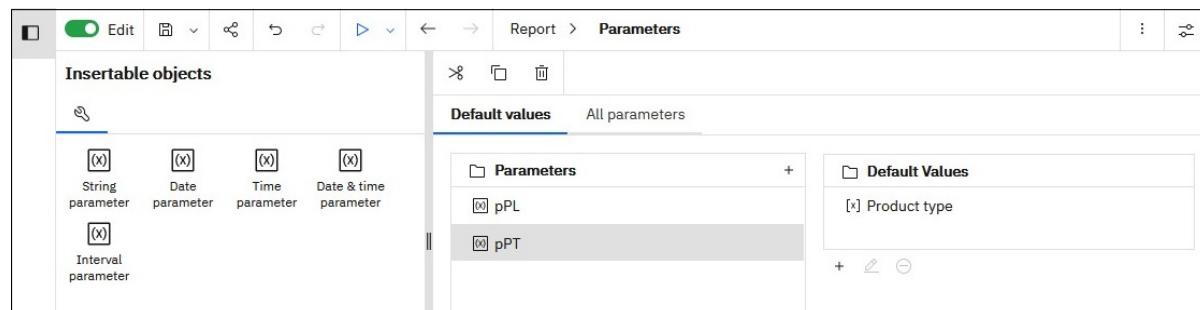
To provide greater flexibility and power to an author, Cognos Analytics - Reporting now includes the functionality to define default parameter values in a report. The values can be specified as a static text, a report expression, or a data item with a corresponding query.

Alternatively, you can use the preexisting **Default selections** property on certain prompt controls to provide static selections. However, applying default values for parameters is more powerful and flexible, and allows to provide dynamic default values.

To define default parameter values, use the new **Parameters** pane that is available from the **Report** menu.



In the **Parameters** pane, on the **Default values** tab, add an entry for each parameter that you would like to define default values for.



The list of parameters that was presented in the main **Report** pane in previous versions of Cognos Analytics - Reporting was moved to the **Parameters** pane, the **All parameters** tab. Using the links in the **Set by** column, you can easily navigate to the objects that are associated with the parameter.

The screenshot shows the 'Parameters' dialog box with two parameters defined:

Name	Value	Type	Required	Multi-select	Set by
pPL	Golf Equipment (Golf Equipment)	String	✓		<input type="checkbox"/> Value prompt
pPT	Woods (Woods)	String		✓	<input type="checkbox"/> Value prompt

[Clear parameter values](#)

For more information, see the "Defining default parameter values" topic in the *IBM Cognos Analytics Reporting Guide*.

Range values based on expressions for Date controls

Report expressions can be used to set range values for Date controls.

The screenshot shows the properties dialog for a date control. The 'First date' and 'Last date' properties are set to report expressions:

- First date:** Report expression `_add_days(ReportDate(), 2 - _day_of_week(ReportDate(), 7))`
- Last date:** Report expression `_add_days(ReportDate(), 6 - _day_of_week(ReportDate(), 7))`

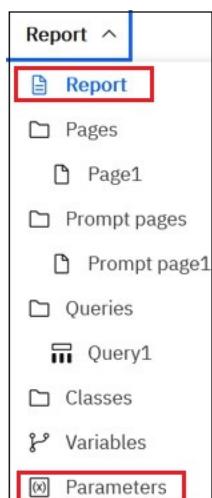
The 'Range' property is also enabled.

The **First date** and **Last date** properties were enhanced and now support report expressions. An author can still define static values, as in prior releases, for these properties.

For more information, see the "Defining default parameter values" topic in the *IBM Cognos Analytics Reporting Guide*.

Quick links to report objects

The **Report** overview pane and **Parameters** pane include links to report objects to make it easier for authors to navigate to the area of the report where the control resides.



The following image shows the links in the **Report** overview pane.

A screenshot of the Report overview pane showing two tables. On the left, a table titled 'Counts' displays the count of various report objects. On the right, another table displays the count of page objects.

Report Object	Count
Pages	1
Prompt Pages	1
Queries	1
Data items	3
Filters	1
Variables	0
Local Classes	5
Global Class Extensions	0
Drill throughs	0

Page Object	Count
Text item	8
Prompt button	4
Block	2
Table	1
List	1
Date prompt	1

The following image shows the links in the **Parameters** pane.

A screenshot of the Parameters pane. At the top, there's a toolbar with icons for Edit, Find, Refresh, and Report. To the right of the toolbar, the word 'Parameters' is displayed. Below the toolbar is a search bar with a magnifying glass icon. Underneath the search bar, there are two tabs: 'Default values' and 'All parameters', with 'All parameters' currently selected. The main area is a table with columns: Name, Value, Type, Required, Multi-select, and Set by. Two rows are visible: one for 'pPL' with a value of 'Golf Equipment (Golf Equipment)', type String, required checked, multi-select checked, and 'Set by' set to 'Drop Down'; and one for 'pPT' with a value of 'Woods (Woods)', type String, required checked, multi-select checked, and 'Set by' set to 'List Box'. The 'Set by' column for both rows is highlighted with a red box.

Name	Value	Type	Required	Multi-select	Set by
pPL	Golf Equipment (Golf Equipment)	String	✓	✓	Drop Down
pPT	Woods (Woods)	String	✓	✓	List Box

Authors can click the links and navigate directly to the specific object in the report.

Tip: As a report author, remember about naming objects in your reports so that the objects are easier to identify.

For more information, see the "The user interface " topic in the *IBM Cognos Analytics Reporting Guide*.

removeEmptySets query hint to help optimize layouts that use the emptySet function

Report layouts that use the emptySet function are optimized to improve query execution. You can disable it by setting the name-value pair `removeEmptySets=false` in the **Advanced hints** property of a query in the report.

For more information, see [Problems derived from using emptySet function in Cognos Analytic queries](#).

More export formats for Network and custom visualizations

On the server side, you can now export reports that contain Network and custom visualizations to PDF, Excel, CSV, and other formats, in addition to HTML format.

For more information, see [Network and Custom Visualizations](#).

Customized Map charts in reports

In reports, you can now provide your-style maps and your-style icons for the Map charts.

For more information, see "Custom maps and icons in Map charts" topic in the *IBM Cognos Analytics Reporting Guide*.

Dashboards and reports

Learn about new features that are common for dashboards and reports.

Alignment of visualization elements

New properties are introduced that make the positioning of legends and axis labels in a visualization more adjustable.

Legend alignment

Now, you have more options to position a legend in a visualization. The combination of two properties, **Legend position** and **Legend alignment**, that are available in **Properties > Visualization > Legend** enables you to position the legend in twelve areas of your visualization. You can select from four options in **Legend position**: Default that is equivalent to Top, Left, Right, and Bottom, and three options in **Legend alignment**: Start, Center, and End.

Axis label alignment

You have now more options to position axis labels in a visualization. To modify the alignment, go to **Properties > Visualization > Axis**, then go to **Item axis label** or **Value axis label**, depending on the alignment of which axis label you are changing. Select left or Right for the **Align item axis label text** or **Align value axis label text** property. The axis label alignment is available in the following visualizations:

- Area
- Bar
- Bubble
- Bullet
- Column
- Line

- Scatter

Map chart enhancements

Several new features were added to the map chart to improve the user experience with this visualization.

Allow overlap

For certain zoom levels, some points are covered by others. To solve this problem, you can enable the **Allow overlap** option in both **Properties > Visualization > Regions layer** and **Properties > Visualization > Points layer**. When you turn on the option, all points are visible independently of the zoom.

Also, you can hide the default circle icons for points in a map by setting the **Transparency** value to 100% in **Properties > Visualization > Points layer**.

Hexbin count tooltip

A count tooltip is available for the points of type Hexbin. With the tooltip, you can read on the screen the number of data items that are inside a hexbin point. The tooltip is uncontrollable, you cannot turn on or turn off the tooltip in any place.

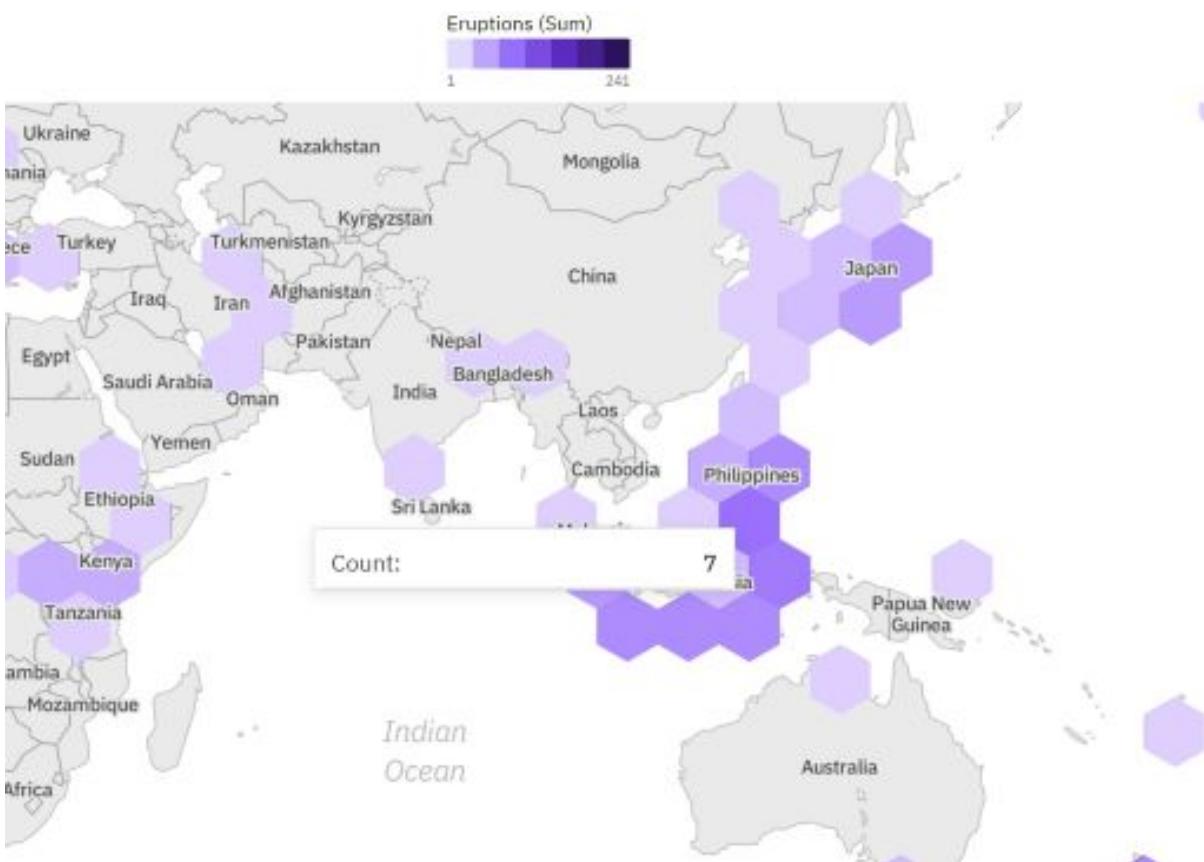


Figure 1. An example of using the hexbin count tooltip

Icons for points

In this version of IBM Cognos Analytics, you can use different icons for points. You can choose a predefined icon or a custom icon. To use a predefined icon, go to **Properties > Visualization > Points layer** and select an icon from the **Icon** property dropdown. To select a custom icon, see [Use custom icons in a map chart](#).

Label and value tooltip

You can now read the label and the value of region or point in a map on the screen. The label and the value are displayed in the tooltip when you position the mouse pointer on the icon of the region or point.

Show map labels

To turn on or off the **Show map labels** property, go to **Properties > Visualization > Chart**. When you deactivate this property, only the labels of your points and regions are visible in a map.

World view

The world view property enables you to display disputed country borders from the perspective of various countries. To change the perspective, go to **Properties > Visualization > Chart** and select a country from the **World View** dropdown list. The **World View** property is set to United States (US) by default, but you can choose from other countries.

Bullet chart enhancements

In this release of IBM Cognos Analytics, new utilities are implemented that improve data visualization in bullet charts.

New in Properties

Axis properties

In **Properties > Visualization > Axis**, you can now adjust the following properties of axes:

- Axis title
- Axis label
- Axis color
- The minimum value on axis
- The maximum value on axis
- Grid line style
- Grid line color

Manual specification of range values

You can now manually insert the minimum, the middle, and the maximum range values in **Properties > Visualization > Ranges**.

Padding

You can now modify the padding of the bullet, the padding of the target marker, and the thickness of the target marker in **Properties > Visualization > Chart**.

Show value labels

In **Properties > Visualization > Chart**, you can now turn on the property **Show value labels** to enable editing the following properties:

- Value label orientation
- Value label format
- Font family
- Font size
- Contrast label color
- Label shadow

Zoom bar

You can now turn on a zoom bar in the visualization by clicking **Enable zoom bar** in **Properties > Visualization > Chart**. With the zoom bar, you can focus on small areas in the visualization.

New in Fields

Categories field

In **Fields**, a new field is available, the **Categories** field. You can use this field to create a multi-bar bullet chart that has a single axis. Not as the **Repeat** fields that put multiple axes in the chart.

Modeling

Learn about new features and changes to the IBM Cognos Analytics modeling components, primarily data modules.

Secured features within Web-based modeling capability

The **Edit Data Module Defined SQL** and **Use Data Module Defined SQL** capabilities that were added to the Cognos Analytics user interface in version 11.2.4 are now active and fully functional.

The **Edit Data Module Defined SQL** and **Use Data Module Defined SQL** capabilities control the ability to create, edit, and use SQL-based tables in data modules.



CAUTION: "If a data module that has the **Web-based modeling** capabilities defined is saved by using the **Save as** option, the new data module inherits the default capabilities of the content folder to which the data module was saved. If the content folder doesn't have the capabilities set correctly, the **Edit Data Module Defined SQL** and **Use Data Module Defined SQL** capabilities can be bypassed and might not have any impact on users. For example, these capabilities are bypassed when the data module is saved to **My content**.

The new capabilities are available with user capabilities and object capabilities in the **Manage** user interface. They are not available in the **Administration console**.

For more information, see "User capabilities" and "Object capabilities" in the *Cognos Analytics Manage Guide*.

Notebook

IBM Cognos Analytics for Jupyter Notebook integrates Jupyter notebooks into IBM Cognos Analytics. You can create and upload notebooks into Cognos Analytics, and work with Cognos Analytics data in a notebook using Python scripts. You can also embed notebook output in a dashboard, story, or report.

Notebook performance logs

A new log file, `performance.txt`, captures Jupyter Notebook performance information, such as memory usage and CPU usage for each Docker container. This is useful if you want to view the usage of notebooks or notebook schedules, as each one uses a separate Docker container.

For more information, see "Notebook performance logs" in the *IBM Cognos Analytics Notebook Guide*.

Administration

Manage the security, access, and functionality of IBM Cognos Analytics components.

Default data source customization for use by the Assistant

Administrators can specify a data asset from **Team content** that the Assistant can use as a default data source for users in a specific role, users in a specific tenant, or for all users.

The asset that is chosen as the default data source can be a package, data module, uploaded file, or a dataset.

For more information about default data source customization, see these topics in the *IBM Cognos Analytics Managing Guide*:

- "Customizing roles"
- "Customizing tenants"
- "Edit the default user profile"

For information about the Assistant, see "Assistant panel" in the *IBM Cognos Analytics Dashboards and Stories Guide*

Collation settings in the data server connection editor

The data server connection editor in the **Manage** user interface now includes the collation settings.

These settings are located in the **Local sort** section.

The screenshot shows a user interface for managing data server connections. At the top, there are tabs: General, Connection (which is underlined in blue), Commands, and Permissions. Below the tabs, there are several sections. One section is titled 'Isolation level'. Another section, 'Default object gateway', is enclosed in a box. A third section, 'Local sort', is also enclosed in a box. Under 'Local sort', there is a sub-section titled 'Collation sequence' which is highlighted with a box. Below 'Collation sequence' is a 'Level' section, which has a 'Primary' option selected. At the bottom of the list is a 'Cloud certificate' section with a help icon (info symbol).

The **Collation sequence** setting is required only in rare cases where there might be sorting discrepancies between Cognos Analytics and a database.

For more information, see "Creating a data server connection" in the *Cognos Analytics Manage Guide*.

New connection editors for Azure SQL and Synapse Analytics

Data server connection editors are added for Azure SQL and Synapse Analytics.

In previous Cognos Analytics releases, the **Microsoft SQL Server** connection editor is used to define a connection to Microsoft SQL Server, Azure SQL, or Synapse Analytics using the Microsoft SQL Server JDBC driver.

In version 12.0.0, when you create a data server connection, you can select **Azure SQL** or **Synapse Analytics** as the connection type.

Existing connections to Azure SQL or Synapse Analytics that were created using the Microsoft SQL Server connection editor will continue to work. In addition, you can still use the Microsoft SQL Server connection editor to create Azure SQL and Synapse Analytics connections.

For more information, see "Creating a data server connection" in the *IBM Cognos Analytics Managing Guide*.

Upgraded Progress DataDirect JDBC driver

Due to a security vulnerability in Progress DataDirect Autorest driver version 6.0.0.004291, Cognos Analytics 12.0 includes an upgraded Progress driver: version 6.0.1.005690.

Important: Progress driver version 6.0.1.005690 supports new Progress features. However, these new features are *not* supported by Cognos Analytics 12.0. Cognos Analytics 12.0 supports only features described in the existing *Progress® DataDirect® Autonomous REST Connector for JDBC™ User's Guide for Partners*.

For more information, see "Progress DataDirect Autonomous REST connections" in the *IBM Cognos Analytics Manage Guide*.

Enable custom visualizations option turned off

As administrator, you can turn off the option **Image Service - enable custom visualizations**

You may want to disable the **Image Service - enable custom visualizations** option in **Manage > Configuration > System > Environment**, because you don't need to export Reports with custom visualizations to formats other than HTML.

For more information, see [Enabling multi-format export of custom visualizations](#)

Performance tuning for the Image Service

You can optimize the times that the Image Service needs to render two types of visualizations:

- Visualizations of justified excessive rendering time, like certain custom visualizations.
- Visualizations of unjustified excessive rendering time, such as the Map chart.

For more information, see [Optimizing how images are rendered](#).

Extension access by group or role

Extension writers can now limit access to extension plugins based on the user's groups and/or roles membership.

The spec.json file that is used to govern extensions now contains a new environment setting, called `groupsAndRoles`.

For more information, see "Limiting extension access by group or role" in the *IBM Cognos Analytics Managing Guide*.

Change to scheduling capabilities for the Consumers role

By default, users in the **Consumers** role can now schedule a subscription or report with a frequency of **By day** only. In previous releases, they can schedule a subscription or report with a frequency of **By week** only.

If you want the **Consumers** role to have the same scheduling capabilities as in previous releases, you must grant to the role the **canUseSchedulingByWeek** capability and deny the **canUseSchedulingByDay** capability.

For more information, see "Creating and managing groups and roles" in the *IBM Cognos Analytics Managing Guide*.

Supported Software Environments page for release 12.0.0

Supported Software Environments information is available for IBM Cognos Analytics 12.0.0.

You can find up-to-date information about the supported software, data sources, and minimum requirements for using IBM Cognos Analytics 12.0.0.

Visit the 12.0.x Supported Software Environments page at <https://www.ibm.com/support/pages/node/6966712>.

Vendor-supported driver versions tested with 12.0.0

IBM Cognos Analytics 12.0.0 supports an updated list of client driver versions.

For more information, see *Vendor-supported client driver versions that were tested with Cognos Analytics on Premises 12.0.0 [Relational] [OLAP]* (<https://www.ibm.com/support/pages/node/6989513#12.0.0r>).

Samples

Get a deeper understanding of Cognos Analytics capabilities with updated sample content.

Changes to base samples

The Cognos Analytics base samples include new and modified samples. Some of the preexisting samples were removed.

The following samples are added in this release:

AU_Daily_Sales.xlsx

This sample uploaded file contains information about daily automobile sales, and the weather at the time of the initial sales visit, for a fictional automobile group. You can explore the business insights based on information about the weather conditions at the time of sale.

The sample is located in Team content > Samples > By industry > Automotive > Data > Source files.

Relative dates on a dashboard

This sample dashboard demonstrates relative dates in the context of a dashboard. It includes examples of YTD (year-to-date) and MTD (month-to-date) measures in summaries, tables, maps, and visualizations. The underlying Gregorian Calendar also supports the global parameter named **_as_of_date** and Time Perspective.

The sample is located in Team content > Samples > By feature > Relative dates.

Relative dates on a report

This sample dashboard demonstrates relative dates in the context of a report. It includes examples of YTD (year-to-date) and MTD (month-to-date) measures in summaries, tables, maps, and visualizations. The underlying Gregorian Calendar also supports the global parameter named **_as_of_date** and Time Perspective.

The sample is located in Team content > Samples > By feature > Relative dates.

The following samples are modified in this release:

Weather analytics

This sample dashboard now uses a different data source, **Auto group data module**, and some of the visualizations are changed as a result. An **About** tab was added that describes the weather data and provides links to information about creating this dashboard.

The sample is located in Team content > Samples > By feature > Core > Dashboards.

JavaScript (Custom controls)

All the JavaScript samples in Team content > Samples > By feature > Custom controls that used the .js files placed on the Cognos server are removed. These samples are replaced with newer versions that use uploaded extensions to supply the JavaScript files instead. This is the new best practice. The samples in Team content > Samples > By feature > Custom controls > Extensions are removed.

For more information, see [this article](#).

The following samples are removed in this release:

- **Boston 311 analysis** data module (Team content > Samples > By feature > Relative dates > Data)
- **Boston_311_requests.xlsx** (Team content > Samples > By feature > Relative dates > Data > Source files)
- **Boston_311_calls** data module (Team content > Samples > By feature > Core > Data)
- **Boston_311_calls.xlsx** uploaded file (Team content > Samples > By feature > Core > Data > Source files)
- **Weather_analytics** data module (Team content > Samples > By feature > Core > Data)
- **Weather_analytics.xlsx** uploaded file (Team content > Samples > By feature > Core > Data > Source files)
- **Boston 311 dashboard** (Team content > Samples > By feature > Relative dates)
- **Boston 311 report** (Team content > Samples > By feature > Relative dates)
- **Animated path scene transition** (Team content > Samples > By feature > Core > Stories)
- The JavaScript (Custom controls) samples in Team content > Samples > By feature > Custom controls > Extensions.

For more information, see "Base samples" in the *Cognos Analytics Samples Guide*.

Changes to audit reporting

The Cognos Analytics Audit samples deployment contains new advanced reports. Also, new columns are added to the **Run Reports** logging table in the **Audit** package.

New sample audit reports

The advanced audit reports are packaged with the existing sample Audit deployment. In this deployment, a new folder named **System health** is added. This folder contains all the new sample audit reports. All sample reports in this folder are in English only. The advanced audit reports can provide information for system administrators to identify abnormal behaviors so that the system remains stable and catastrophic incidents are avoided.

The following sample audit reports are added in this release:

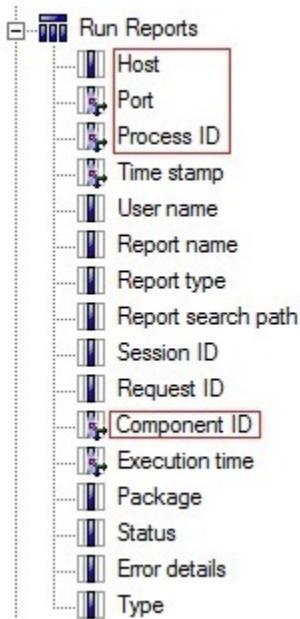
- Detail error report by day and hour
- Detail report by day and hour
- Detail report by year and month
- Prompt reference report
- Report execution failures due to out-of-memory error
- Run report details

- Reports running during crashes
- Top N most frequently run reports per hour
- Top N longest-running reports in a month
- Traffic count by host and components
- Usage - daily execution
- Usage - weekly execution
- Usage - BIBusTKServerMain usage per 10 minutes
- Usage - occurrences of well known errors per hour

For more information, see "Sample audit reports" in the *Cognos Analytics Samples Guide*.

New columns in the Run Reports logging table

In the **Audit** package, the following new columns are added to the **Run Reports** logging table: **Host**, **Port**, **Process ID**, and **Component ID**.



For more information, see "Sample audit reports" in the *Cognos Analytics Samples Guide*.

Installation and configuration

Learn about changes to the IBM Cognos Analytics installation and configuration.

Image service configuration

To configure and enable the use of the Image service, you must make changes in:

- the Image service configuration file, the config.conf file.
- the system environment configuration in Cognos Analytics.

For more information, see [Configuring the Image service](#).

Configuration change for Learn pane in Cognos Analytics

By default, the cognitive Learn pane in Cognos Analytics is now hosted on a new domain. This change ensures continued access to documentation and other information through the Learn pane.

In the unlikely event that the Learn pane cannot connect to the Learn pane server, you can restore the Learn pane server setting. Follow these steps:

1. Go to **Manage > Configuration > System** and select **Advanced Settings**.
2. Type Glass.learningPanelServerUrl in the **Key** field.
3. Enter <https://cchelp.pac.cloud.ibm.com/docs/cch> in the **Value** field.
4. Click **Apply**.

For more information, see [Unable to access the Learn panel server](#) (<https://www.ibm.com/support/pages/node/6985027>)

Cryptography configuration settings

Starting in version 12.0, the **Security > Cryptography** section in Cognos Configuration is reorganized to better highlight the properties that must be configured when a third-party Certificate Authority (CA) is used. As a result, the locations of several cryptography properties have moved. In addition, one cryptography property is no longer required.

The affected properties and their old and new locations are listed in the following table:

Cognos Configuration – Old location (version 11.2.4)	Cognos Configuration – New location (version 12.0.0)
Cryptography > Cognos > Confidentiality algorithm	Cryptography > Confidentiality algorithm
Cryptography > Cognos > PDF Confidentiality algorithm	Cryptography > PDF Confidentiality algorithm
Cryptography > Cognos > Supported ciphersuites	Cryptography > Supported ciphersuites
Cryptography > Signing key pair algorithm	Cryptography > Cognos > Signing key pair algorithm
Cryptography > Cognos > Use third party CA	<i>Not required in version 12.0</i>

Note: The **Use third party CA** property is not required in version 12.0, as the steps to configure a third-party Certificate Authority has changed. For more information, see [Enable the external certificate authority \(CA\)](#).

Note: If you used a third-party Certificate Authority in a previous release, then upgraded to Cognos Analytics 12.0, you can continue to use the third-party Certificate Authority. During the upgrade process, the **Security > Cryptography > my_third_party_CA** node will be automatically configured from the previous configuration.

For more information, see "Configuring cryptographic settings" in the *IBM Cognos Analytics Installation and Configuration Guide*.

FIPS mode now available on all platforms

Federal Information Processing Standards (FIPS) is an American cryptographic standard that is published by the National Institute of Standards and Technology (NIST). IBM Cognos Analytics is not FIPS-certified. However, Cognos Analytics NodeJS modules on all platforms now use FIPS-certified security modules by default. When using only FIPS-certified security modules, Cognos Analytics is in "FIPS mode".

In previous releases, only Linux-based NodeJS modules can be used in FIPS mode.

Note: For more information, see "Enabling FIPS mode" in the *Cognos Analytics Installation and Configuration Guide*.

Configuration setting to prevent Dataset service timeouts

The configuration parameter **dssPortNumberExchangeTimeout** allows you to extend the amount of time before the Dataset service times out.

For more information, see "Configuring the Dataset service port number exchange timeout" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Updated HTTP server template configuration files

Six HTTP server template configuration files are updated from previous releases.

As part of the new feature "[Configuration of local data caching](#)" on page 100, the following six files are updated for Cognos Analytics 12.0:

- cognos_apache22_loadbalance.conf
- cognos_apache22_loadbalance_SSO.conf
- cognos_apache24_loadbalance.conf
- cognos_apache24_loadbalance_SSO.conf
- cognos_IHS9.conf
- cognos_IHS9_SSO.conf

These updated files allow local data caching configuration to be reflected in distributed environments and gateway environments.

Important:

Use caution if you plan to customize these sample HTTP server files. Doing so may prevent dashboard users from being able to [auto create local data caches](#).

If you upgraded from an older version of Cognos Analytics, the HTTP configuration files may have been preserved and you must update them to the most recent version.

If your Cognos Analytics installation uses any additional HTTP server configuration files, including but not limited to the Apache HTTP Server httpd.conf file, you may need to update those files. Otherwise, dashboard users may not be able to [auto create local data caches](#).

For information about how to resolve this local data caching issue, see '[Auto create data caches' progress starts but does not complete configuring data caches](#) (<https://www.ibm.com/support/pages/node/6997029>).

For more information, see "Configuring Apache HTTP Server or IBM HTTP Server with Cognos Analytics" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Chapter 2. Deprecated and removed features in 12.0.x

This section provides information about features that are deprecated or removed from IBM Cognos Analytics 12.0.x versions.

For a list of data servers that were deprecated or removed in different releases, see "Data sources that are no longer supported in Cognos Analytics" in *IBM Cognos Analytics Managing* guide.

12.0.3 - April 2024

Deprecated support for operating systems

Support for the following operating systems is removed from IBM Cognos Analytics:

- Red Hat Enterprise Linux (RHEL) Server 7
- Ubuntu 16
- Ubuntu 18
- SUSE Linux Enterprise Server (SLES) 12

Deprecated support for IBM Cloud Data Engine

In a future version of Cognos Analytics, support will be removed for IBM Cloud Data Engine connections.

Deprecated support for Exasol 7.0 connections

As of release 12.0.3, connections to Exasol 7.0 are no longer supported.

Deprecated support for Greenplum 6.x connections

In a future version of Cognos Analytics, support will be removed for Greenplum 6.x connections.

12.0.2 - January 2024

Map Manager removed from Reporting

Map Manager maps are no longer supported in IBM Cognos Analytics - Reporting. For more information, see ["Map Manager removed from Reporting"](#) on page 38.

Removed support for data source connections

Support for the following data source connections is removed from IBM Cognos Analytics:

- MySQL 5.6
- Mongo BI 2.13 or earlier
- MariaDB 10.2
- SingleStore 7.1 and 7.3
- Dremio 17
- Db2 LUW 10.1

Deprecated support for data source connections

In a future version of Cognos Analytics, support will be removed for the following data source connections:

- MySQL 5.7
- Mongo BI Connector 2.14
- SingleStore 10.3 thru 10.9

- SingleStore 7.5 and 7.6
- Dremio 18 and 19
- Db2 LUW 10.5

12.0.1 - September 2023

Deprecated data source connections

In a future version of Cognos Analytics, support will be removed for the following data source connections:

- PostgreSQL 10.x and 11.x
- Denodo 7.x
- Vertica 10.x
- Exasol 7.x

Blocked connections to database versions

As of release 12.0.1, Cognos Analytics blocks connections to the following database versions:

- Denodo 6.x
- Vertica 9.x

12.0.0 - June 2023

Removed Query Studio, Analysis Studio, and Cognos Workspace

The following components are removed from Cognos Analytics:

- Query Studio
- Analysis Studio
- Cognos Workspace

Note: For information about parallel functionality in Cognos Analytics Reporting and Cognos Analytics Dashboards that existed in Query Studio and Analysis Studio, see [Comparing Analysis Studio and Query Studio features with Reporting and Dashboards features](#).

Removed base samples

The following base samples are no longer included with the product:

- **Boston 311 analysis** data module (Team content > Samples > By feature > Relative dates > Data)
- **Boston_311_requests.xlsx** (Team content > Samples > By feature > Relative dates > Data > Source files)
- **Boston_311_calls** data module (Team content > Samples > By feature > Core > Data)
- **Boston_311_calls.xlsx** uploaded file (Team content > Samples > By feature > Core > Data > Source files)
- **Weather_analytics** data module (Team content > Samples > By feature > Core > Data)
- **Weather_analytics.xlsx** uploaded file (Team content > Samples > By feature > Core > Data > Source files)
- **Boston 311 dashboard** (Team content > Samples > By feature > Relative dates)
- **Boston 311 report** (Team content > Samples > By feature > Relative dates)
- **Animated path scene transition** (Team content > Samples > By feature > Core > Stories)
- The JavaScript (Custom controls) samples in Team content > Samples > By feature > Custom controls > Extensions. For more information, see [this article](#).

Removed SPARK SQL Thrift data source connector

As of release 12.0.0, the connector for SPARK SQL Thrift data sources is removed from IBM Cognos Analytics. If you have existing connections to SPARK SQL Thrift data sources, they will no longer work.

Removed Meta Integration Model Bridge (MIMB)

MIMB was used with Framework Manager to extract metadata from third-party data sources.

Chapter 3. Known issues in 12.0.x

This section describes known issues found in IBM Cognos Analytics 12.0.x versions.

12.0.3

Favorites and Recent items are broken, not imported, or overwritten after an import

After a deployment is imported, users may find that some of their **Favorites** and **Recent** items are either broken, not imported, or overwritten.

- **Broken connections to Favorites or Recent items**

This problem occurs if someone renames and/or moves an asset before every user who references that asset has logged in. To resolve the issue, restore the name and location of the asset to its exported state. After every user who references that asset has logged out of CA and then logged back in, you can then safely rename the asset to any name and its **Favorites** or **Recent** connection will not be broken.

- **Favorites are not imported from a partial deployment**

When you import a partial deployment to an environment that has or had **Favorites**, none of the **Favorites** in the deployment are imported.

- **Recent items are not imported from a partial deployment**

When you import a partial deployment to an environment that has or had **Recent items**, none of the **Recent items** in the deployment are imported.

- **Existing Favorites and Recent items are overwritten during a full deployment import**

When you import a full content store or full tenant content deployment, affected accounts are populated with **Favorites** and **Recent** items from the import.

Updates to the truncated name or description of an asset may not refresh as expected

When you modify existing truncated text of an asset's name or description from the **Properties** page in the **Content** view, your updated text may not display properly.

Solution

To resolve this issue, refresh your browser.

12.0.2

Favorites and Recent assets are not included in deployments (existing issue)

Exported deployments do not contain assets that were listed in the **Favorites** tab (as of version 12.0.1) and the **Recent** tab (as of version 11.0). The issue occurs when you import a deployment into a fresh content store.

Cannot create a notebook when both Cognos Analytics and Jupyter Notebook Server are configured using SSL

When Cognos Analytics and Jupyter Notebook Server are configured to use HTTPS and you try to create a notebook or open a notebook sample, the following message appears:

A secure connection can't be established between the Cognos Analytics server and the Jupyter server. Verify that each server has valid SSL certificates installed.

This error occurs even though all SSL certificates were set up correctly.

Importing a deployment that is not password-protected fails (JRE issue)

When you try to import a deployment that is not password-protected into a fresh content store, error messages appear similar to the following:

CM-REQ-4111 Object "/Team Content/DBCERT_AZURESQL_N/model" (of class "model") was not imported. CM-REQ-4163 The import operation was unable to add an object. CM-SYS-5149 Content Manager is unable to process your request because a data error occurred in the content store database subsystem.
Try to determine the report that triggered the error by checking log files in the ./logs directory. An error occurred while reading the value from the stream object. Error: "java.util.zip.ZipException: invalid stored block lengths" modelCM-REQ-4111 Object "/Team Content/DBCERT_AZURESQL_N/model/[].[securityViews].[DBCERT_AZURESQL_N]" (of class "modelView") was not imported. CM-REQ-4163 The import operation was unable to add an object. CM-REQ-4191 The parent path for the object does not exist. The missing parent path is "/Team Content/DBCERT_AZURESQL_N/model".

This issue is caused by faulty versions of the Java Runtime Environment (JRE) that are included in the following Cognos Analytics releases:

- 12.0.2 (caused by JRE 8.0.8.10)
- 12.0.1 (caused by JRE 8.0.8.5)

Workaround

To resolve this issue, ensure that your deployment archive is encrypted:

- If you create the deployment using the Manage component, you are already required to set an encryption password:
Click Manage > Content > New backup
- If you create a partial deployment using the legacy Administration console, ensure that you click **Set the encryption password** when prompted.
For more information, see step **15** in [Creating a new export deployment specification](#).

Cannot upgrade 11.2.4 FP3 content to version 12.0.0, 12.0.1, or 12.0.2 without causing issues during a subsequent upgrade

If you try to upgrade your 11.2.4 FP3 content to version 12.0.0, 12.0.1, or 12.0.2, you may need to run specialized scripts before you can do another upgrade to version 12.0.3 or later.

Reason:

Schema changes are made in the content store of 11.2.4 FP3 (and future releases) to support faster processing of content retention rules. Therefore, when you upgrade from 11.2.4 FP3 (or later), you must upgrade to a release with the same content store enhancements, for example, 12.0.3 (or later).

Workaround

To upgrade 11.2.4 FP3 content to version 12.0.x, wait until 12.0.3 or later to do so.

Note: You can still upgrade any 11.2.x content **other than** 11.2.4 FP3 to any version of 12.0.x.

Firewall Security Rejection error when viewing a report's run history details

When the Cognos Configuration property **Is third party XSS checking enabled?** is set to **True** and you try to view the run history details for a report, the page is not displayed and this message appears:

DPR-ERR-2079 Firewall Security Rejection

The issue occurs when you try to access the **View run history details** page or the **View archive versions** page for a selected report.

Workaround

You can view the missing run history information by navigating to these pages:

- **Content_location > report_name > Actions** menu > **View versions > Open Details** panel
- **Content_location > report_name > Actions** menu > **Run details**

The following information is available:

- Request, start, and completion Times
- Report paths
- Archive versions
- Format type
- Language
- Output download links

Note: Administrators can also view this information by clicking **Manage > Administration console > Past activities.**

The file .ca_base_preserve.txt is missing references to some files (existing issue)

The file `.ca_base_preserve.txt` specifies files to be preserved when you upgrade to a new version of Cognos Analytics. However, in releases 12.0.0, 12.0.1, and 12.0.2, `.ca_base_preserve.txt` is missing references to the following files:

- `install_location/templates/ps/portal/variables_TM1.xml`
- `install_location/templates/ps/portal/variables_plan.xml`
- `install_location/templates/ps/portal/icon_active_application.gif`
- `install_location/webcontent/planning.html`
- `install_location/webcontent/pmhub.html`
- `install_location/webcontent/tm1/web/tm1web.html`
- `install_location/templates/ps/system.xml`
- `install_location/templates/ps/portal/system.xml`

Workaround

Important: You cannot edit the file `.ca_base_preserve.txt`. Instead, you create (or modify if it exists) a file named `preserve.txt`. Follow these steps:

1. Go to the folder `install_location/configuration/preserve`.
2. In a text editor, do one of the following:
 - Open the file `preserve.txt`, if it already exists.
or
 - Open the file `preserve.txt.template`.
3. Add the following lines:

```
#TM1 files
templates/ps/portal/variables_TM1.xml
templates/ps/portal/variables_plan.xml
templates/ps/portal/icon_active_application.gif
webcontent/planning.html
webcontent/PMHub.html
webcontent/tm1/web/tm1web.html

#CA files
templates/ps/system.xml
templates/ps/portal/system.xml
```

4. Save the file as `preserve.txt`.

For more information, see "Preserved files and folders when upgrading Cognos Analytics" in the *IBM Cognos Analytics Installation and Configuration Guide*.

Daily schedule start times may shift by one hour

After a Daylight Saving Time change, the start time of daily schedules may unexpectedly shift by one hour.

For more information, see [COGNOS ANALYTICS - DAYLIGHT SAVINGS TIME CHANGE RESULTS IN AN UNEXPECTED SHIFT IN SCHEDULE START TIMES](https://www.ibm.com/support/pages/node/7052876) (<https://www.ibm.com/support/pages/node/7052876>).

Cannot log in to the Cognos Analytics server from Framework Manager in Cognos Analytics on Cloud

In Cognos Analytics on Cloud On-Demand, when you try to log in to the Cognos Analytics server from Framework Manager, the following error message appears:

An error has occurred in the script on this page.
Error: Invalid character

Solution

To resolve this issue, you must enable WebView2. For more information, see “[Alternate web technology support for Framework Manager authentication \(Microsoft Edge WebView2\)](#)” on page 58.

Updates to the truncated name or description of an asset may not refresh as expected

When you modify existing truncated text of an asset's name or description from the **Properties** page in the **Content** view, your updated text may not display properly.

Solution

To resolve this issue, refresh your browser.

Transformer French, German, and Japanese installations contain incorrect information in the About boxes

After you install Transformer using a French, German, or Japanese locale, the following issues occur:

- In Cognos Configuration, when you select **Help > About IBM Cognos Configuration**, the displayed version is 11.0 instead of 12.0 and the copyright year is 2017 instead of 2024.
- In Transformer, when you select **Help > About Transformer**, the copyright year is 2017 instead of 2024.

Parts of Transformer installations on a German locale are not translated

After you install Transformer using a German locale, the following issues occur:

- In Cognos Configuration, the entire user interface is in English. This includes the **About IBM Cognos Configuration** box and the splash screen.
- In Transformer, when you select **Help > About Transformer**, the text appears in English.

12.0.1

Upgraded customized themes give unexpected results

If you upgraded customized themes to release 12.0.1, you may notice differences in the appearance of Cognos Analytics that did not exist in the previous release. For example, elements of the application bar or the Navigation bar might now be blue instead of green.

This problem exists because legacy themes do not contain the parameter paletteId, which is introduced in 12.0.1.

Solution

To resolve this issue, follow these steps:

1. Download your customized theme.
2. Extract the .zip file.
3. Edit the extracted spec.json file and add the following line:

"paletteId": "IBM"

4. Upload your modified theme and then apply it as the default.

For more information, see "Modifying and uploading your own theme" in the *IBM Cognos Analytics Managing Guide*.

12.0.0

Cannot apply a top or bottom filter with auto-group in the same field in a visualization on a dashboard

You cannot apply a top or bottom filter to a field if auto-group is enabled or to a data group. Conversely, you cannot apply auto-group to a field if you enabled the top or bottom filter. This is to prevent certain errors from appearing in dashboards.

Existing dashboards that had these settings applied together did not change. However, if users disable the top or bottom filter, they cannot reapply the top or bottom filter unless they disable auto-group. Conversely, if users disable auto-group, they cannot reapply the auto-group unless they remove the top or bottom filter.

Solution

If you removed a top or bottom filter from a field and cannot add the filter again, you must disable auto-group before applying the filter.

If you disabled auto-group from a field and cannot enable auto-group again, you must remove the top or bottom filter before enabling auto-group.

Grouped widgets in a dashboard do not behave as a group when rearranging them using the position properties

If you have a group of widgets and change the position of the widget group by using the position properties (in the **General > Position** section of the **Properties** page), the widgets change their positions but do not keep their respective positions to each other (for example, the widgets might overlap).

Workaround

To work around this issue, use the mouse to move the grouped widgets on the canvas instead of using the **Properties** page.

Error message XQE-PLN-0503 when using narrative insights with multiple fact streams

When using narrative insights with forecasting enabled on a dashboard visualization with at least two fact tables, you might receive a message in the XQE log file with the following error code:

Caught error in the Query Service: XQE-PLN-0503 The data item [query]. [text_string] contains an operation across 2 fact streams and involves detail items. Please ensure that each term is aggregated before the operation is applied.

This error also displays in the Assistant if you ask the Assistant to show a visualization that has calculation columns across two fact tables.

Cause

This error occurs because narrative insights are adding additional aggregation operations on expressions that use multi-fact calculations that do not explicitly specify aggregation operations.

Solution

To address this error, follow these steps:

1. Use only one fact table in your dashboard visualization before you enable narrative insights or add explicit aggregations in multi-fact calculations.

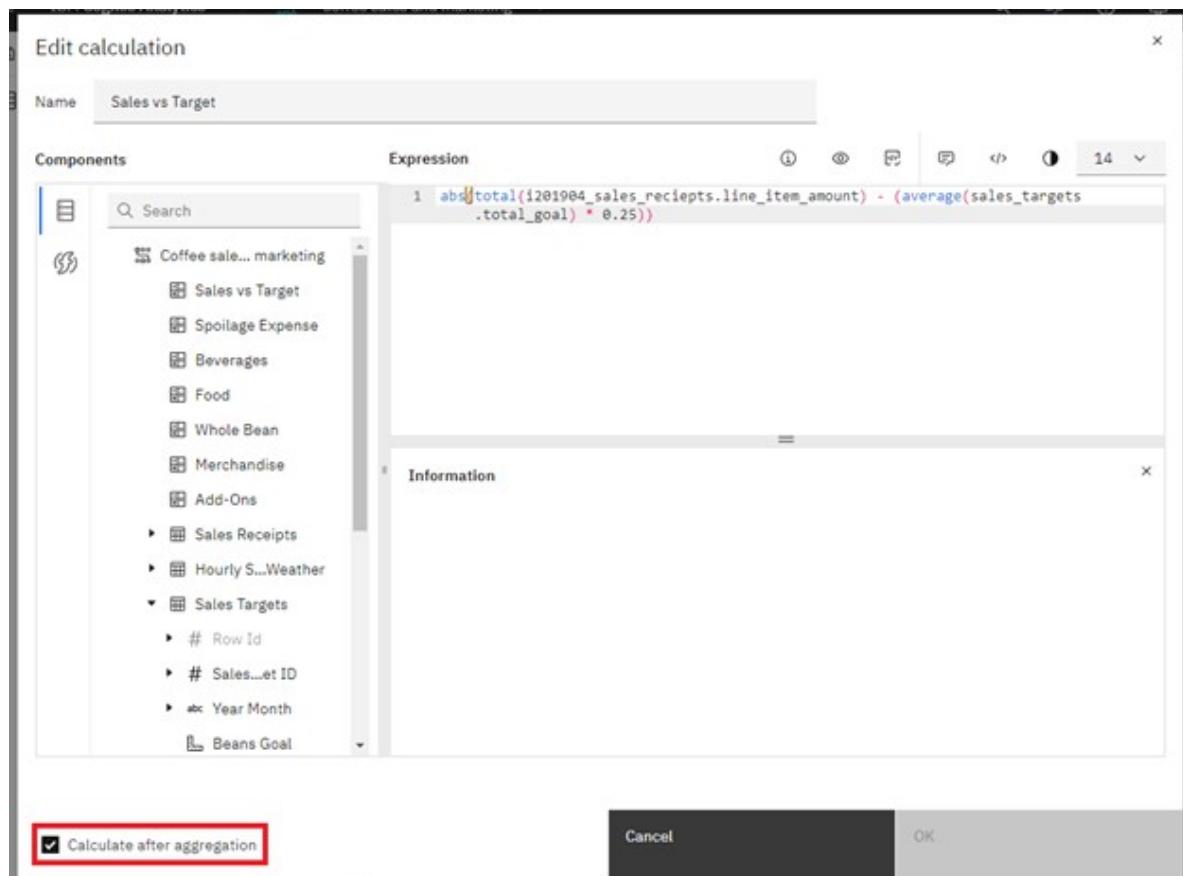
For example, instead of using this calculation:

```
abs(sales_receipts.line_item_amount - (sales_targets.total_goal * 0.25))
```

use this calculation instead:

```
abs(total(sales_receipts.line_item_amount) - (average(sales_targets.total_goal) * 0.25))
```

2. Ensure that the **Calculate after aggregation** check box is selected:



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