IBM Cognos Analytics Version 11.1

Accessibility Guide



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#### **Product Information**

This document applies to IBM Cognos Analytics version 11.1.0 and may also apply to subsequent releases.

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# **Chapter 1. Accessibility features overview**

Accessibility features assist users who have a disability, such as restricted mobility or limited vision, to use information technology content successfully. Cognos<sup>®</sup> Analytics includes accessibility features for navigating the user interface, and for authoring reports so that they're accessible for yourself or others.

Cognos Analytics includes the following major accessibility features:

- Keyboard-only operation.
- Operations that use a screen reader.
- User preference and report settings to enable accessibility features.
- Accessible report output for report runs, including jobs, job steps, subscriptions, and scheduled items.
- Operable in high contrast modes.
- Operable when the browser zoom level is increased up to 200%.
- Accessible visualizations: table, list, and crosstab.

With a Microsoft Windows OS, use the latest release of the JAWS screen reader in combination with the latest Extended Support Release of the Mozilla Firefox web browser.

The first thing to do after you sign in is set your user preference to turn on accessibility features. You want to set this preference because only some parts of the user interface are accessible by default. For more information, see "Turning on accessibility features " on page 3.

With your preference set, you can navigate by keyboard throughout the user interface and you get accessible report output when you run reports that were authored to include accessibility features.

The Cognos Analytics sample report, *Employee satisfaction*, was authored to include accessibility features. The following figure is an example of output that includes accessibility features.

<b>i</b> [	🖺 v 🖍 🎧 🕞 v 🖆 Employee	satisfaction 🗸					•	O Benjamin
) <b>,</b>	EMPLOYEE SATISFACTION BY DEPARTMEN	IT 2012						
2								
3	Survey topic scores by department Employee rankings and terminations by department							
)	Customer Service average score is -12.104% compared to the company average.	Department	Excellent	Very Good	Good	Satisfactory	Poor	Terminations
		Customer Service	1.9%	31.2%	35.1%	27.3%	5.8%	21.4%
		Finance	0. <mark>9</mark> %	18.9%	37.9%	21.7%	2.7%	1.8%
		Human Resources	6.2%	15.4%	24.6%	21.5%		3.1%
		Information Services and Technology		20.9%	31.3%	26.1%	2.6%	2.6%
		Marketing	3.1%	18.8%	31.3%	15.7%	9.4%	9.4%
		Procurement	4.0%	23.9%	47.8%	19.9%		0.0%
i		Production and Distribution	5.3%	28.0%	30.6%	25.3%	1.3%	8.0%
		Sales	3.1%	18.5%	44.2%	27.2%	6.2%	4.1%
i		Sales (Corporate)		18.6%	31.0%	24.8%	3.1%	9.3%

Figure 1. Accessible output for sample report

For comparison purposes, the following figure shows the same sample report run with accessibility features disabled and therefore appears with visually oriented graphics.

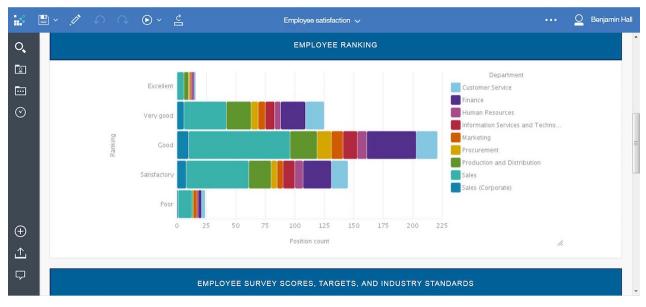


Figure 2. Output for sample report without accessibility features

For information on how to author accessible reports, see <u>Chapter 2</u>, "Accessible report authoring," on page 13.

## Text tour of the interface

The Cognos Analytics web user interface includes WAI-ARIA navigational landmarks that you can use to quickly navigate to functional areas in the application. Here's a description of the layout to help you get oriented.

After you sign in and you're on the **Welcome** home page, the user interface includes a navigation toolbar down the left of the window, an application toolbar across the top, and the main area for interacting with content.

From the left-side navigation bar you can search, open content folders or recent items, create new items (reports, dashboards, stories, data modules), open your notifications, upload data files, and open Manage if you're an administrator.

The application bar includes icons on the left, center, and right of the bar. The page switcher is in the center of the bar. Use the page switcher to open, remove, or change between pages. The personal menu on the far right, includes access to your user preferences, subscriptions, sign in, and sign out.

For descriptions of the functions in the different parts of the user interface, see the <u>Getting Started Guide</u> overview.

#### Additional interface information

The Cognos Analytics user interfaces do not have content that flashes 2 - 55 times per second.

The Cognos Analytics web user interfaces rely on cascading stylesheets to render content properly and to provide a usable experience. If you are a low-vision user, you can adjust your operating system display settings, and use settings such as high contrast mode. You can control font size by using the device or web browser settings.

## **Turning on accessibility features**

The user preference **Turn on accessibility features** is off by default. To turn it on, go to your **Personal menu** and open **My preferences**. You can set this preference by using mouse or keyboard navigation. The following procedure is for signing in and navigating by keyboard to set your preference.

#### About this task

When the **Turn on accessibility features** preference is off, its check box is not selected.

When the preference is selected, your experience in the user interface changes in the following ways:

- You can operate throughout the interface by using only a keyboard.
- When you run reports that were authored accessibly, you get accessible output.
- When you author reports, the option **Show on-demand UI on right click** (**More** icon ), **Options**, **View** tab) is automatically selected. As a result, report object toolbars do not appear. To show an object's toolbar, navigate to the object and press the Enter key.

#### Procedure

- 1. From the sign in screen, tab to **Select Namespace**. Press Enter to select a namespace. Optionally, if there are multiple namespaces, use the up and down arrow keys to navigate the list.
- 2. Tab to the User ID field, type your user ID, then tab to the Password field.
- 3. Type your password, and press Enter.
- 4. On the Welcome screen, tab to your **Personal menu** in the application bar.
- 5. With focus on the **Personal menu**, press Enter and tab to **My preferences**. Press Enter.
- 6. On the **My preferences** panel, tab to **Turn on accessibility features**, and press Enter to select the check box.
- 7. Press the Ctrl+S shortcut.

The panel closes and your preference is set.

#### What to do next

If you want to subscribe to reports that include accessible output, you must first set the report properties to enable accessibility support. For more information, see <u>"Enabling accessibility when subscribing and</u> scheduling" on page 10.

## **Keyboard navigation**

Cognos Analytics uses mainly standard navigation keys and gestures, but there are some unique keyboard shortcuts.

On mobile devices, when the VoiceOver feature is enabled, it acts as a screen reader. You can then navigate by using an Apple Bluetooth keyboard.

Cognos Analytics uses the following keyboard shortcuts.

Table 1. Keyboard shortcuts in Cognos Analytics			
Action	Desktop keyboard shortcut	Mac keyboard shortcut	Mobile keyboard shortcut
Save changes to a slide- out panel.	Ctrl+S		Ctrl+S

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Action	Desktop keyboard shortcut	Mac keyboard shortcut	Mobile keyboard shortcut
Close slide-out panels (except for the modeling interface), drop-down lists, and toolbar menus.	Escape		Ctrl+[
Type text in a dashboard or story text field.	F12		Ctrl+1
Exit dashboard or story text field.	Shift+F12		Ctrl+0
Filter all tabs in dashboard. (Windows)	Shift+Alt+F		
Filter current tab in dashboard. (Windows)	Shift+F		
Filter all tabs in dashboard. (Mac)	Shift+Option+F		
Filter current tab in dashboard. (Mac)	Shift+F		
Expand a visualization for editing.	F10		Ctrl+X
Go to the first row of a data grid.	Ctrl+Home		Ctrl+H
Go to the last row of a data grid.	Ctrl+End		Ctrl+E
Open the context menu.	Enter		Not applicable
Skip to navigation.	Ctrl+Shift+1	Cmd+Shift+1	
Skip to main content.	Ctrl+Shift+2	Cmd+Shift+2	
Skip to report navigation	Ctrl+Shift+3	Ctrl+Shift+3	

#### Keyboard navigation in the modeling interface

To navigate the modeling user interface, use the standard Cognos Analytics keyboard shortcuts, and some additional shortcuts that are provided in the following table. Please note that the mobile keyboard shortcuts are not applicable to the modeling component.

Table 2. Keyboard shortcuts in the Cognos Analytics modeling interface			
Action	Desktop keyboard shortcut		
Add metadata to a data module or to an expression.	Shift+Right arrow		
Expand or collapse the data tray.	Enter		
View columns in the data tray.	Right and left arrow keys, or tab		
View rows in the data tray.	Up and down arrow keys		
Increase or decrease the number of rows that you view in the data tray.	Up and down arrow keys		

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Table 2. Keyboard shortcuts in the Cognos Analytics modeling interface (continued)		
Action	Desktop keyboard shortcut	
Copy a selected item from the metadata tree or slots view.	Ctrl+C	
Paste a copied metadata tree or slot item into a new slot position. Tab to the desired insertion point:	Ctrl+V	
Opening Inventory adds the copied item before Opening Inventory.		
• Opening Inventory replaces Opening Inventory with the copied item.		
Opening Inventory adds the copied item after Opening Inventory.		

The following list provides examples of actions in the modeling interface, and the keyboard shortcuts to perform these actions.

• Add tables to a data module

In the **Selected sources** panel, select one or more tables, and press the Shift+Right arrow keys to add the tables to the **Data module** panel.

• Use the context menu in the **Data module** panel

Press the Shift+F10 shortcut to open the context menu for a module, a table, or a column. Use the up and down arrow keys to navigate between the menu options, and the Enter key to select an option. The Escape key closes the context menu without selecting any options.

Create a custom calculation

Select a column in the **Data module** panel, and press the Shift+Right arrow shortcut to add the column name to the expression in the expression editor. To add a function to your expression, type the first letter of the function. In the drop-down list that is displayed, navigate to the function that you need to use, and press the Enter key.

#### Keyboard navigation in IBM Cognos LifeCycle Manager

To navigate the Cognos LifeCycle Manager user interface, use the standard navigation keys and some additional shortcuts that are provided in the following table. Please note that the mobile keyboard shortcuts are not applicable to Cognos LifeCycle Manager.

Table 3. Keyboard shortcuts in Cognos LifeCycle Manager		
Action	Desktop keyboard shortcut	
Go to the Cognos LifeCycle Manager home (IBM <sup>®</sup> Cognos LifeCycle Manager text in the user interface).	Ctrl+Alt+h	
Open slide-out panels, drill down comparison results.	Enter	
Close slide-out panels.	Escape	

## Keyboard commands to edit canvas content

You can use keyboard shortcuts as an alternative way to invoke a command by pressing a combination of keyboard keys.

The following tables list keyboard shortcuts to edit an image on your canvas that you plan to share with your colleagues.

PC keyboard command	Macintosh keyboard command	Description
t	t	Activate the Textbox Tool
a	a	Activate the Arrow Tool
р	p	Activate the Pen Tool
r	r	Activate the Rectangle Tool
с	с	Activate the Crop Tool
q	q	Rotate object(s) clockwise 10 degrees
Shift + Q	Shift + Q	Rotate object(s) counter- clockwise 10 degrees
Delete/Backspace	Delete	Delete object(s)
]	]	If the active select object is a textbox, shrink the word- wrapped area horizontally by 5 px.
Shift + {	Shift + {	If the active select object is a textbox, shrink the word- wrapped area horizontally by 50 px.
]	]	If the active select object is a textbox, expand the word wrapped area horizontally by 5 px.
Shift + }	Shift + }	If the active select object is a textbox, expand the word wrapped area horizontally by 50 px.
Ctrl + z	Ctrl + z / Command + z	Undo Previous Action
Ctrl + y	Ctrl + y / Command + y /	Redo Previous Action
Escape	Escape	Close Entire Panel

PC keyboard command	Macintosh keyboard command	Description
Tab	Tab	Move the tool selection on the toolbar from Left to Right one at a time. If you press Tab on the final tool (for example, Clear/ Done) the focus moves from the toolbar to the image.

PC keyboard command	Macintosh keyboard command	Description
Shift + Tab	Shift + Tab	Move the tool selection on the toolbar from Right to Left one at a time. Pressing Shift + Tab on the First tool moves the focus from the toolbar to the parent element.
Enter	Enter/Return	Activate the selected tool/color

PC keyboard command	Macintosh keyboard command	Description
Up Arrow	Up Arrow	Scroll the image up (If applicable)
Down Arrow	Down Arrow	Scroll the image down (If applicable)
Left Arrow	Left Arrow	Scroll the image left (If applicable)
Right Arrow	Right Arrow	Scroll the image right (If applicable)
Up Arrow	Up Arrow	Move the selected Object(s) up by 5 px.
Down Arrow	Down Arrow	Move the selected Object(s) down by 5 px.
Left Arrow	Left Arrow	Move the selected Object(s) left by 5 px.
Right Arrow	Right Arrow	Move the selected Object(s) right by 5 px.
Shift + Up Arrow	Shift + Up Arrow	Move the selected Object(s) up by 50 px.
Shift + Down Arrow	Shift + Down Arrow	Move the selected Object(s) down by 50 px.
Shift + Left Arrow	Shift + Left Arrow	Move the selected Object(s) left by 50 px.
Shift + Right Arrow	Shift + Right Arrow	Move the selected Object(s) right by 50 px.
Shift + Alt + Up Arrow	Alt + Up Arrow	Scale the selected Object(s) up by 5 px. Bottom Right Corner is selected for scaling.
Shift + Alt + Down Arrow	Alt + Down Arrow	Scale the selected Object(s) down by 5 px. Bottom Right Corner is selected for scaling.
Shift + Alt + Left Arrow	Alt + Left Arrow	Scale the selected Object(s) left by 5 px. Bottom Right Corner is selected for scaling.
Shift + Alt + Right Arrow	Alt + Right Arrow	Scale the selected Object(s) right by 5 px. Bottom Right Corner is selected for scaling.

PC keyboard command	Macintosh keyboard command	Description
Shift + Alt + Up Arrow	Shift + Alt + Up Arrow	Scale the selected Object(s) up by 50 px. Bottom Right Corner is selected for scaling.
Shift + Alt + Down Arrow	Shift + Alt + Down Arrow	Scale the selected Object(s) down by 50 px. Bottom Right Corner is selected for scaling.
Shift + Alt + Left Arrow	Shift + Alt + Left Arrow	Scale the selected Object(s) left by 50 px. Bottom Right Corner is selected for scaling.
Shift + Alt + Right Arrow	Shift + Alt + Right Arrow	Scale the selected Object(s) right by 50 px. Bottom Right Corner is selected for scaling.
Tab	Tab	Press successively to select each object that you created in the order that you created them. If the final object is already selected, hitting Tab will move focus from the image to the Share Panel.
Shift + Tab	Shift + Tab	Press successively to select each object that you created in the order that you created them. If the first object is already selected, hitting Shift + Tab will move the focus from the image to the toolbar.
Enter	Enter/Return	Enter Textbox Editing Mode if the active select object is a textbox.
Escape	Escape	Deselect any active object. If the selected object is a textbox and is currently in Textbox Editing Mode, it exits Textbox Editing Mode.
Escape	Escape	Deselect the active object and stop drawing. If the active select object is a textbox, exit Textbox Editing Mode
Enter	Enter/Return	Begin drawing an object with the virtual cursor by simulating a mouse down event.
Enter	Enter/Return	End drawing an object with the virtual cursor by simulating a mouse
Up Arrow	Up Arrow	Move the Virtual Cursor up by 5 px.
Down Arrow	Down Arrow	Move the Virtual Cursor down by 5 px.

PC keyboard command	Macintosh keyboard command	Description
Left Arrow	Left Arrow	Move the Virtual Cursor left by 5 px.
Right Arrow	Right Arrow	Move the Virtual Cursor right by 5 px.
Shift + Up Arrow	Shift + Up Arrow	Move the Virtual Cursor up by 50 px.
Shift + Down Arrow	Shift + Down Arrow	Move the Virtual Cursor down by 50 px.
Shift + Left Arrow	Shift + Left Arrow	Move the Virtual Cursor left by 50 px.
Shift + Right Arrow	Shift + Right Arrow	Move the Virtual Cursor right by 50 px.

## **Skip to content**

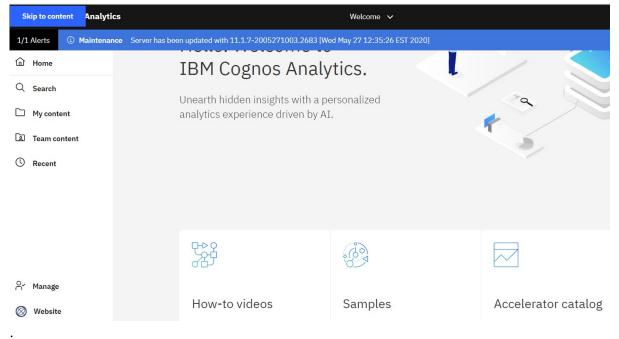
Using **Skip to content** you skip the application toolbar and the navigation pane and go straight to the content in IBM Cognos Analytics.

#### About this task

This helps in keyboard navigation because you don't need to tab through the application toolbar and the navigation pane to reach your content. This is especially beneficial when you use a screen reader. You don't hear the screen reader read the aria labels for all the focus-able items in the application toolbar and the navigation pane, as those are mostly the same in the various perspectives of Cognos Analytics.

#### Procedure

1. If you have Cognos Analytics open in your browser, the first focus-able item that you come across as you press the Tab key and enter the main window of Cognos Analytics would be **Skip to content**.

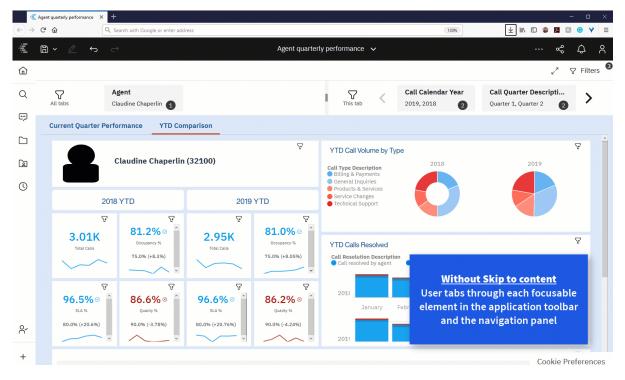


2. To Skip to content, press the Enter key.

You can also press the Tab key to continue your keyboard navigation without skipping to the content.

You can also use the keyboard shortcuts to achieve the same results:

- Skip to navigation: Ctrl+Shift+1 (for Windows), Cmd+Shift+1 (for macOS)
- Skip to main content: Ctrl+Shift+2 (for Windows), Cmd+Shift+2 (for macOS)



## Enabling accessibility when subscribing and scheduling

If you want to subscribe to a report and get accessible saved output, you must enable accessibility support in the report's properties. Similarly, if you want to schedule an accessible report to run and to save output that's accessible, you set the report's properties to enable accessibility features. Users of accessibility features can then use the saved output for that report.

Before you subscribe to a report or schedule a report, enable accessibility support in the report's properties.

If you change the report properties to enable accessibility support, report outputs are accessible for all consumers of that report, regardless of their user preference settings. The settings that are described in override the settings that are set in user preference settings. For more information, see <u>"Turning on</u> accessibility features" on page 3.

#### Setting the accessibility option in the properties of a report

- 1. For a report in a content list, tap  $\pm$  and then tap  $\approx$ .
- 2. On the properties slide-out, tap the **Report** tab.
- 3. Tap Report options.
- 4. From the menu list for the **Enable accessibility support** option, select **True**. With accessibility support enabled, saved output for the report includes accessibility features.

The option **Default** takes over the user preference setting for accessibility. For more information, see <u>"Turning on accessibility features</u>" on page 3.

The option True and False override what is set in the user preference setting for accessibility.

#### Setting the accessibility option in the run options of a report

You can also override the user preference setting for accessibility when you are editing a report by way of **Show run options** when you are about to run a report.

#### **Run options**

Lan	guage:	
(	Default)	-
A	Afrikaans	
Afrikaans (South Africa)		
A	Albanian	
A	Albanian (Albania)	•
~	Include accessibility features	
	Enable bidirectional support	
	Include performance details	
~	Prompt	

#### Setting the accessibility property in the scheduling options of a report

- 1. For a report in a content list, tap  $\pm$  and then tap  ${\tt z}.$
- 2. On the properties slide-out, tap the **Schedule** tab.
- 3. Tap the **Options** tab.
- 4. Select the **Enable accessibility support** option.

#### Setting the accessibility property in the Run as options of a report

- 1. For a report in a content list, tap  $\pm$  and then tap **Run as**  $\triangleright$ .
- 2. Select the Enable accessibility support option.

#### Setting the accessibility property in the job options of a report

- 1. For a report in a content list, tap = and then tap **Create a new job**
- 2. Click Edit options
- 3. Select the Enable accessibility support option.

## **IBM and accessibility**

IBM is committed to accessibility. Accessibility features that follow compliance guidelines are included in Cognos Analytics to benefit users with disabilities.

Cognos Analytics uses the latest W3C Standard, <u>WAI-ARIA 1.0</u> (http://www.w3.org/TR/ wai-aria/) to ensure compliance with the <u>United States Access Board Section 508</u> <u>Standards</u> (http://www.access-board.gov/guidelines-and-standards/communications-and-it/about-thesection-508-standards/section-508-standards), and the <u>Web Content Accessibility Guidelines (WCAG)</u> 2.0 (https://www.w3.org/TR/WCAG20/).

The Cognos Analytics online product documentation in IBM Knowledge Center is enabled for accessibility. For more information, see <u>Accessibility features for IBM Knowledge Center</u> (https://www.ibm.com/support/knowledgecenter/help#accessibility).

To request an accessibility conformance report, see <u>Accessibility Conformance Reports</u> (https:// able.ibm.com/request/).

For more information about the commitment that IBM has to accessibility, see <u>IBM Accessibility</u> (www.ibm.com/able).

In addition to standard IBM help desk and support websites, IBM has established a TTY telephone service for use by deaf or hard of hearing customers to access sales and support services:

TTY service 800-IBM-3383 (800-426-3383) (within North America)

# **Chapter 2. Accessible report authoring**

Creating accessible reports ensures access of information to all users, with all levels of ability. To support the use of accessibility features, report authors can add alternate and summary text for images, charts, and tables, define table and other headings, associate labels with prompt controls, and add conditional layouts.

When you build accessibility into a report, you can test and check the output by using a run option to include accessibility features. This run option is handy for authors that don't have their user preference set to turn on accessibility features. For more information, see <u>"Showing accessible report output in IBM</u> Cognos Analytics - Reporting" on page 17.

If you want to schedule an accessible report to run and save output that's accessible, you set the report's properties to enable accessibility features. A user of accessibility features can then consume the saved output for that report.

## **Considerations to improve report accessibility**

In addition to accessible formats that you can build into your reports to support accessibility, you can also follow some best practices to help ensure your content is widely useable.

The following are some design considerations for creating accessible reports:

- Avoid using visual cues, such as bold text or color, to convey important information.
- Avoid using pictures and OLE Objects in PDF documents, as these items are tagged as artifacts and ignored by the screen reader.
- Avoid using conditional formatting to convey important information.
- When selecting color palettes for report objects, choose patterns or shades of gray.
- Ensure that there is a table corresponding to chart types that are rendered as images because the screen reader ignores this information.
- Deliver reports in HTML format, which is the most supported output format for most screen readers.
- Ensure that the report has a title.
- Gain an understanding for screen reading technology.
- Avoid spelling and grammatical errors, as they cause the screen reading software to misinterpret the information.
- Avoid using features like calendar boxes and up and down selections on time controls. Instead use prompts such as check boxes, radio buttons, combo boxes, and multi-select boxes.
- Ensure that the target application is accessible when using embedded Web applications or drill-through paths.
- Avoid using large, complex list or crosstab reports.

Displaying the information in multiple simple lists or crosstab reports is more manageable for assistive technology users.

- Add alternate text to images, charts, and other visual objects so that screen readers can provide context for them.
- When using tables, add summary text to provide context for the table content. If the top cells in a table behave as headers, designate these cells as headers so that screen readers can identify the relationships.
- Avoid using range prompt controls that contain radio buttons.

From:	
C Quantity	•
Lowest value	
то:	
0 0 11	
C Quantity	

Figure 3. Range prompt with From and To sections

When users tab to a radio group, the focus should be in the selected radio button. In the case of range prompts, for both the From and To sections, the radio button groups start first in the tab order. However, the secondary input elements, which can be text boxes, drop-down lists, date edit boxes, and so on, are located before the selected radio button in the tab order. Instead of going to the selected radio button, the focus goes to the secondary input element. As a result, users using a screen reader do not know that the input element is one of two options.

### Alternate text and summary text

To make reports accessible, you can add alternate text or summary text to objects such as images, charts, and tables. When a screen reader encounters one of these objects, it reads the text that you added to the object.

#### Add Alternate Text to Images and Charts

You can add alternate text for images, maps, and charts to make your reports accessible. When a screen reader encounters one of these objects, it reads the alternate text that you added to the object.

You can add translations for the text to support users in multiple languages. When users run a report, IBM Cognos Analytics uses the alternate text in the appropriate language.

If you use images only for visual spacing in your report, leave the **Alternate text** property empty.

#### Before you begin

For the report output to contain the alternate text, you must enable the accessibility features for the report. For more information, see <u>"Showing accessible report output in IBM Cognos Analytics - Reporting"</u> on page 17.

#### Procedure

- 1. Select the image or chart object.
- 2. Click the **Show properties** icon a, and in the **Properties** pane, click the **Select ancestor** icon and select the **Image**, **Map**, or chart object.
- 3. Double-click the Alternate text property.
- 4. Select **Specified text** and click the ellipsis button.
- 5. In the **Default text** box, type a description for the object, and click the add icon
- 6. In the **Languages** dialog box, select the languages that apply to your text.
- 7. Double-click a language and type the translation of the text for each language and click **OK**.

#### Add Summary Text to Tables

You can provide summary text for crosstabs, lists, repeater tables, and table objects. This text provides context for the entire object to make your reports accessible. When a screen reader encounters one of these objects in HTML report outputs, it reads the description that you added to the object.

The table summary is not displayed in visual Web browsers. Only screen readers and speech browsers use the summary text. The summary text is usually read immediately before the table caption.

You can add translations for the text to support users in multiple languages. When users run a report, IBM Cognos Analytics uses the summary text in the appropriate language.

If you use tables for report layout, leave the summary empty to indicate to screen readers that the table is used exclusively for visual layout and not for presenting tabular data.

#### Before you begin

For the report output to contain the summary text, you must enable the accessibility features for the report. For more information, see <u>"Showing accessible report output in IBM Cognos Analytics - Reporting"</u> on page 17.

#### Procedure

- 1. Select the crosstab, list, or table.
- 2. Click the **Show properties** icon \*, and in the **Properties** pane, click the **Select ancestor** icon and select the **Crosstab**, **List**, **Repeater Table**, or **Table** object.

Tip: You can also click the container selector (three orange dots) of the container to select it.

- 3. Double-click the Summary text property.
- 4. Select **Specified text** and click the ellipsis button.
- 5. In the **Default text** box, type a description for the object, and click the add icon
- 6. In the Languages dialog box, select the languages that apply to your text.
- 7. Double-click a language and type the translation of the text for each language and click **OK**.

## Designate Cells as Headers in Tables

You can specify whether specific table cells are table headers. This allows screen readers and speech browsers to identify the relationships between the cells in your tables.

#### **Before you begin**

For the report output to contain the cell headers, you must enable the accessibility features for the report. For more information, see <u>"Showing accessible report output in IBM Cognos Analytics - Reporting" on</u> page 17.

#### Procedure

- 1. Select the table cells.
- 2. Click the Show properties icon a, and in the Properties pane, set the Table header property to Yes.

## **Headings and emphasis**

You can apply certain global classes to text objects to make the text easier to read for visually impaired users.

The following global classes are available to improve text readability for headings and blocks of text:

- Heading 1 through 6
  - **Tip:** In HTML output, these classes are converted to <h1> to <h6> tags.
- Emphasize Text and Strong Text

**Tip:** In HTML output, these classes are converted to <em> and <strong> tags.

You apply one of these global classes to text by accessing the **Classes** property of the text and choosing the class that you want to apply.

## **Prompt control labels**

You can associate labels to prompt controls to make the prompts accessible.

There are several methods that you can use to associate a label to a prompt control:

- Associate a text item to the prompt control.
- Insert the prompt control in a field set and use the caption of the field set to specify the label.
- Use HTML items to define a field set.

When a text item is associated to a prompt control, the text is read by screen readers when users tab to the control. When a prompt control is inserted in a field set, screen readers read the label of the field set when the focus moves to any input element within the field set.

## Associating a text item to a prompt control in IBM Cognos Analytics -Reporting

Associate a text item to a prompt control to create a label for the prompt.

#### Before you begin

You must specify a name for the prompt control before you can associate a text item to the control.

#### Procedure

- 1. To specify a name for the prompt control, select the control, click the **Show properties** icon *z*, and in the **Properties** pane, type the name in the **Name** property.
- 2. Create a text item or select an existing text item.
- 3. In the **Properties** pane, in the Label for property, type the name of the prompt control.

#### Associating labels with prompt controls using field sets

You can associate labels with prompt controls using field sets.

#### Procedure



- 1. Click the **Toolbox** icon and drag **Field set** to the report.
- 2. Double-click the caption of the field set and type the text that you want to appear as the prompt control label.
- 3. Click the **Toolbox** icon and drag a prompt control to the field set.
- 4. Optional: To hide the field set border so that only the prompt control border appears in the prompt page, set the border to none.
  - a) Select the field set.
  - b) Click the Show properties icon a, and in the Properties pane, click the Border property.
  - c) In the **Style** box, click **None**.
  - d) Under **Preview**, click the apply all borders icon **D** and click **OK**.

#### Associating labels with prompt controls using HTML items

Instead of using the field set object, you can associate labels with prompt controls using HTML items. You use the HTML items to create the field sets.

#### Procedure

1

- 1. Click the **Toolbox** icon *local* and drag **HTML item** to the left of the prompt.
- 2. Click the HTML item.
- 3. Click the **Show properties** icon *z*, and in the **Properties** pane, double-click the **HTML** property.
- 4. In the **HTML** window, type the following text and click **OK**.

<fieldset style="border:0;">

<legend>Prompt label</legend>

- 5. Click the **Toolbox** icon and drag **HTML item** to the right of the prompt.
- 6. Click the HTML item.
- 7. In the **Properties** pane, double-click the **HTML** property.
- 8. In the **HTML** window, type the following text and click **OK**.

</fieldset>

## Showing accessible report output in IBM Cognos Analytics -Reporting

You can show accessibility features in report output when you run a report from within Cognos Analytics - Reporting.

#### About this task

When you enable accessible report output in Cognos Analytics - Reporting, you can test accessible features that were added to a report.

#### Procedure

- 1. In Cognos Analytics Reporting, click the **Run options** icon  $\triangleright$ .
- 2. Click Show run options.
- 3. Select the Include accessibility features check box.

# Example - Conditionally Show a List Below a Chart for an Accessible Report

Charts are rendered as images in report outputs, such as HTML and PDF. As a result, they are difficult to navigate for visually impaired users and screen readers cannot convey the information shown in charts. To make your reports accessible, you can add a conditional layout that shows list or crosstab equivalents of the chart when the accessibility features are enabled for the report output.

To set up this conditional layout, use a conditional block that contains the list or crosstab and the report function IsAccessible. The IsAccessible function is a Boolean function that returns Yes (or true) when the accessibility features are enabled for the report output and No (or false) when the accessibility features are not enabled.

Therefore, the list or crosstab becomes conditional and appears only when the accessible report output option is enabled. In addition, you should add alternate text for the chart object so that screen readers can let users know that an accessible list or crosstab follows.

#### Procedure

1. Open IBM Cognos Analytics - Reporting with the sample GO Sales (query) package.

- 2. Create a new report with a pie chart.
- 3. Add data items to the chart. Click the Data icon , and from the **Source** tab , do the following:
  - Expand Sales (query) and Sales and then insert Quantity in the Default measure area.
  - Expand Products and insert Product line in the Series (pie slices) area.
- 4. Run the report to see your chart.
- 5. Add alternate text for the pie chart:
  - Select the chart, click the **Properties** icon ≈, and in the **Properties** pane, double-click the **Alternate text** property.
  - Select **Specified text** and click the ellipsis button.
  - Type default text for the chart, such as

A pie chart shows the quantity of sales by product line as a percentage of total sales. An equivalent list is below.

If you want to add the alternate text in additional languages, click the add button



- 6. Click the **Toolbox** icon *I*, and from the **Advanced** group, insert a **Conditional blocks** object below the chart.
- 7. Select the conditional block and, from the **Properties** pane, double-click the **Block variable** property.
- 8. Under **Variable**, select **New boolean variable** and type a name for the variable, such as accessibility\_condition.
- 9. In the **Report expression** dialog box, specify the expression that defines the variable:
  - From the **Functions** tab [*F*[8]], expand **Report Functions** and insert the IsAccessible function to the **Expression Definition** box.
  - Type a closing bracket at the end of the function IsAccessible () and click **OK**.
- 10. Select the conditional block, and in the **Properties** pane, change the **Current block** property to **Yes**.
- 11. Click the **Toolbox** icon, and add a list inside the conditional block.
- 12. Add the same data items from the chart to the list. Click the **Data** icon, and from the **Source** tab, do the following:
  - Expand Sales (query) and Products and insert Product line in the list.
  - Expand Sales and insert Quantity as the second column in the list.
- 13. Add summary text for the list:
  - Select the list, and in the **Properties** pane, double-click the **Summary text** property.
  - Select **Specified text** and click the ellipsis button.
  - Type default text for the list, such as

The first column lists all product lines and the second column lists sales quantities.

If you want to add the alternate text in additional languages, click the add button.

- 14. Select the conditional block, and in the **Properties** pane, change the **Current Block** property to **No**.
- 15. Click the **Run options** icon **D**, click **Show run options**, and select the **Include accessibility features** check box.
- 16. Run the report.

#### Results

Because we just chose to include the accessibility features, you see both the chart and the list. Also, when a screen reader encounters the image for the chart, it reads the alternate text that you added.

If you clear the **Include accessibility features** check box and run the report again, you see only the chart.

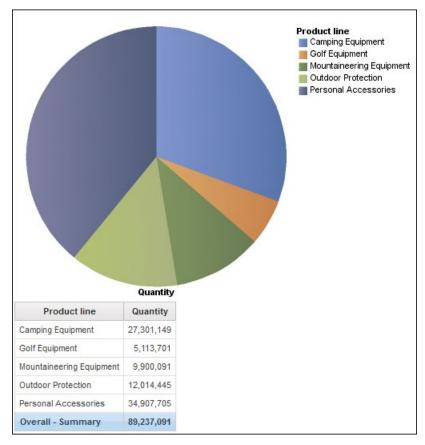


Figure 4. Report showing both a pie chart and a list

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## About this guide

This document is intended for use with IBM Cognos Analytics. Cognos Analytics integrates reporting, modeling, analysis, dashboards, stories, metrics, 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 <u>IBM</u> Knowledge Center (http://www.ibm.com/support/knowledgecenter).

#### **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.

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