

IBM Cognos Insight  
Version 10.2.2

*Tutorial*



**Note**

Before using this information and the product it supports, read the information in "Notices" on page 25.

**Product Information**

This document applies to IBM Cognos Insight Version 10.2.2 and may also apply to subsequent releases.

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## Introduction

This tutorial consists of interactive tasks that enable you to learn how to use IBM® Cognos® Insight. Cognos Insight is a data exploration and planning solution.

### Audience

For analysts and business users who are looking to more easily access and understand key business information, Cognos Insight empowers you to independently discover, explore, and share this information, and then take action. In contrast to spreadsheets or other point solutions that create information silos, Cognos Insight can be seamlessly woven into a workgroup or larger corporate entity.

### Finding information

To find IBM 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. Cognos Insight has accessibility features. For information on these features, see the accessibility section in the IBM Cognos Insight User Guide ([http://www.ibm.com/support/knowledgecenter/SSVJ22\\_10.2.2](http://www.ibm.com/support/knowledgecenter/SSVJ22_10.2.2)).

### 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

The Sample Outdoors Company, Great Outdoors Company, GO Sales, any variation of the Sample Outdoors or Great Outdoors names, and Planning Sample depict fictitious business operations with sample data used to develop sample applications for IBM and IBM customers. These fictitious records include sample data for sales transactions, product distribution, finance, and human resources. Any resemblance to actual names, addresses, contact numbers, or transaction values is coincidental. Other sample files may contain fictional data manually or machine generated, factual data compiled from academic or public sources, or data used with permission of the copyright holder, for use as sample data to develop sample applications. Product names referenced may be the trademarks of their respective owners. Unauthorized duplication is prohibited.



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## Chapter 1. Prerequisites

To prepare for this tutorial, you must install IBM Cognos Insight, download the samples, and learn about the Cognos Insight user interface.

You can also review the supported environments online (<http://www.ibm.com/support/docview.wss?uid=swg27041095>).

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### Installing Cognos Insight

Before you can begin following this tutorial, you must have IBM Cognos Insight installed on your computer.

The way in which you download and install Cognos Insight depends on the other Cognos products in your environment.

#### Procedure

Perform one of the following procedures depending on which Cognos products you have:

Cognos products	Installation instructions
Cognos Insight Personal Edition	See Installing Cognos Insight Personal Edition in the <i>Cognos Insight Installation and Configuration Guide</i> .
Cognos Insight Standard Edition	See Installing Cognos Insight Standard Edition in the <i>Cognos Insight Installation and Configuration Guide</i> .
Cognos Insight and IBM Cognos Express®	See Installing Cognos Insight from a Cognos server in the <i>Cognos Insight Installation and Configuration Guide</i> .
Cognos Insight and IBM Cognos TM1®	See Installing Cognos Insight from a Cognos server in the <i>Cognos Insight Installation and Configuration Guide</i> .
Cognos Insight and IBM Cognos Business Intelligence	See Installing Cognos Insight from a Cognos server in the <i>Cognos Insight Installation and Configuration Guide</i> .

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### Downloading the samples

In this tutorial, you work for the Sample Outdoors Company. You will use IBM Cognos Insight with the samples to examine and review corporate data.

By using the sample workspaces to perform a set of tasks, you can explore Cognos Insight and learn how it can help you use your corporate data to fully understand how your company is doing now and what lies ahead.

To use this tutorial, you must download the Cognos Insight samples ([https://www.analyticszone.com/wikis/home#/wiki/W688ee50d7e7f\\_4322\\_b0bb\\_006007324321/page/IBM%20Cognos%20Tutorial%20and%20Samples](https://www.analyticszone.com/wikis/home#/wiki/W688ee50d7e7f_4322_b0bb_006007324321/page/IBM%20Cognos%20Tutorial%20and%20Samples)).

Each workspace sample includes the following widgets that enable you to understand and interact with your data:

- Tabs, to make it easy to browse through the workspace.
- Crosstabs, to view dimensions and perform basic analysis on your data.
- Charts, to clarify numbers and communicate comparisons, relationships, and trends.
- Text, to create a title or add an explanation.
- Images, to add visual impact.

## The Cognos Insight user interface

Review the parts of the IBM Cognos Insight window. Some of the terms that are used in this tutorial are unique to the elements of the Cognos Insight user interface.

The following figure displays the parts of the Cognos Insight window.

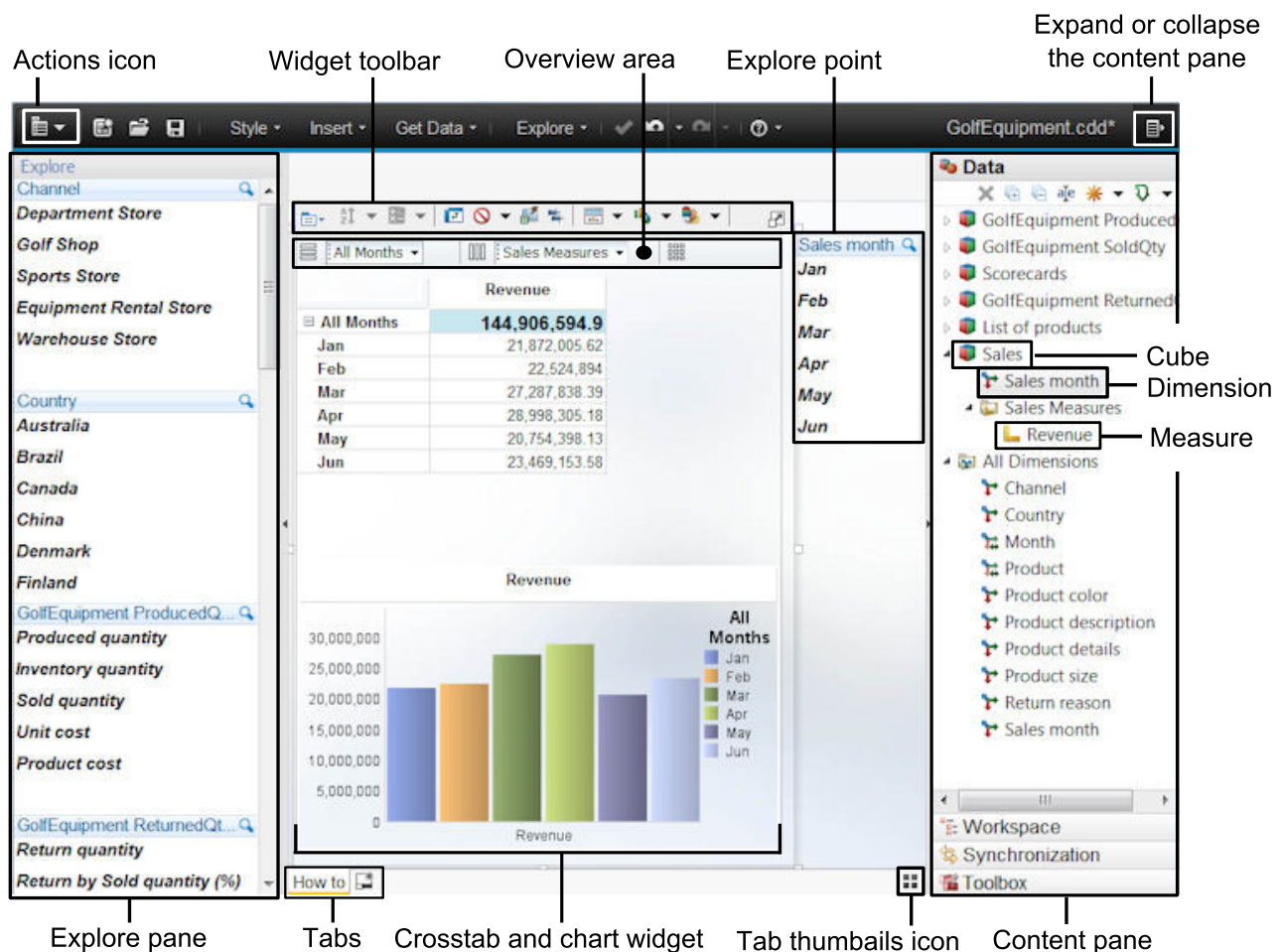



Figure 1. The parts of the Cognos Insight window

The Cognos Insight window includes the following parts:

### The Actions icon

Clicking the **Actions icon**  expands a menu that includes options to create, open, save, print, export, and close workspaces.



### **A crosstab and chart widget**

Widgets are the pieces of a Cognos Insight workspace. One type of widget contains a crosstab, or grid, and a chart. The data in the crosstab is linked to the data that appears in the chart, so when you change the data in the crosstab, the chart data changes as well, and when you change the data in the chart, the crosstab changes as well.

### **A widget toolbar**

The widget toolbar appears when you are working in a widget. It includes icons that are particular to the widget, such as the **Change Display Type**



icon, which enables you to change the type of the chart that appears in the widget.

### **The overview area**

The overview area is displayed above a crosstab or chart. The overview area tells you what dimensions and measures appear in the crosstab, chart, or crosstab and chart. The overview area is divided into three sections: rows, columns, and context. These sections represent the dimensions and measures that appear in the rows, columns, and context of the crosstab, chart, or crosstab and chart. For example, if the Products dimension appears in the rows section of the overview area, then products also appear in the rows of the crosstab.

### **The content pane**

The content pane displays all of the cubes, dimensions, measures, and attributes that you can work with in the current workspace. From the content pane, you can also import, create and delete, move, and edit the elements in the content pane. The content pane also displays import processes, which enables you to refresh data from a specific import.

### **Explore points**

An explore point is a list of the elements in a dimension. You can click the elements to filter the data in the crosstab, chart, or crosstab and chart.

**Tabs** Workspaces can be divided into several tabs. From the tabs area, you can create, delete, and rename tabs.

### **The tab thumbnails icon**

Clicking the tab thumbnails icon displays small graphics of each tab so that you can navigate to another tab using these graphics instead of the tab names.



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## Chapter 2. Lessons

Each lesson of the IBM Cognos Insight Tutorial focusses on different features. The Cognos Insight samples will show you these features in real-world examples.

This tutorial can be completed in the order in which the lessons appear. However, each lesson stands alone as well, so if you are interested in a particular feature, you can skip to that lesson.

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### Importing order data from a spreadsheet file

This tutorial covers the following skills in IBM Cognos Insight: importing a file, creating a workspace, understanding data mapping, and learning the parts of a workspace.

As a sales executive at the Sample Outdoors Company, you want to review your order data to analyze your company's performance. You have a spreadsheet file that includes this data, so you decide to import the file into a new IBM Cognos Insight workspace for analysis

#### Procedure

1. From the Microsoft Windows **Start** menu, click **IBM Cognos Insight**.
2. From the **Get Data** menu at the top of the Cognos Insight window, click **Import Data**. The import wizard appears, displaying the **Import Data - Select Data Source** page.
3. To import a file, beside the **Name** field, click **Browse**. A new **Open** window appears where you can browse the files on your computer.
4. Navigate to where you downloaded the samples, and then open the `Orders_language_code.csv` file. For example, if you want to work with the Spanish sample file, open the `Orders_ES.csv` file. The data from the file appears in the import wizard.

**Tip:** You can expand the **File Details** section to display details about how your source data is imported. In this example, the default options are appropriate.

You decide that you don't want to import all of the data from your file into Cognos Insight.

5. In the **Columns** section, in the **Import** column, clear the check boxes for the following data items to indicate that these items should not be imported:
  - a. **Order number**
  - b. **Month**
  - c. **Order size**
  - d. **Unit price**
  - e. **Ship date**
  - f. **Sales representative**
6. Click **Advanced**. The **Import Data - Data Mapping** page of the import wizard appears. This page provides details about how your data will be imported. Note that Cognos Insight automatically nested the **City** element within the **Country or Region** element, because cities are logically child items of countries or regions.

**Tip:** You can drag items from the **Source Items** list to the **Target Items** hierarchy, and you can drag items to different positions in the **Target items** hierarchy. When you drag items, your cursor changes to display information about where you can drop the item and what the item will become if you drop it in that position.

Figure 2 shows the **Mapping** pane as it should appear after step 6.

## ▼ Mapping

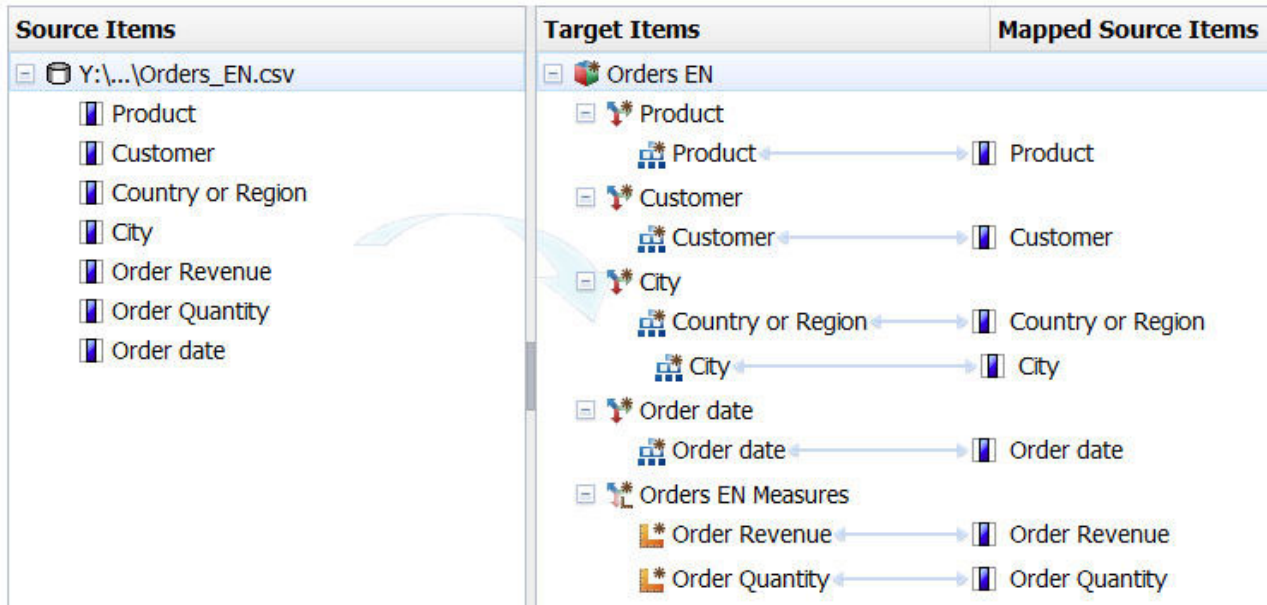


Figure 2. The Mapping pane in the Import wizard

7. Click **Summary**. The **Import Data - Importing** page of the import wizard appears. The **Import Messages** pane displays the actions that Cognos Insight will perform when you import the data. The **Property Summary** pane displays the settings that you chose in the **Properties** pane for each target item. You can use this summary to review and compare the properties of each type of data, including the cube you are creating and its dimensions, levels, attributes, and measures.

8. Click **Finish**.

Your data appears in a new Cognos Insight workspace. The workspace includes a crosstab and a column chart, and your data hierarchy appears in the content pane on the right, under the heading **Data**.

Figure 3 on page 7 shows the workspace after importing the CSV file.

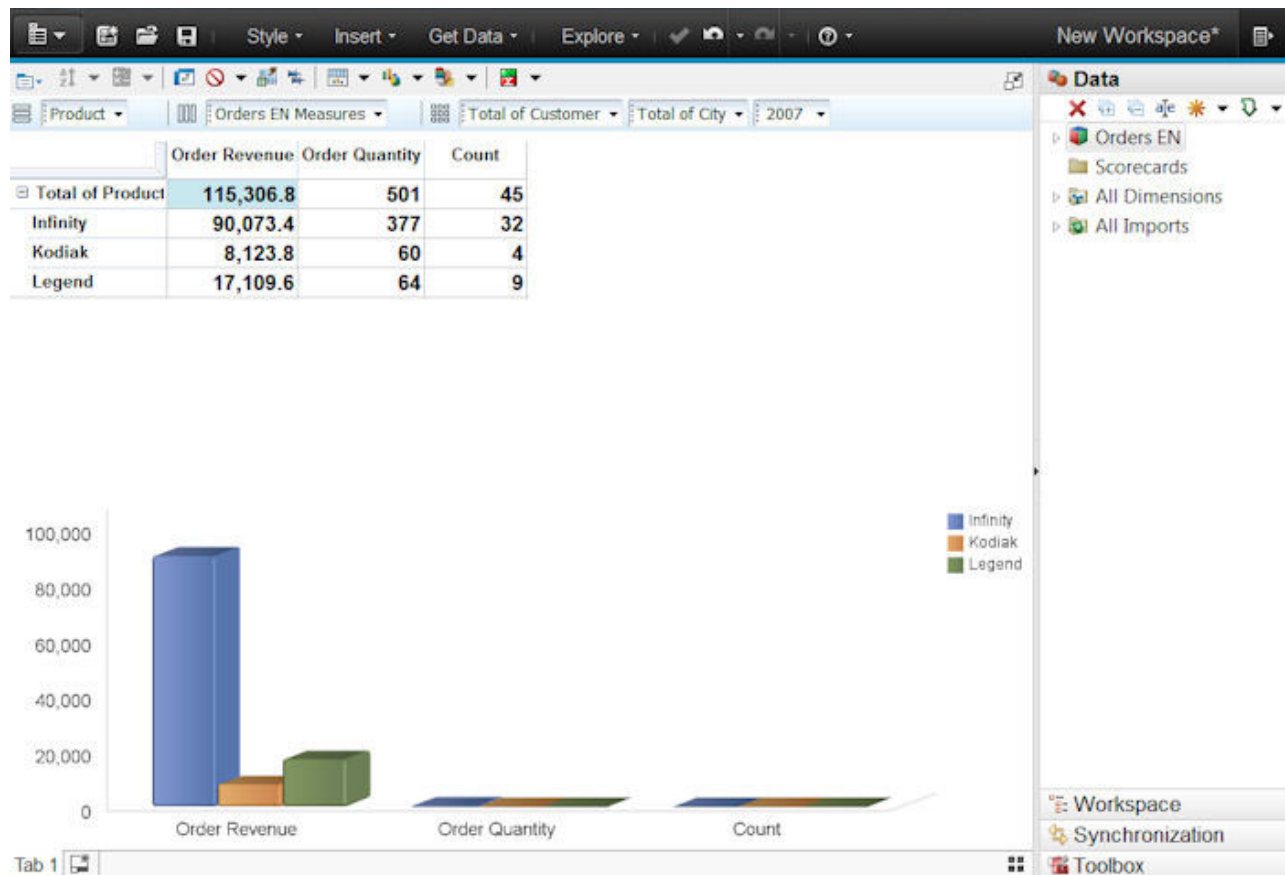


Figure 3. The new workspace after importing data




The crosstab displays the following data from your new cube:

- The **Product** dimension appears in the rows of the crosstab.
- The three measures in your cube, **Order Revenue**, **Order Quantity**, and **Count**, appear in the columns of the crosstab.

The chart displays the following data from your new cube:

- Products are plotted as columns in the chart. For example, there is a column for **Infinity** in each group of columns.
- The three measures in your cube are plotted as groups of columns in the chart. For example, there is a group of three columns for **Order Revenue**.


The overview area above the crosstab identifies the data that appears in your crosstab:

- The rows section  shows that the **Product** dimension appears in the rows of the crosstab.
- The columns section  shows that the **Orders language\_code Measures** dimension appears in the columns of the crosstab. The name of the measures dimension depends on the name of the cube, which comes from the name of the file that you imported. For example, if you imported the Spanish sample file, `Orders_ES.csv`, your cube would be named **Orders ES**, and the measures dimension would be called **Orders ES Measures**.
- The context section  shows that the **Customer** dimension, the **City** dimension, and the **Order date** dimension appear in the context of the

crosstab. The dimension names in the context section represent the totals for the dimensions, such as **Total of Customer** and **Total of City**. The **Order date** dimension appears as **2007** in the context section, because only 2007 was included in the source file.

**Tip:** You can click the dimensions in the rows, columns, and context sections of the overview area to change the data that is displayed in your crosstab and chart. For example, click **Total of City**, and then click **Austria**. Now only the data for Austria is displayed in your crosstab and chart instead of the data for all cities. To return to displaying the data for all cities, click **Austria** in the context section, and then click **Total of City**.

You decide that you want to add data about sales representatives to your workspace so that you can see which sales representatives were responsible for the most revenue.

9. Click the **Actions** icon , and then click **Close**.
10. When you are prompted to save the changes you made to the sample, click **No**.

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## Reviewing sales data in an existing workspace

This tutorial covers the following skills in IBM Cognos Insight: navigating tabs and using an existing workspace to make decisions.

As a sales executive at the Sample Outdoors Company, you want to see an overview of the company's sales data to gain an understanding of the company's overall performance.

Using tabs can help you organize data and filters to hide or focus on specific data. For example, you can use tabs to tell a story about your own business by separating the aspects of your business into meaningful divisions that allow you to quickly view and analyze your data. Each tab displays different information, but all the tabs are part of the same workspace.

### Procedure

1. Click the **Actions** icon , and then click **Open**.
2. Navigate to where you downloaded the samples and double-click `Orders_language_code.cdd`. For example, if you want to work in the Hungarian sample, double-click `Orders_HU.cdd`. An information message appears to tell you that this workspace includes web widgets. Web widgets, because they display content from online sources, can contain malicious content, just like web pages can. Click **OK** to dismiss this message.
3. Navigate from one tab to another in the following ways:
  - From the **Workspace** section of the content pane , click the **Products** tab.
  - From the tabs along the bottom of the Cognos Insight window, click the **Orders** tab.
  - At the top right of the canvas, click the **Samples** action button. You can add action buttons like these to any workspace by clicking **Action button** from the **Insert** menu.
4. Click the **Actions** icon, and then click **Close**.
5. When you are prompted to save the changes you made to the sample, click **No**.

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## Filtering data to view details about specific products and customers

This tutorial covers the following skills in IBM Cognos Insight: filtering data using explore points and changing the level of detail in charts and crosstabs.

As a sales representative at the Sample Outdoors Company, you want to gain a deeper understanding of sales for each product and customer to determine whether there are problem areas that need further investigation.

### Procedure



1. Click the **Actions** icon , and then click **Open**.
2. Navigate to where you downloaded the samples and double-click `Orders_language_code.cdd`. For example, if you want to work in the Hungarian sample, double-click `Orders_HU.cdd`. An information message appears to tell you that this workspace includes web widgets. Web widgets, because they display content from online sources, can contain malicious content, just like web pages can. Click **OK** to dismiss this message.
3. Click the **Orders** tab.  
On the **Orders** tab, there are three crosstab widgets and two chart widgets. Along the left of the workspace are three explore point widgets. The **Orders information** crosstab shows that sales are much lower for the **Kodiak** line than for the other two lines. You want to explore the data to find more information about the sales.
4. In the **Products** explore point on the left of the workspace, click **Kodiak**. This selection filters out product information for the **Infinity** and **Legend** products, as shown in Figure 4 on page 10.



Figure 4. The **Orders** tab filtered to show only the **Kodiak** product line

**Tip:** You can use the **Clear this explore point** icon  to display all the products again. If you clear the explore points, ensure that you select **Kodiak** again to continue with this tutorial.

- In the pie chart, hover over the pie slices to display sales information for the countries or regions where the **Kodiak** product line is sold.
- In the **Customers** explore point to the left of the Cognos Insight window, click **Kanga Kampers**. Figure 5 on page 11 shows the resulting workspace.





Figure 5. The Orders tab filtered to show only the **Kodiak** product line and the **Kanga Kampers** customer

The following information appears on the **Orders** tab now:


- The **Orders information** crosstab shows that all sales of the **Kodiak** product line to the **Kanga Kampers** customer occurred in **February**.
  - The **Sales by country or region** crosstab shows that all sales of the **Kodiak** product line to the **Kanga Kampers** customer occurred in **Australia**.
  - The area chart is a graphical display of the **Orders information** crosstab.
  - The pie chart is a graphical display of the **Sales by country or region** crosstab.
  - Below the area and pie charts, the **Order details** crosstab shows more details about the **Kanga Kampers** sales, such as **City**, **Order quantity**, and **Sales representative**.
  - In the **Order size** explore point, note that all orders are within the **1-5000** range.
7. Click the **Actions** icon, and then click **Close**.
  8. When you are prompted to save the changes you made to the sample, click **No**.

## Grouping months into a quarter

This tutorial covers the following skills in IBM Cognos Insight: inserting a new column in a crosstab, grouping data, and inserting a parent member.

As the manager of the Sample Outdoors Company who is responsible for training, you need to cut costs. To help you determine where you can cut costs, you want to compare costs for given periods of the year.

## Procedure

1. Click the **Actions** icon , and then click **Open**.
2. Navigate to where you downloaded the samples and double-click `HumanResources_language_code.cdd`. For example, if you want to work in the Norwegian sample, double-click `HumanResources_NO.cdd`.
3. Click the **Employee training** tab at the bottom of the Cognos Insight window.  
This tab provides at-a-glance course information. It shows the courses by name, a list of attendees, and course costs, the number of days on course, and the enrolment by month.  
Now, you want to group **January**, **February**, and **March** so that you can analyze the data by quarter.
4. Ctrl+click **January**, **February**, and **March**.
5. Right-click the selected columns, and then click **Insert Parent**. The selected members are summarized in a new member called **Member 1**.
6. To rename **Member 1** to something more meaningful, click **Member 1** and type **Quarter 1**.  
You can now see that the course costs for the quarter are \$32000, which is close to the total for the month of July. You might want to explore further to see why there is such a difference so that you can decide whether you need to take action.  
Creating hierarchies of parent-child relationships allows you to expand your data set and gives you enhanced control of your application.
7. Click the **Actions** icon, and then click **Close**.
8. When you are prompted to save the changes you made to the sample, click **No**.


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## Calculating a salary increase with a dimension calculation

This tutorial covers the following skills in IBM Cognos Insight: creating a new column in a crosstab and creating a dimension calculation.

As the human resources manager, you need to determine the business impact of making changes that affect the structure and staff of the Sample Outdoors Company. In this case, you want to see the effect of increasing salaries by 5%.

## Procedure

1. Click the **Actions** icon , and then click **Open**.
2. Navigate to where you downloaded the samples and double-click `HumanResources_language_code.cdd`. For example, if you want to work in the Korean sample, double-click `HumanResources_KO.cdd`.
3. Click the **Employee expenses** tab at the bottom of the Cognos Insight window.  
You decide to use a formula to calculate a 5% increase in salaries. For more information about formulas, see the *IBM Cognos Insight User Guide*. Access this document for your product and version from IBM Knowledge Center (<http://www.ibm.com/support/knowledgecenter>).
4. In the **Employee Expenses** crosstab, right-click the **Pay** column heading, click **Duplicate**, and type **What-if Pay 5** to rename the column.
5. Click the cell at the intersection of the **What-if Pay 5** column and the **All Countries or regions** row, type `inc5`, and then press Enter.

The values in all the cells in the **What-if Pay 5** column increase incrementally by five percent. Figure 6 shows the updated crosstab and chart.

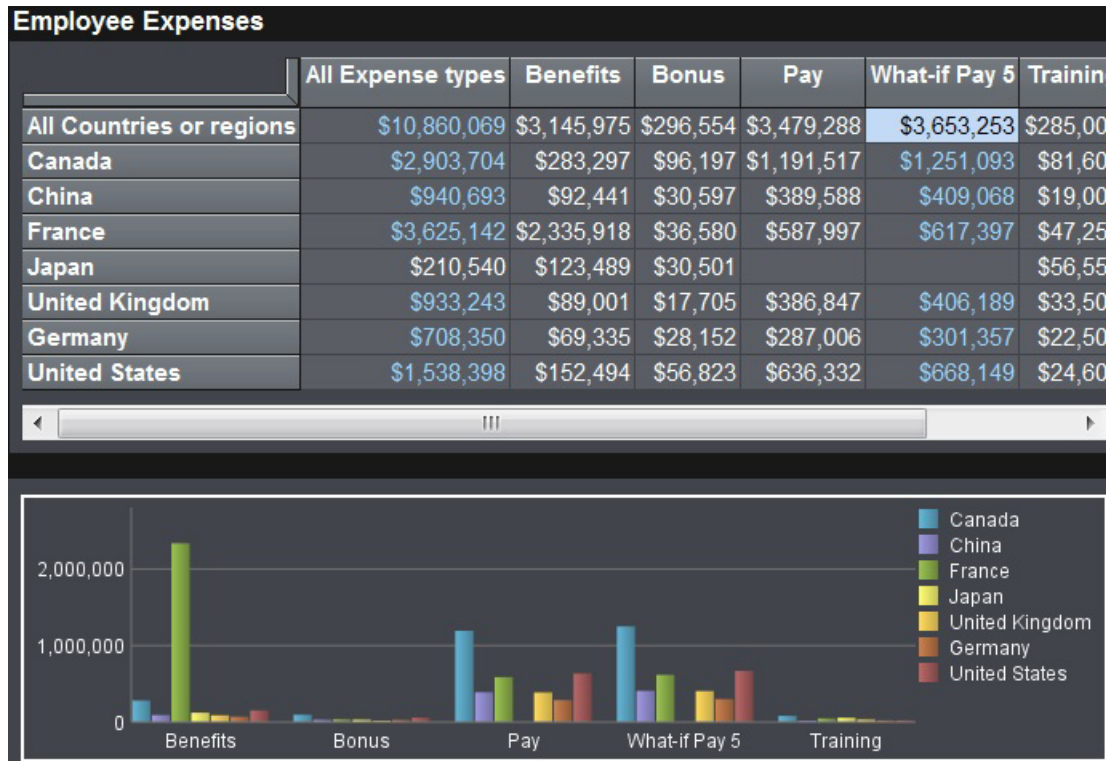


Figure 6. Crosstab and chart showing the inc5 calculation


- Click the **Actions** icon, and then click **Close**.
- When you are prompted to save the changes you made to the sample, click **No**.

## Identifying high and low revenue with color

This tutorial covers the following skills in IBM Cognos Insight: creating conditional styles and identifying trends.

As a sales account manager at the Sample Outdoors Company, you want to know which products are selling well and which products are selling poorly. You also want to see changes over the year to determine the months in which each product does not perform well.

### Procedure

- Click the **Actions** icon , and then click **Open**.
- Navigate to where you downloaded the samples and double-click `Orders_language_code.cdd`. For example, if you want to work in the Japanese sample, double-click `Orders_JA.cdd`. An information message appears to tell you that this workspace includes web widgets. Web widgets, because they display content from online sources, can contain malicious content, just like web pages can. Click **OK** to dismiss this message.
- Click the **Orders** tab. You decide to use a conditional style to identify months with higher or lower revenues.
- In the **Orders information** crosstab, right-click a cell that is not a row or column heading, and then click **Conditional Style**.


5. In the **Conditional Style** window, click the **Add** icon , click **New Conditional Style Using > Order Revenue**.
6. In the **Numeric Condition** window, in the **Range value** field, type 5000, and press Enter. The new condition appears in the list.
7. In the **Range value** field, type 10000, and press Enter. The list now displays the two values you entered and rows above and below each of the values. These rows are where you will define the conditions. For example, you can define a condition for the values that are below 5,000 by setting the style in the row below the value **5,000**.
8. In the row below the **5,000** value, click the cell in the **Style** column, and then click **Poor**.
9. In the row above the **5,000** value, click the cell in the **Style** column, and then click **Average**.
10. In the row above the **10,000** value, click the cell in the **Style** column, and then click **Excellent**. The conditions you created now indicate the following information:
  - Order revenue above 10,000 is excellent.
  - Order revenue between 5,000 and 10,000 is average.
  - Order revenue below 5,000 is poor.
11. Click **OK** twice to see the workspace. The **Orders information** crosstab, as shown in Figure 7 on page 15, now displays excellent, average, and poor values in the styles that you defined.



Figure 7. The **Orders information** crosstab showing different colored cells and text for the defined conditional styles

12. In the **Customers** explore point on the left of the Cognos Insight window, click each of the customers to see sales by month and country or region to help you determine when and where to target your sales campaigns.
13. Click the **Actions** icon, and then click **Close**.
14. When you are prompted to save the changes you made to the sample, click **No**.

## Results


From exploring the data in the workspace, you can tell that there might be sales opportunities with the **Sportworld** customer, as they did not order the **Kodiak** nor the **Legend** products.

## Calculating revenue by modifying the model

This tutorial covers the following skills in IBM Cognos Insight: creating a cube calculation, inserting a tab, creating a crosstab, creating a chart, replacing dimensions and measures, suppressing empty cells, and changing how totals appear.


As a data analyst at the Sample Outdoors Company, you want to change the Order Revenue column so that it reflects changes to the Quantity and Unit price values. This will enable you to decide how the quantities and unit prices of products affect the company's revenue.

## Procedure

1. Click the **Actions** icon , and then click **Open**.
2. Navigate to where you downloaded the samples and double-click `Orders_language_code.cdd`. For example, if you want to work in the Italian sample, double-click `Orders_IT.cdd`. An information message appears to tell you that this workspace includes web widgets. Web widgets, because they display content from online sources, can contain malicious content, just like web pages can. Click **OK** to dismiss this message.
3. At the bottom of the Cognos Insight window, to the right of the tabs, click the




**Insert a new tab** icon .

A new tab appears at the bottom of the Cognos Insight window. The new tab is called **Tab 5**.



4. Right-click the new tab, click **Rename**, and then enter `Test`.  
You now have a blank canvas to use for creating a new view of the data.
5. Open the content pane  to see all the dimensions and measures that have been imported into this workspace.
6. Drag the **Order details** cube onto the workspace.

By default, dragging the cube to the workspace creates a crosstab and a chart. The crosstab and chart display the first dimension in the cube, **Order number**, and all the measures that are available in the cube.




The overview area above the crosstab identifies the data that appears in your crosstab:

- The rows section  shows that the **Order number** dimension appears in the rows of the crosstab.
- The columns section  shows that the **Order details Measures** dimension appears in the columns of the crosstab. This dimension includes all of the measures in the **Order details** cube.
- The context section  shows the remaining dimensions in the context of the crosstab. The dimension names in the context section represent the data that is displayed in the crosstab. For example, the context section displays **All Products**, so the data in the crosstab represents all of the products. If you filter the **Products** dimension to display the **Legend** item in the context section of the overview area, then the data in the crosstab represents only the **Legend** product.

You decide that you want to see all the data, but nested in a way that is easy to understand at a glance. To do this, you need to change the dimensions in the rows, columns, and context sections of the overview area.


7. From the content pane , from the **Order details** cube, drag the **Products** dimension to the right of the **Order number** dimension in the rows section  of the overview area. The cursor changes as you hover over the overview area to show you where you can and cannot drop the dimension.

**Tip:** You can also drag dimensions from one section of the overview area to another.

8. From the **Order details** cube, drag the **Customers** dimension to the right of the **Products** dimension in the rows section  of the overview area.
9. From the **Order details** cube, drag the **Order size** dimension to the right of the **Customers** dimension in the rows section  of the overview area. The rows section now includes the following dimensions, nested in this order: **Order number**, **Products**, **Customers**, and **Order size**, as shown in Figure 8. The columns section  includes the **Order details Measures** dimension.

				Month	Country or Region	City	Order Revenue
▣ All Order numbers	▣ All Products	▣ All Customers	▣ All Order sizes				<b>\$115,306.80</b>
			1-5,000				\$46,042.60
			< 1,000				\$10,634.80
			> 5,000				\$58,629.40
		Golf's'us	▣ All Order sizes				\$7,518.40
			1-5,000				\$5,604.00
			< 1,000				\$1,914.40
			> 5,000				
		Kanga Kampers	▣ All Order sizes				\$9,764.80
			1-5,000				\$8,054.20

Figure 8. Crosstab with **Order number**, **Products**, **Customers**, and **Order size** in the rows and **Order details Measures** in the columns

10. Right-click each of the four totals in the rows of the crosstab (such as **All Order numbers**), and then click **Show Totals > Don't Show Totals**. The crosstab is still mostly empty, because it is showing a cell for each data intersection. You decide to remove the empty cells.
11. In the widget toolbar, click the **Suppress empty cells** icon , and then click **Rows**. The crosstab now displays all the data in the cube, as shown in Figure 9 on page 18.

				Month	Country or Region	City	Order Revenue	Quantity	Unit price
810178	Infinity	Golf's'us	1-5,000	January	Belgium	Leuven	\$1,607.20	7	\$229.60
810793	Infinity	Kanga Kampers	1-5,000	January	Australia	Sydney	\$1,494.00	6	\$249.00
812060	Infinity	Golf's'us	1-5,000	January	Belgium	Zaventem	\$2,984.80	13	\$229.60
812670	Infinity	Kanga Kampers	1-5,000	January	Australia	NewCastle	\$1,245.00	5	\$249.00
811184	Kodiak	Kanga Kampers	1-5,000	February	Australia	Sydney	\$1,362.00	10	\$136.20
	Legend	Kanga Kampers	1-5,000	February	Australia	Sydney	\$1,351.00	5	\$270.20
810015	Infinity	The Marketplace	< 1,000	March	United States	New York	\$508.00	2	\$254.00
810430	Infinity	Fachgeschäft Müller	1-5,000	March	Austria	Ternitz	\$3,018.00	12	\$251.50
810836	Infinity	Grand choix	< 1,000	March	France	Paris	\$762.00	3	\$254.00
811365	Legend	Falcon Outfitters	1-5,000	March	Canada	Montréal	\$2,241.00	9	\$249.00
811408	Infinity	Falcon Outfitters	< 1,000	March	Canada	Ottawa	\$508.00	2	\$254.00

Figure 9. Crosstab with no totals showing and no empty cells

You decide that you want to focus on the **Kanga Kampers** customer.

12. In the overview area, click the **Customers** dimension, and then click **Kanga Kampers**. The crosstab and chart now show only the **Kanga Kampers** data.
13. Multi-select all of the cells in the **Order Revenue** column of the crosstab, and then right-click the selection and click **Create Cube Calculation**.
14. In the **Cube Calculation Name** window, enter **Order Revenue Calculation**, and press Enter. The calculation that you are creating applies only to the dimensions and measures as they are filtered in the crosstab. For example, the **Customers** dimension is filtered to include only the **Kanga Kampers** product in the crosstab, so the calculation applies only to the **Kanga Kampers** product.

**Tip:** You can change these filters in the expression editor. Each dimension in the filter area, under **Define a new expression for**, displays the members that appear in the crosstab and the dimension name. For example, the **Customers** dimension is filtered to include only the **Kanga Kampers** product, so the **Customers** dimension includes **Kanga Kampers**, the member that appears in the crosstab, and **Customers**, the name of the dimension.

15. In the data hierarchy on the left of the window, in the **Terms** tab, scroll down and expand **Order details Measures**. The **Terms** tab includes the dimensions and measures that are available in the current cube. These are called the terms in your expression.

**Tip:** You can use expression terms from other cubes in the workspace by importing a term. Importing a term from another cube enables you to add a dimension or measure from another cube to your calculation. You do this by mapping the dimensions in the current cube to the dimensions in the cube that you want to import from.

16. Drag the **Quantity** measure to the **Expression** pane.
17. In the **Expression** pane, type an asterisk (\*), which is the symbol for multiplication.

**Tip:** You can add calculation templates to the **Expression** pane by choosing them from the **Simple** tab. For example, on the **Simple** tab, if you click **Arithmetic** in the **Operation type** list, and **\*(Multiplication)** in the **Operation** list, the following template for a multiplication appears in the **Expression**



pane: ([<operand 1>] \* [<operand 2>]). You can then replace [<operand 1>] and [<operand 2>] with the dimensions and measures you want to use in the calculation.

18. Drag the **Unit price** measure to the **Expression** pane, placing it after asterisk (\*).
19. To save and apply the calculation, click **OK**. Now the **Order Revenue** column in the crosstab is calculated by multiplying the **Quantity** by the **Unit price**.
20. Click a cell in the **Unit price** column, type a new price, and press Enter. The **Order Revenue** value in that row changes to reflect the new unit price. You can also change the values in the **Quantity** column to see how a change in the quantity that you sell impacts the **Order Revenue**.
21. Click the **Actions** icon, and then click **Close**.  
When you are prompted to save the changes you made to the sample, click **No**.



---

## Appendix. The Cognos family of products

There is much more that you can do in IBM Cognos Insight. For instance, if you have a license for IBM Cognos TM1, IBM Cognos Business Intelligence, or IBM Cognos Express software, you can use Cognos Insight to publish, distribute, and control your workspaces.

The following workflow example illustrates how Cognos Insight works with other products in the Cognos family.

1. User A creates a workspace (or CDD file) in Cognos Insight that shows worldwide sales by salesperson and by country or region. User A decides to ask for a manager's input before finalizing the workspace. So User A emails the workspace to User B, a manager.

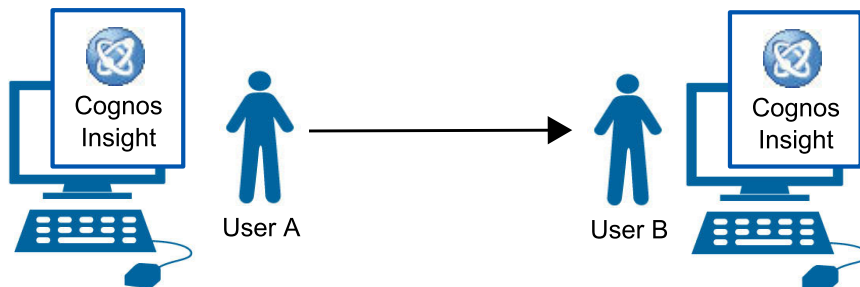


Figure 10. Workflow of User A sending a workspace to User B

2. User B reviews the workspace and makes some minor changes to how the data is displayed. Then User B emails the workspace back to User A.

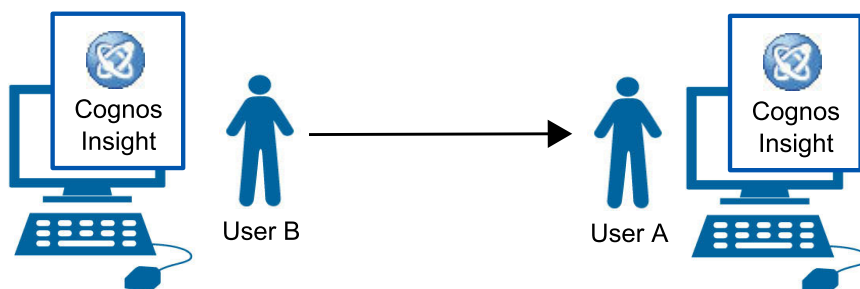


Figure 11. Workflow of User B sending the workspace to User A

3. User A likes the changes that User B made, and wants to share the workspace with other employees. User A has permission to add files to his company's Cognos Business Intelligence server, so User A uses the **Share** feature in Cognos Insight to add the workspace to the Sales folder in Cognos Connection.

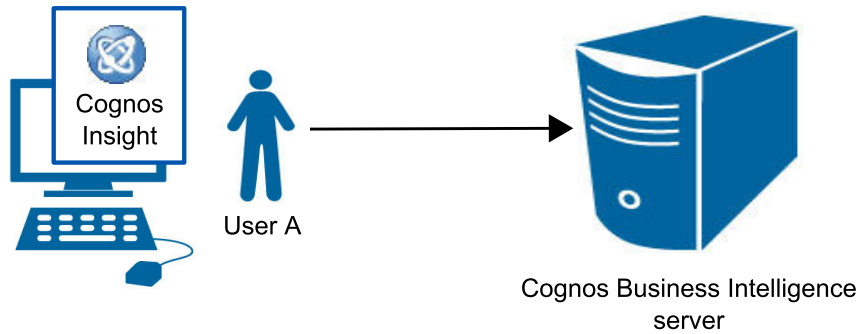


Figure 12. Workflow of User A adding the workspace to Cognos Connection

4. User C finds the workspace on Cognos Connection, and decides that the International Sales team would also benefit from the information in the workspace. User C opens the workspace from Cognos Connection and updates the data from the company's sales database. User C then asks the Cognos TM1 server administrator to publish and distribute the workspace to the Cognos TM1 server and Cognos BI server so that other users can access the data online.

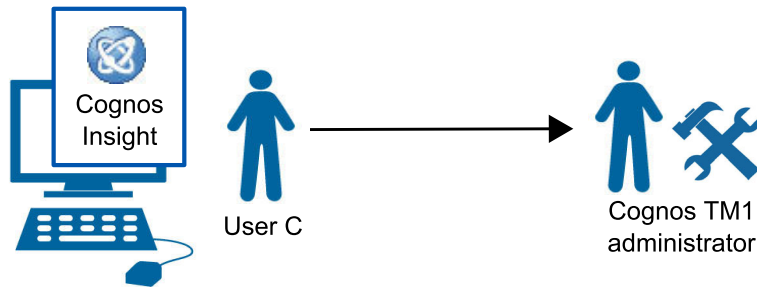


Figure 13. Workflow of User C sending the workspace to the server administrator

5. The Cognos TM1 server administrator publishes and distributes the workspace and model to the Cognos TM1 server and the Cognos BI server. Publishing and distributing adds an application and the data model to the Cognos TM1 server, and adds a data source connection and reports to the Cognos BI server. The administrator also schedules a refresh of the data in the model from the company's database so that users can refresh the report data.

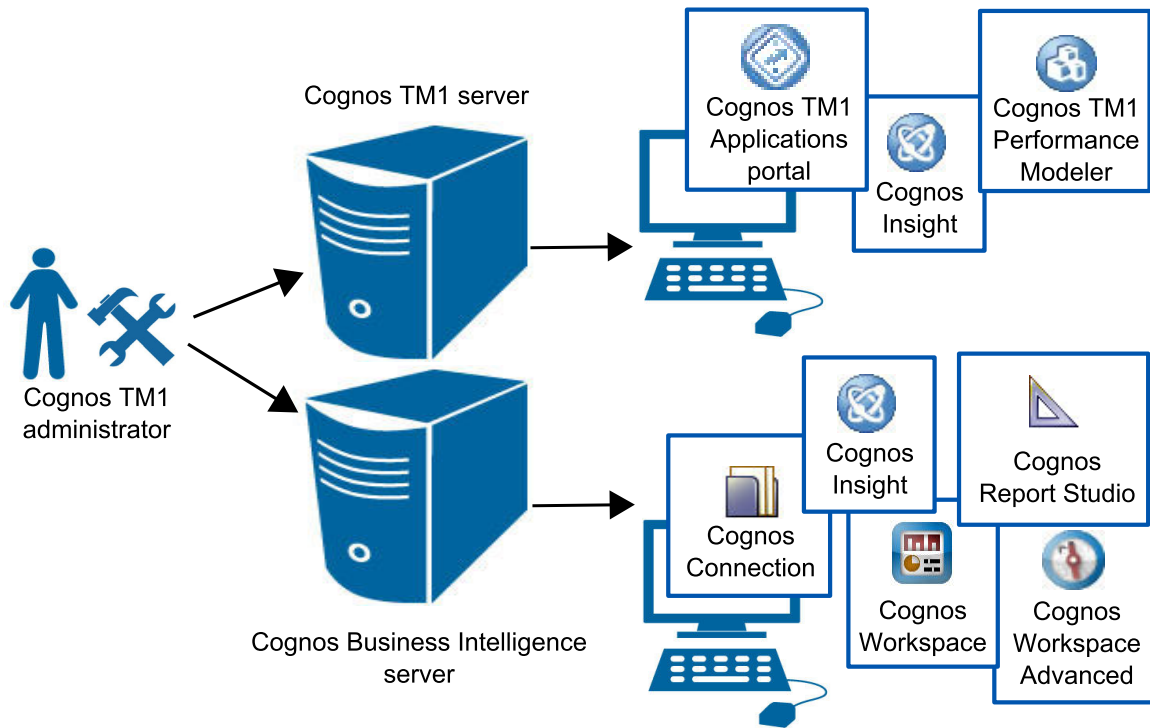


Figure 14. The server administrator publishes and distributes the workspace

6. User C finds one of the published reports on Cognos Connection and schedules a PDF report to be regularly burst to the International Sales team.

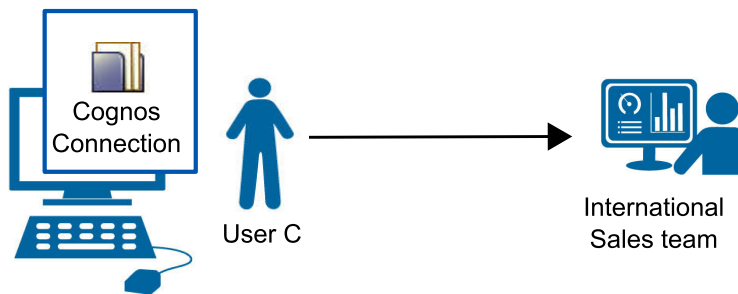


Figure 15. User C bursts a report to the International Sales team



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