IBM Cognos Analytics Version 11.0.0

Getting Started Guide



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Chapter 1. Get started

IBM® Cognos® Analytics integrates reporting, modeling, analysis, dashboards, stories, and event management so you can understand your organization's data, and make effective business decisions.

After the software is installed and configured, administrators set up security and manage data sources. Next comes the data. You can get started yourself by uploading local files and applying visualizations in dashboards or stories. For enterprise-level data, modelers are next in the workflow. After data modules and packages are available, report authors can then create reports for business users and analysts. Administrators maintain the system on an ongoing basis.

Whether you're an analyst, report author, data modeler, or an administrator, you start by signing in to the Welcome portal from your desktop or mobile device. There are coach marks in the user interface to help you discover what's where.

For links to videos, getting started resources, expert blogs, events, and more, you can tap in the application bar and visit the IBM Cognos Analytics community (www.ibm.com/communities/analytics/cognos-analytics/).

If you want to start with video tutorials and sample data, see "Get started video tutorials and samples" on page 8.

Depending on the work you do, you use different areas of the interface. There are IBM Cognos Analytics capabilities associated with the following areas and you see only those that you work with:

Welcome portal

Run reports, search for content, view **My content**, **Team content**, and **Recent** lists, open dashboards, open stories and other items, upload files, check your notifications, set your preferences and home page, and review your subscriptions.

Delete, copy, move, edit, run as, set properties, set permissions and more, depending on the type of entry in the content list.

Create report views for a report directly without using the Reporting view.

Create shortcuts to reports, dashboards, stories, or data modules. A shortcut is a link to an object in a different location. If the original object is moved or renamed, the shortcut no longer works.

Tap 1 to create new reports, data modules, dashboards, or stories.

Reporting

Create and edit a wide range of professional reports. Use templates or customize your reports with prompts, bursting, advanced charts and visualizations.

For more information, see the Cognos Analytics Reporting Guide.

Dashboards and stories

View, monitor, and communicate data insights and analysis with dashboards or stories. You can assemble a view that contains visualizations

such as graphs, charts, plots, tables, maps, or any other visual representation of data. Enrich dashboards and stories with web pages and other content.

For more information, see the Cognos Analytics Dashboards and Stories User Guide.

Data modeling

Modelers and administrators shape data, create modules and packages and make them available to people that create and use reports. You can use the IBM Cognos Analytics modeling tool to quickly create data modules from various data sources such as data servers, uploaded files, and previously saved data modules. The tool is intent-driven and generates a base module by using terms that you define.

For more information, see the Cognos Analytics Data Modeling Guide.

Manage and administer

Create and manage accounts (users, groups, and roles), schedules, data source connections, activities, and content stores. Perform configuration tasks, create new jobs, and open the **Administration console** for more management options.

Changes that you make in either the Manage interface or Administration interface, are effected in both interfaces.

For more information, see Cognos Analytics Managing Guide and the Cognos Analytics Administration and Security Guide.

Search and find content

You can find IBM Cognos Analytics reports, dashboards, stories, data, files, folders, packages and other items by opening your **My content** or **Team content** folders or by checking your **Recent** list. But **Search** is a quick, easy way to find your items.

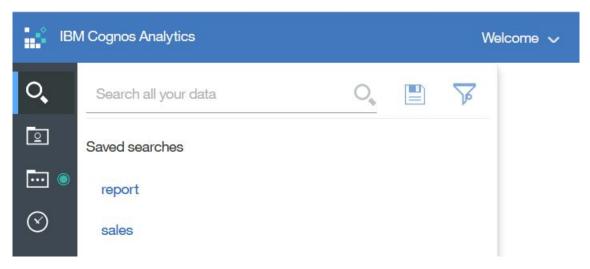


Figure 1. Find your content

To find items, type keywords and tap the Enter key. You can also search for text including table or column labels, XML report specifications, URL items, shortcuts, templates, and more. Search doesn't return results for content that's archived, but you can access archived content from a report that's listed in one of your folders.

Narrow your search with filters

If your search returns too many results, you can tap the filter icon and select the options you want. The filter option is only available after you do an initial search.

Save searches

After you search and the results are listed, you can save your search. The save option is only available after you search.

Team content

Your organization's content is in the **Team content** folder. This is where you find reports, packages, dashboards, stories, models, and more. Items in Team content are organized in folders, so searching with keywords is an easy way to find what you're looking for.

Note: Items listed in **Team content** may have different menu options when compared to the same items found during a search. For example, right-clicking a report in Team content will display a Copy or move option, but the option is not available for the same report when found during a search.

View report output versions and archived versions

For a report in a list, tap ____ and then tap the **View versions** icon <u>||||</u> .

Navigation tips

Tapping around in the IBM Cognos Analytics user interface helps you discover how things work. Here are a few navigation tips to speed your discovery.

Run a report from the My content or Team content list

Tap the name of a report or tap if for the **Run as** option.

Select entries in content lists

Tap their icons or tap the space beside the entry names.

Add a folder to My content or Team content

The content lists open in a narrow view. To open the wide view where you can add folders, sort, and filter content, tap

View and interact with content

You search and find an IBM Cognos Analytics report in the Team content folder, and then you run it. The report opens in a viewer. You now have different options, such as subscribe, save as a report view, edit in reporting, and more. The available options depend on the type of report or the item that you view. When a report runs in the interactive viewer, you also have options to see different data in the report by filtering, drilling up and down, and more.

Choose the options that best suit your needs for viewing frequency and personalization. If you want to see a report on a regular basis, subscribe to it. If it's really important, you can set it as your home page. If you entered prompt and parameter values and you want to save those so you don't have to enter them every time, save the report as a report view. If you choose to edit, the report opens in Reporting with all the tools you need. Depending on the item type, the appropriate actions are available in the viewer:

- **Subscribe**. Delivers reports with your prompt values and options.
- Save as report view. Saves your prompt values and options in a view.
- · Set as home.
- Zedit. Opens Reporting.
- Run as. Choose the output format.
- Save and Save as.

If you view saved report output, and you want to be alerted when there's a new version of the report, tap **Notify me**. You can easily find entries in **Team content** by searching and by viewing the **Recent** items list. But you can also save and organize your items in **My content** which is useful for saving report views with your custom prompts or for saving report output versions. Your **My content** folder is your private area and only you can see the content that's stored there.

When a report runs in the interactive viewer, the following options are available in the toolbar that appears when you select a report object:

- Sort data .
- In lists, group data .
- Summarize data 🔽 .
- Convert a list or crosstab to a chart, or change a chart to a different chart type
- In crosstabs and charts, suppress columns or rows or swap columns and rows.
- · Drill through to another report.
- 11.0.5 Add calculated members ...
- 11.0.5 Drill up, drill down, and perform dimensional operations, such as top/bottom filtering .
- 11.0.5 Run the report as Excel or CSV output.
- 11.0.5 Select and interact with the elements of a chart, such as the bars in a bar chart.
- 11.0.6 View lineage information for a data item .
- 11.0.6 Access a business glossary, such as the IBM InfoSphere® Information Governance Catalog, for a data item .
- 11.0.6 Create, edit or remove filters .
- 11.0.6 Share or embed report output, preserving the context of the current view of the report, such as prompt values.

To share or embed report output, click the **More** icon and then click **Share** or **Embed**.

• 11.0.6 Run a report as the report owner or with the capabilities granted to the owner.

In the Cognos Analytics portal, access the **Properties** slideout of the report, click the **Report** tab, and then open the **Advanced** section.

Report versions

If you run IBM Cognos Analytics reports, you see the latest data from the data source. But often you view report versions and outputs, such as when a report you subscribe to is delivered. Report outputs are generated by subscriptions, schedules, multiple formats or languages, bursting, and delivery methods that include save, print, and email.

In many instances, you are notified and receive a link to view report output, but you can also view saved and archived versions for reports in your content lists.

To view report versions and archived versions

For a report in a content list, tap i and then tap View versions.

Save a report version

In the application bar, when you view a report, tap either The location of the save option depends on the type of report you view.

You also have the **Save as** option of saving the report version under a different name or in a different location.

Delete saved outputs for report versions

For a report in a content list, tap . Tap View versions, tap an entry in the list, and then tap the delete icon. Deleting removes all saved output formats for the version.

Versions Versions Archives Jun 14, 2016 2:47 PM **EN-US**

Figure 2. Delete saved output for a report version

Run variations of reports with report views

If you want to run an existing IBM Cognos Analytics report, but run it with different prompt values, schedules, delivery methods, run options, languages, or output formats, you can create a report view. Creating a report view does not change the original report.

To create a report view, run a report using the prompt values or other run options that you want and in the save options, select Save as report view. Your prompt

values and run options are saved in the view. If you want to edit the prompt values for the report view, open the report view properties panel.

You can also create a report view in My content or Team content. Tap in next to a report, and then tap **Create report view**.

In the properties panel for the report view, you can see a link to the source report. If the source report is moved to another location, the report view link is maintained. If the source report is deleted, the report view link breaks.

Subscribing to reports

If you use an IBM Cognos Analytics report regularly, you can subscribe to it. When you subscribe, you pick the time, date, format, and where you want it delivered. When you subscribe to a report, the subscription includes all your prompt and parameter values.

About this task

The subscription option is available when you run and view a report, but not when you are in editing mode or when you view saved output. If you edit a report, you must save it before you can subscribe.

After you subscribe, each time your report is delivered, you are notified. In the Welcome portal, tap **Notifications**, and find a message with a link to view the report output.

Procedure

- 1. Run a report.
- 3. Select your subscription options, and then tap **Create**. Your subscription is created. To view and modify your subscriptions, tap your user name, and then tap **My subscriptions**.

Scheduling entries

Report analysts can schedule tasks, such as when and how often a report is run.

About this task

For more information on scheduling, including using jobs to schedule multiple entries, see the *IBM Cognos Analytics Managing Guide*.

To create a new schedule or view the schedule for an entry, use the following steps.

Procedure

- 1. For the item, tap and then tap the Properties icon.
- 2. In the Properties panel, tap the **Schedule** tab.

Managing your schedules and subscriptions

You can view all your scheduled activities and subscriptions on the My schedules and subscriptions panel.

You can view a list of your scheduled activities that are current, past, or upcoming on a specific day. You can filter the list so that only the entries that you want appear. A bar chart shows you an overview of daily activities, by hour. If you switch views, you must refresh to see current data. For example, if you switch from Past Activities to Upcoming Activities, you must refresh to see current data in the panes. For more information about managing scheduled activities, see the IBM Cognos Analytics Managing Guide.

You can enable, disable, modify, or delete subscriptions, and view their saved outputs or archived versions. If you view the versions, you can also open the version details panel for information such as the run status, error messages, and run time.

Procedure

- 1. Tap your user name, and then tap My schedules and subscriptions.
- 2. For an entry in the list, tap |Y| and then tap the action that you want.

Notifications

Notifications help you stay on top of important data. If you subscribe to a report or report view, you are notified every time your subscription is delivered. If you view saved output and you want to know when there's a new version of the report, you can tap the Notify me button.

The **Notify me** button is available in the application bar when you view a saved output version of a report. If you request notification and then someone runs that report, you get a notification with a link to the updated version.

When you subscribe, if you choose the **Save the report on the system** delivery option, you receive a notification with a link to the new report version. To see all your notifications, tap 🕎 in the navigation bar.

For more information, see "Subscribing to reports" on page 6.

Set properties for entries

You can control the way entries appear and behave in IBM Cognos Analytics by modifying their properties.

You can view and set general and advanced properties for reports, folders, dashboards, stories, uploaded files, data modules, and other entries. When you open the properties panel, you see the General tab and the Permissions tab for all entries, and the tabs that are appropriate for the entry you're viewing, such as **Report** and **Schedule** for reports.

To open the properties panel for an entry, from its **More** menu _____, tap **Properties**.

Link behavior when you copy, move, or rename

Reports are typically associated with packages in IBM Cognos Analytics and can have other links as well. When you copy and move reports or other items, the IDs and links are either maintained or overwritten.

If you copy or move a report from one folder to another, the report retains its ID and any links, including the link to the associated package.

However, when you overwrite an existing report, the link behavior depends on whether you copy or move an entry.

- If you copy and overwrite an existing report, the copied report ID and links
 replace those of the existing report. In this case, you might need to update links,
 such as links to job schedules.
- If you move and overwrite an existing report, the existing report ID and links are maintained. In this case, references to the moved entry are broken.

If you rename an entry, the ID is retained and references to the entry from other entries are not broken. For example, a package has reports, agents, and drill-through definitions associated with it. When you rename the package, the references in the associated reports, agents, and drill-through definitions are not broken.

11.0.6 If you create a shortcut to a content object, the shortcut does not work if the original content object is renamed or moved.

Get started video tutorials and samples

If your administrator installs and configures the samples that are available with IBM Cognos Analytics, you can experiment with sample data, metrics, and report templates.

If you're a beginning user, as part of the base samples, there are Get started tutorials with samples (including data), videos, and written procedures to guide you through creating your first reports, active reports, dashboards and stories.

These **Get started** samples and the sample data are in **Team content**, in the **Get started** folder. The **Data** folder includes Microsoft Excel files that were uploaded and saved for you to use with the **Get started** tutorials. The **Version 11.0.x base samples** report is added only to inform you about the version of IBM Cognos Analytics that these samples are included with. To complete the tutorials, open the

samples to see the finished product, then click the link beside this icon watch the tutorial video. (For the dashboard samples, the video link is embedded).

For more information, see the IBM Cognos Analytics Samples Guide.

Chapter 2. Setting your preferences

When you start using IBM Cognos Analytics you can choose the default format for your report runs. You can also set language and regional preferences, email, password, accessibility support, and more.

To set your preferences, tap your user name and then My preferences.

Language settings

You can select the language that you prefer for the IBM Cognos Analytics user interface. If your data and reports are available in multiple languages, you can also select the language that you prefer for the content. Make your selections in **My preferences**.

To change the language setting, close all your open items first, select the language in **My preferences**, close **My preferences**, and refresh your browser. The new language setting takes effect.

There is also support for bidirectional languages such as Hebrew, Arabic, Urdu, and Farsi. Report authors can control the display of native digits and the direction of text, crosstabs, and charts.

For more information, see the *IBM Cognos Analytics Administration and Security Guide*, and the *IBM Cognos Analytics - Reporting User Guide*.

Turn UI hints on

When you first sign in to IBM Cognos Analytics, you can see hints that help you navigate the user interface. If you turn the hints off, but want to show them again, select the **Show hints** check box in **My preferences**.

Setting the default format for report runs

You can set the default run format for your IBM Cognos Analytics reports.

Procedure

- 1. Tap your user name, then tap **My preferences**.
- 2. Select the report format that you want.

Hiding and showing hidden entries

To prevent unnecessary use of IBM Cognos Analytics items such as reports, packages, folders, jobs, data servers, you have the option of hiding them. This applies especially to drill-through reports that can waste system resources when they are run unnecessarily. You can hide drill-through reports, but they remain enabled as drill-through targets. You can set your preference to show or not show hidden entries in content lists.

To hide an entry, open its menu and tap **Properties**. On the **General** tab, open the Advanced section and select the **Hide this entry** check box.

To show hidden entries in your content lists, tap your user name, then **My preferences**. On the **General** tab, select the **Show hidden entries** check box.

Regardless of the preference that you set, hidden entries are visible, but faded in the following parts of the user interface:

- · Search results.
- Properties panel, Permissions tab.
- · Personal tabs.
- Job steps that refer to hidden entries already in a job.
- Agent tasks that refer to hidden entries already in an agent.
- Details in a report run history.

The following rules apply to hidden entries:

- A hidden report is accessible as a drill-through target. Drill-through targets include parameter values to avoid resource-intensive query operations. However, users still require appropriate permissions to use this target report in a drill-through activity.
- A hidden drill-through definition is not displayed in the Go To page if the user interface does not show hidden entries.

Managing logging levels

11.0.4

In addition to the logging capabilities that exist on the IBM Cognos server, you can produce logs and error reports for your own workstation. This type of client-side logging is important for troubleshooting and can cover JavaScript anomalies that are not detectable from the server environment.

About this task

You can turn logging on or off as well as set the logging level. Under normal circumstances, logging is on, but the level is set to **Error**. In some circumstances, IBM customer support might direct you to increase the logging level. Set it to one of the following levels:

Error Basic level of logging that tracks only major error messages that occur during processing on the client workstation.

Warning

The next level of logging that includes all the information from the Error level of logging and includes warnings about situations that might not affect your system function.

Information

This level of logging aggregates all previous levels of logging and includes more detail about the regular operation of the user interface. You might notice that performance at this level is slower.

Debug

This level of logging contains the most information. Use it if you are testing your own extensions or when you are advised by a member of the software development team or customer support. You can expect that performance at this level is noticeably slower.

Logging levels are stored in the browser cache. If you clear the browser cache, logging levels return to the default setting.

Procedure

1. From the Welcome toolbar, select My preferences.

Tip: To locate **My preferences**, click your login name.

- 2. On the **Personal** tab, expand the **Advanced** section.
- 3. In the **Logging** entry, click **Manage**.
- 4. Ensure that logging is on.
- 5. Set the **Logging level** to the level directed by the customer support representative by clicking the drop-down list and clicking the level.
- 6. To retrieve logs from the browser console press the **F12** key on your keyboard or from the browser menu, click **Developer** and then click **Web Console**.

Tip: For the Firefox web browser, you can use an add-on, such as Firebug to make it easier to retrieve and save log files from the console.

7. After you are done troubleshooting, return to the **Logging** preferences window and ensure that logging is set back to **Error** to prevent logging from slowing down your system while you are working.

What to do next

For more information about troubleshooting your system, see the *IBM Cognos Troubleshooting Guide*.

Chapter 3. Credentials

Your credentials are the user name and password that you use to sign in to IBM Cognos Analytics. Your credentials are associated with groups, roles, capabilities, and permissions that determine what parts of the user interface you can access and how you can interact with content.

If you change the password you use to sign in to Cognos Analytics, be sure to renew your credentials. Your saved credentials are used to run scheduled requests when you're not signed in, for example, overnight. Credentials are automatically renewed once a day, but a schedule run can fail, if it runs after you change your password, but before your credentials are automatically renewed.

If you are prompted for credentials when you connect to a data server, you can save your credentials so you aren't prompted for them every time that you use the same data server. Your saved data server credentials are listed in your advanced, personal preferences. You can view and delete listed entries.

To see what groups and roles and what capabilities are available with your sign-in credentials, see "Viewing your permissions for functions and features" on page 17.

Renewing your credentials

Your credentials are renewed automatically once a day or at an interval that is determined by your administrator, but if you change your sign-in password, update your credentials manually.

About this task

It is important to manually renew your credentials when you change your sign-in password, if your credentials are used to run schedules.

Procedure

- 1. Tap your Personal menu, then tap My preferences > Personal > Advanced.
- 2. For Credentials, tap Renew.

Managing your credentials

If you own an entry, you can authorize trusted users to use your credentials when those users lack sufficient access permissions to perform specific tasks. In your personal, advanced preferences, you can view, add to, or delete from the list of groups, users, and roles that are authorized to use your credentials.

About this task

If you want to add groups, users, or roles from multiple namespaces, you can use the type in method described as a choice in step 3.

Procedure

- 1. Tap your Personal menu, then tap My preferences > Personal > Advanced.
- 2. For My credentials, tap Manage.

- 3. To add a group, user or role, tap 🕕 , then do one of the following actions:
 - Select a Namespace from the Name list. You can then search by keyword or filter by type to find what you want faster.
 - To type the names of entries you want to add, tap and select **Type in**. Type the names of groups, roles, or users by using the following format, where a semicolon (;) separates each entry:

 *namespace/group_name;namespace/role_name;namespace/user_name;

 Here is an example:
- 4. Select the names that you want and tap **Add**. Your selections are now listed in the My credentials slide-out panel.

Managing your data server credentials

You can view and delete your saved data server credentials in your personal, advanced preferences.

Procedure

- 1. Tap your Personal menu, then tap My preferences > Personal > Advanced.
- 2. For Data server credentials, tap Manage.

Cognos/Authors; LDAP/scarter;

Chapter 4. Access permissions

Access permissions are used to secure the organization's data.

Your administrator adds you to the groups and roles that have the capabilities and permissions you need to work with secured functions, features, and your organization's content. For example, report authors typically have access to the reporting, but not the managing part of the user interface. Members of the report author role have **Write** permission on a report, but members of a sales group might have only **Run** permission for the same report.

If you want to see what you are permitted to do with a specific report or other entry, see "Viewing your permissions for content" on page 17.

If you lack sufficient access permissions for an item, item owners or users with more extensive access permissions can authorize you to use their credentials. For more information, see "Managing your credentials" on page 13.

For information on administering user access to groups, roles, and capabilities, see the *IBM Cognos Analytics Managing Guide*.

Simple and granular access permissions

Access permissions determine a user's ability to perform a specific action, or access a feature or object.

Permissions for a specific user are a combination of permissions for that user and permissions for the groups and roles where the user is a member. When a user is a member of more than one group or role, deny permissions for one group or role take precedence over grant permissions for a different group or role.

Users have **Read**, **Run**, **Write**, and **Full** permissions for items. These simple permissions represent combinations of more granular permissions that administrators use to control access.

Simple permissions mapped to granular permissions

The following simple permissions include combinations of granular permissions:

Read

Includes the read and traverse granular permissions.

Run

Includes the read, execute, and traverse granular permissions.

Write

Includes the read, write, execute, and traverse granular permissions.

Full

Includes the read, write, execute, traverse, and set policy granular permissions.

Granular permissions and permitted actions

The underlying, granular permissions are described in the following list:

Read

View all the properties of an entry, including the report specification and report output.

Create a shortcut to an entry.

Write

Modify properties of an entry.

Delete an entry.

Create entries in a container, such as a package or a folder.

Modify the report specification for reports created in Reporting and Query Studio.

Create new outputs for a report.

Execute

Process an entry.

For entries such as reports, agents, and metrics, the user can run the entry.

For data sources, connections, and signons, the entries can be used to retrieve data from a data provider. The user cannot read the database information directly. The report server can access the database information on behalf of the user to process a request. IBM Cognos software verifies whether users have execute permissions for an entry before they can use the entry.

For credentials, users can permit someone else to use their credentials. To use the run as the owner report option, a user must have execute permissions for the account.

Set policy

Read and modify the security settings for an entry.

Traverse

View the contents of a container entry, such as a package or a folder, and view general properties of the container itself without full access to the content.

Setting permissions for content

Set access permissions to specify which users, groups, or roles can access your content.

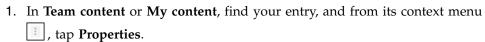
About this task

You can set permissions for content that you own, such as reports, dashboards, stories, packages, and so on. Permissions can be granted, denied, or inherited from a parent entry. For information about the types of permissions that you can specify for entries, see "Simple and granular access permissions" on page 15.

When you set access permissions, you can reference both authentication provider users, groups, and roles, and Cognos groups and roles. However, if you plan to

deploy your application in the future, we recommend that you use only the Cognos groups and roles to simplify the process.

Procedure



- 2. On the **Permissions** tab, select the check box **Override parent permissions**, and tap the add icon.
- 3. Open the namespace that contains the users, groups, or roles for which you want to specify permissions for the entry. To quickly find the entries, click the search icon, or click the filter icon to narrow the view of entries within the namespace.
- 4. Select the users, groups, or roles that you need. You can control-select multiple entries. Tap **Add**. The selected users, groups, or roles are added to the security policy of your entry with the basic permission **Read**.
- 5. To change the permission to **Run**, **Write**, or **Full**, tap the set access icon, and change the permission.
- 6. Tap on the permission name to view the granular permissions that this permission is comprised of. To change the granular permissions, tap the set access icon for a permission, and change the access type to grant, deny, or inherit.
- 7. If you want the children entries inherit the same permissions, select the **Apply to all children** check box.
- 8. Tap Apply.

Viewing your permissions for content

To secure IBM Cognos Analytics content, administrators assign permissions. You can check your permissions for a report or another entry in the properties for the entry.

About this task

The Read, Run, Write, and Full permissions represent groupings of more granular permissions that administrators assign. For more information, see "Simple and granular access permissions" on page 15.

Procedure

- 1. For an entry in a list, tap the context menu i, and then tap **Properties**.
- 2. On the **General** tab, tap **Advanced**. You see the **Permission** property and your permission value for the entry.

Viewing your permissions for functions and features

As a user or member of a group or role, you are assigned the capabilities that you need to work with different IBM Cognos Analytics functions and features.

About this task

If you are missing a capability that you require, contact your administrator. To see what groups and roles and what capabilities are available with your sign-in credentials, follow these steps:

Procedure

- 1. Tap your personal menu, then tap My preferences > Personal > Advanced.
- 2. Tap View details for either Groups and roles or My capabilities.

Chapter 5. Sources of data

To create and run reports, dashboards, and stories, you need data. This data might be made available to you by an administrator who creates packages or data modules, or you could upload your own data.

You can use packages, data modules, uploaded files, and data sets as sources of data for your IBM Cognos applications.

Packages

A package is a subset of a model, which can be the whole model, that is made available to the IBM Cognos Analytics application.

Relational packages are created in IBM Cognos Framework Manager, and OLAP packages in IBM Cognos Cube Designer and in IBM Cognos Administration. For more information, see the chapter on publishing packages in the *IBM Cognos Framework Manager User Guide*.

Not all types of packages can be used in all Cognos Analytics components. Only Reporting can use all types of packages traditionally supported in earlier versions of Cognos Analytics.

For dashboards and stories, the following packages are supported:

- Relational, dynamic query mode packages.
- Relational, compatible query mode packages if there is a JDBC connection defined for each data source in the package.
- Dimensional OLAP packages that are based on PowerCubes, dynamic cubes, TM1 data sources, dimensionally modeled relational (DMR) data sources, and other data sources.

The modeling component supports only relational, dynamic query mode packages as sources for data modules.

Data modules

Data modules contain data from data servers, uploaded files, data sets, other data modules, and from relational, dynamic query mode packages. Data modules are created in the modeling component in IBM Cognos Analytics, and saved in **My content** or **Team content**. You can use multiple input sources for a single data module.

For more information, see the IBM Cognos Analytics Data Modeling Guide.

Uploaded files

Uploaded files contain data that are stored on the IBM Cognos Analytics server in a columnar format.

Only certain types of files can be uploaded. Supported file formats include Microsoft Excel (.xlsx and .xls) spreadsheets, and text files with comma-separated, tab-separated, semi colon-separated, or pipe-separated values.

By default, you can upload data files of up to 100 MB from your local drive. If you want to upload a workbook, remember that only the first sheet in a Microsoft Excel workbook is uploaded. If you want to upload the data from multiple sheets in a workbook, you must save the sheets as separate workbooks. After you upload files, they can be used as a source to create a data module.

The uploaded files are automatically saved in **My content**. Later, you can copy or move them to a folder or package in **Team content**.

For more information, see "Uploading data."

Data sets

11.0.4

Data sets are customized collections of items that you use frequently. As you make updates to your data set, the dashboards and stories that use the data set are also kept up-to-date the next time you run them.

Data sets can be created from packages or data modules. You can use data sets to create dashboards or stories.

It is also possible to use a data set to create a data module. You can start with a data set and extend it by creating a data module from it. For example, you can add calculations and multiple additional data sources. For more information, see the *IBM Cognos Analytics Data Modeling Guide*.

For more information, see "Creating data sets" on page 21.

Uploading data

If you want to do some quick analysis and visualizations with data files, you can upload them to IBM Cognos Analytics yourself and use them in dashboards and stories. Uploaded files are also used as sources for data modules.

You can upload simple data files of up to 100 MB from your local drive. Administrators can increase the file size limit, but must be aware of file upload size limits for browsers. The data must be in columnar form - no pivot tables or crosstabs.

Uploading files

Use the **Upload files** facility to upload the files. To upload a file, tap **Upload files**tap the file, and then tap **Open**. After the file is loaded, you can select the columns that appear. You can also designate which columns are measures. You do this by tapping or the column label. Measures contain numerical data, such as sales figures or the number of items in inventory.

Updating uploaded files

Find the file in **My content** or **Team content**, tap file context menu ;, and then tap **Update file**.

Using data from uploaded files in Reporting

You can use files that you upload in dashboards, stories, and data modules, but not in Reporting. To use the data in Reporting, the file that contains the data can be uploaded and incorporated into a data module. For more information, see the *IBM Cognos Analytics Data Modeling Guide*

Creating data sets

Create a data set to group a customized collection of items that you use frequently.

Data sets can be created from packages or data modules.

Procedure

- 1. Navigate to a package or data module in **Team content** or **My content**.
- 2. From the package or data module context menu i, tap Create data set.
- 3. Drag the data items from the source pane to the data set editor pane. The items appear as columnar data in a similar fashion to a list report.
- 4. For relational data or data modules, select the **Summarize detailed values**, **suppressing duplicates** check box.
 - If you are not sure if this check box should be selected, clear the check box to see how the data is aggregated in the edit window. Condensed data that is set into fewer rows usually leads to better performing reports and dashboards. A reason for not aggregating the data in your data set is that you lose some details in the process, and the data from one system might not match the data from another system. This is especially true for calculations, such as an average.
- 5. To add filters to the columns or individual items of the data set, tap the item and then tap . You can add a customized filter or use one of the preset options.
- 6. For data with prompts, tap **Reprompt** to choose values or enter different values.
- 7. If your data set is very large, you can tap the **Page views** icon and toggle between the two settings:
 - Tap Page design to avoid delays in data retrieval.
 - Tap Page preview when you want to see the refreshed data.
- 8. After you are done adding columns, tap the save icon .
 - To save the data set for the first time or to save changes to the data set, from the drop-down list tap **Save**. This option saves the metadata, but does not load the data. Depending on the data set, loading data may take some time.
 - To save an updated data set to a new data set, from the drop-down list tap **Save as**. This option saves the metadata, but does not load the data. Depending on the data set, loading data may take some time.
 - To save the data set and load the data, from the drop-down list tap **Save** and load data. In addition to saving new or changed metadata, this option loads data. This data is immediately available when you use it in the creation of a dashboard or story.
- 9. In the **Save as** window, choose where to save the data set. In the **Save as** box, type a name, and then tap **Save**.

- 10. Optional: To create a data set while building a dashboard, perform the following steps:
 - a. Create a new dashboard, choose a template, and tap OK.
 - b. Tap to add some data.
 - c. Navigate to a package by tapping Team content, and then tap Open.
 - d. The Create data set window appears. You can create a new data set and after you save it, you can continue to build your dashboard. If you need to modify the data set, you can also do that from within the dashboard by expanding the data sources.

Chapter 6. Sharing and embedding Cognos Analytics content

11.0.5

You can share IBM Cognos Analytics content objects with other users. You can share content objects, such as reports and dashboards, with a URL that opens the content object directly, instead of having to browse to the content object from the Cognos Analytics welcome screen. You can also embed Cognos Analytics content objects (except for data modules) in customized web pages. An embedded content object does not display the application or navigation bars.

Authentication issues with sharing and embedding content

If your Cognos Analytics server requires user authentication, the Cognos Analytics sign-in screen is shown when a **Share** or **Embed** link is displayed. After you sign in, the Cognos Analytics content is displayed. If multiple content objects are embedded in a web page, each embedded object displays the sign-in screen.

If you are embedding Cognos Analytics content objects in a web page, you can use the Cognos Analytics REST API to sign in, instead of using the Cognos Analytics sign-in screen. The embedded content sample included with Cognos Analytics illustrates the use of the REST API to sign in a user, and then displays embedded content. For more information, see "Authentication sample with embedded content" on page 24.

Share or embed a content object

11.0.5

Procedure

You can share and embed content objects in two different ways.

- In **Team Content** or **My Content**, browse to the object, click **More** (), and then click **Share** or **Embed**.
- 11.0.6 You can share or embed a report, dashboard, or story that is open. To do this, click **More** () on the application bar, and then click **Share** or **Embed**.

Embed is not available for data modules.

A dialog box opens that displays a URL (for **Share**) or an HTML iFrame element (for **Embed**).

Results

You can now provide a **Share** URL to other users that allow them to open the content object directly. You can add the **Embed** element to a web page to display the content object.

If you use the URL in an HTML item in a report, replace instances of & with &.

You can also modify the URL to perform other actions, such as opening a report for editing instead or running the report, or changing the output format of the

report. For more information, see Chapter 7, "Creating custom URLs to display and run Cognos Analytics content," on page 25.

Authentication sample with embedded content

11.0.5

The embedded content sample shows how to use the IBM Cognos Analytics REST API to sign in a user and then display embedded content.

Procedure

- 1. Copy the embedded_content folder from the <installation_location>\samples folder to the <installation_location>\webcontent folder.
- 2. Edit embedded_content\preLoginSample.html and change the namespace identifiers in the select object to your namespace identifiers.
- 3. Edit embedded_content\iFrameSample.html and replace the iFrame objects with **Embed** iFrame objects from your Cognos Analytics installation.
- 4. In a web browser, type http://<server_name>:<port>/embedded_content/preLoginSample.html

Results

A sign-in web page is displayed. After you sign in, the embedded content objects are shown.

Chapter 7. Creating custom URLs to display and run Cognos Analytics content

11.0.5

You can create URLs that open or run IBM Cognos Analytics content objects, such as reports, dashboards, stories, and data modules. This feature extends the **Share** command that creates a URL to display Cognos Analytics content objects to provide more control over the actions that are taken when the content object is displayed or run.

The Share command that is described in Chapter 6, "Sharing and embedding Cognos Analytics content," on page 23 provides a simple way to create a URL that opens and runs Cognos Analytics content objects. You can create these URLs if you require more control over the actions invoked by them.

11.0.6 The following report types are supported in custom URLs: standard reports, report views, active reports, data sets, Query Studio reports, Analysis Studio reports, and their saved outputs.

11.0.6 If the content object is a report that has saved output, the saved output is displayed if it exists. Otherwise, the report is run. If the content object is saved output, it is displayed. An error message is displayed if the saved output has been deleted.

11.0.7 Ability to specify login parameters in the URL.

Syntax

11.0.6 The syntax of the custom URLs takes one of the following two forms.

- http://<servername>:<port>/bi/?pathRef=<path>&<option1>=<value1> &<option2>=<value2>...
- http://<servername>:<port>/bi/?objRef=<id>&<option1>=<value1> &<option2>=<value2>...

pathRef or objRef identify the content object to use.

pathRef

Specifies the location of the object. This value does not change if the version of Cognos Analytics is changed or if the object is exported or imported in a deployment.

The easiest way to determine the value of pathRef is to create a URL by using the **Share** command. This URL contains the value of pathRef.

objRef Specifies the id of the object. This value does not change if the content object is moved to a different location in **My content** or **Team content**.

The value of objRef is the **ID** value in the properties pane of the object.

A number of optional options can be appended to the URL. The following two options can be used in any perspective.

ui_appbar

Specifies whether to display the Application bar (true) or not (false). The default value is true.

ui_navbar

Specifies whether to display the Navigation bar (true) or not (false). The default value is true.

The following options can be used if the content object is a report..

action Specifies run to run a report or edit to author a report. edit can only be used in the authoring perspective. The default value is run.

format When running a report, specifies the output format. The possible values are HTML and PDF. In the classicviewer perspective, the following values are also supported: xlsxData, CSV, spreadsheetML, layoutDataXML, XLWA, rawXML, XHTML, singleXLS, and HTMLFragment. The default value is HTML.

To use the classicviewer perspective, the option perspective=classicviewer must be included in the URL. For example, http://servername>:<port>/bi/?perspective=classicviewer &pathRef=<path>&<option1>=<value1>&<option2>=<value2>...

- When running a report, specifies whether to include accessibility features (true) or not (false). The default value is false.
- **bidi** When running a report, specifies whether to enable bidirectional support (true) or not (false). The default value is false.
- **prompt** When running a report, specifies whether to show the prompt page (true) or not (false). The default value is false.

p_prompt name>

When running a report, specifies the value to use for the prompt named ..

promptParameters

When running a report, specifies prompt parameters as a JavaScript Object Notation (JSON) object. You to pass more complex prompts to use when you run a report. For more information, see "promptParameters option syntax" on page 27.

- The easiest way to create a custom URL is to use the Share command for the
 content object that you want to create a custom URL for, and then to modify the
 options in this URL.
- Custom URLs can be long and your Cognos Analytics server environment might impose a length limit on the query portion of the URL You can work around this limitation by using the URL fragment identifier (#) in the URL. Here are some examples.
 - http://<servername>:<port>/bi/#pathRef=<path>&<option1>=<value1> &<option2>=<value2>...
 - http://<servername>:<port>/bi/?pathRef=<path>
 &<option1>=<value1>#<option2>=<value2>...

You can also use the HTTP POST method to send the options to the Cognos Analytics server.

• If your Cognos Analytics server requires user authentication, a sign-in view is displayed when you run a custom URL in a web browser. For information on some ways to handle the authentication issue, see Chapter 6, "Sharing and embedding Cognos Analytics content," on page 23.

• If you use a custom URL in an HTML item in a report, replace instances of & with & amp;.

promptParameters option syntax

11.0.5

You can use the promptParameters option to pass complex prompt values for use when you run a report. The prompt values are contained in a JavaScript Object Notation (JSON) object.

Syntax

The syntax of the promptParameters option is promptParameters=[{<prompt_1>},{<prompt_2>,...]. The syntax of each prompt value depends on the type of prompt value and are described as follows.

Specific values

```
{
  "name":"<prompt_name>",
  "value":[
    {"use":"<use_value1>","display":"<display_value_1>"},
    {"use":"<use_value2>"},
    ...
]
}
```

rompt_name> is the name of the prompt, <use_value1> is the use value,
and <display value 1> is the display value. The display value is optional.

Bounded range

```
{
  "name":"<prompt_name>",
  "value":[
    {
      "boundRange":{
        "start": {"use":"<use_start_value>", "display":"<display_start_value>"},
        "end": {"use":"<use_end_value>"}
    }}
  ]
}
```

Unbounded start range

```
{
  "name":"<prompt_name>",
  "value":[
  {
    "unboundedStartRange": {
    "end": {"use":"<use_end_value>", "display":"<display_end_value>}
  }
}
```

<prompt_name> is the name of the prompt, <use_end_value> is the upper
use value, <display_end_value> is the upper display value. The display
value is optional.

Unbounded end range

```
{
  "name":"<prompt_name>",
  "value":[
    {
      "unboundedEndRange": {
      "start": {"use":"<use_start_value>", "display":"<display_start_value>}
    }
}
```

Chapter 8. Integrating with other Cognos products

IBM Cognos Analytics integrates with supported versions of other IBM Cognos products so your analytics capabilities can grow with your needs.

To access the following applications, they must be installed, and IBM Cognos Analytics must be installed with the custom option which enables other applications. For information on opening companion applications, see "Opening companion apps" on page 32.

Cognos Planning - Analyst

For supported versions, you can access published plan data in IBM Cognos Analytics by using the Generate Framework Manager Model wizard. For more information, see the *IBM Cognos Analyst User Guide*.

Cognos Planning - Contributor

For supported versions, you can access unpublished (real-time) Contributor cubes in IBM Cognos Analytics by custom installing the IBM Cognos Analytics - Contributor Data Server component that is included with IBM Cognos Planning - Contributor.

For supported versions, you can access published plan data in IBM Cognos Analytics by using the Generate Framework Manager Model administration extension in Contributor. For more information, see the *IBM Cognos Contributor Administration Guide*.

Cognos Finance

You can access IBM Cognos Finance cubes that are secured against a Series 7 namespace by using the IBM Cognos Finance Network API Service. You can also export data and metadata from IBM Cognos Finance for use in Framework Manager.

Cognos Controller

You can access IBM Cognos Analytics to create IBM Cognos Controller Standard Reports by using a predefined Framework Manager model that is created when IBM Cognos Controller is installed. You can also access published Controller data and structures in Framework Manager for custom reporting and analysis.

Cognos Transformer

You can use IBM Cognos PowerCubes and Transformer models, that were generated by supported Transformer versions, directly in IBM Cognos Analytics. The cubes and models are upwards compatible and require no migration or upgrade tools. You can run reports and analyses in IBM Cognos Analytics against the IBM Cognos PowerCubes.

Cognos TM1®

IBM Cognos TM1 integrates business planning, performance measurement and operational data to enable companies to optimize business effectiveness and customer interaction regardless of geography or structure. Cognos TM1 provides immediate visibility into data, accountability within a collaborative process, and a consistent view of information, allowing managers to quickly stabilize operational fluctuations and take advantage of new opportunities. For more information, see the *IBM Cognos TM1 User Guide*.

Cognos PowerPlay

You use IBM® Cognos® PowerPlay® Studio to create and view reports that are based on PowerCube data sources. For more information, see the *IBM Cognos PowerPlay Studio User Guide*.

The IBM Cognos Software Development Kit

The IBM Cognos Software Development Kit provides a platform-independent automation interface for working with IBM Cognos Analytics services and components.

Developers in your organization can use the IBM Cognos Software Development Kit to create custom reports, manage deployment, and integrate security and portal functionality to suit your needs, locale, and existing software infrastructure. The Software Development Kit uses a collection of cross-platform Web services, libraries, and programming interfaces.

You can choose to automate only a specific task, or you can program the entire process from modeling through to reporting, scheduling, and distribution.

The Software Development Kit is available as a separate package.

For more information, see the IBM Cognos Software Development Kit Developer Guide.

Functionality mapping from Cognos BI to Cognos Analytics

IBM Cognos Analytics is the next version of IBM Cognos Business Intelligence.

The following table describes where you can find BI functionality in IBM Cognos Analytics. The companion applications are only available in the user interface if they are installed and if legacy applications are enabled in a custom installation of Cognos Analytics. Some, but not all of the companion applications, are installed separately.

Table 1. BI to Cognos Analytics functionality mapping

IBM Cognos Business Intelligence	IBM Cognos Analytics
Cognos Connection	Welcome portal
Cognos Viewer	The viewer is not named. Depending on the item you view, there is different functionality in the viewer.
Report Studio	Reporting: to create a new report, in the Welcome portal, tap , then tap Report . For a report entry in a content list, if you tap , then tap Edit , the report opens in Reporting.
No equivalent, new in Cognos Analytics.	Data modeling: to create a new data module, in the Welcome portal, tap the New icon, and then tap Data module.
Cognos Administration	Managing: incorporates part of the administration functionality. Access from the Welcome portal. Link to the full Administration console from the Manage panel.
Workspace Advanced	Reporting: incorporates Workspace Advanced functionality. Page preview in Reporting is similar to Page preview in Workspace Advanced.

Table 1. BI to Cognos Analytics functionality mapping (continued)

IBM Cognos Business Intelligence	IBM Cognos Analytics
Drill-through definitions	Companion application: to access Drill-through, in the
	Welcome portal navigation bar, tap New 🕕 , then Other
	. Drill-through definitions support Framework Manager packages, but not data modules.
Event Studio	Companion application: to access Event Studio, in the
	Welcome portal navigation bar, tap New ①, then Other .
My Inbox	Notifications: if you select Save to the system for subscriptions and report output versions, you go to Notifications in the Welcome portal, open the notice and tap a link to the report version.
	Also, you can access My Inbox from your personal settings.
Analysis Studio	Companion application: to access, in the Welcome portal, tap New , then Other .
Query Studio	Companion application: to access, in the Welcome portal, tap New , then Other .
Workspace	Dashboarding: incorporates Workspace functionality. However, for some additional functionality, you can access the Workspace companion application if it was installed. In the Welcome portal navigation bar, tap New , then Other .
Framework Manager	Framework Manager

Move from quirks to standards mode HTML

Because of the move from quirks to standards mode HTML in much of the user interface, you might need to make minor changes to existing reports. You might also need to update your web browser settings.

Many IBM Cognos Analytics user interfaces now use standards mode HTML, including the Cognos Analytics portal, Cognos Analytics – Reporting, and HTML viewers and reports. Because reports have moved from quirks to standard HTML, there might be small differences in the look of your reports. These differences do not have an impact on the majority of reports that were created in previous Cognos versions. However, minor changes might be required in a small number of existing reports.

If you use the Microsoft Internet Explorer web browser after you upgrade to Cognos Analytics 11.0, you might need to change your browser settings. Previously, when Cognos 10.2.x was used with the Internet Explorer browser, you either had to enable the **Automatically recover from page layout errors with Compatibility Mode** option or add websites to the **Compatibility View Settings**. Because Cognos Analytics 11.0 uses standards mode HTML, you must change settings that enabled compatibility mode to avoid problems with caching. To ease your transition to standards mode HTML, legacy components, such as IBM Cognos

Query Studio and IBM Cognos Analysis Studio that still require it now use meta tags to automatically switch into compatibility mode.

For more information, see Cognos Analytics conversion to Standards Mode.

Opening companion apps

Companion applications might be accessible in the IBM Cognos Analytics user interface.

About this task

You can access the following applications if you have the required capabilities and if the applications are enabled during installation:

- · Cognos Analysis Studio
- · Cognos Query Studio
- Cognos Event Studio
- Cognos Workspace
- Drill-through definitions
- My Inbox
- My Watch Items
- · Create new jobs

The following applications are separately installed. To see them, the custom installation option must be selected when IBM Cognos Analytics is installed, and you must have the appropriate capabilities:

- Cognos PowerPlay
- Cognos Planning

Procedure

- To see My Inbox and My Watch Items, in the Welcome portal, tap your user name.
- 2. To see Create new job, in the **Welcome** portal navigation bar, tap **Manage**.
- 3. To see all other companion applications, in the **Welcome** portal navigation bar, tap ①, then 🔝.
- 4. Tap the companion application that you want.

Appendix. About this guide

This document is intended for use with IBM Cognos Analytics. Cognos Analytics integrates reporting, modeling, analysis, dashboards, stories, and event management so you can understand your organization's data, and make effective business decisions.

To find product documentation on the web, including all translated documentation, access IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter).

Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products successfully. For information on accessibility features in Cognos Analytics, see the *Cognos Analytics Accessibility Guide*.

Forward-looking statements

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

Samples disclaimer

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