

One Design
One Server
One User Experience

Using e.Analysis

Information in this document is subject to change without notice. Examples provided are fictitious. No part of this document may be reproduced or transmitted in any form, or by any means, electronic or mechanical, for any purpose, in whole or in part, without the express written permission of Actuate Corporation.

© 1995 - 2011 by Actuate Corporation. All rights reserved. Printed in the United States of America.

Contains information proprietary to: Actuate Corporation, 2207 Bridgepointe Parkway, San Mateo, CA 94404

www.actuate.com www.birt-exchange.com

The software described in this manual is provided by Actuate Corporation under an Actuate License agreement. The software may be used only in accordance with the terms of the agreement. Actuate software products are protected by U.S. and International patents and patents pending. For a current list of patents, please see http://www.actuate.com/patents.

Actuate Corporation trademarks and registered trademarks include:
Actuate, ActuateOne, the Actuate logo, Archived Data Analytics, BIRT, Collaborative Reporting
Architecture, e.Analysis, e.Report, e.Reporting, e.Spreadsheet, Encyclopedia, Interactive Viewing,
OnPerformance, Performancesoft, Performancesoft Track, Performancesoft Views, Report Encyclopedia,
Reportlet, The people behind BIRT, X2BIRT, and XML reports.

Actuate products may contain third-party products or technologies. Third-party trademarks or registered trademarks of their respective owners, companies, or organizations include:

Adobe Systems Incorporated: Flash Player. Apache Software Foundation (www.apache.org): Axis, Axis2, Batik, Batik SVG library, Commons Command Line Interface (CLI), Commons Codec, Derby, Shindig, Struts, Tomcat, Xerces, Xerces2 Java Parser, and Xerces-C++ XML Parser. Bits Per Second, Ltd. and Graphics Server Technologies, L.P.: Graphics Server. Bruno Lowagie and Paulo Soares: iText, licensed under the Mozilla Public License (MPL). Castor (www.castor.org), ExoLab Project (www.exolab.org), and Intalio, Inc. (www.intalio.org): Castor. Codejock Software: Xtreme Toolkit Pro. DataDirect Technologies Corporation: DataDirect JDBC, DataDirect ODBC. Eclipse Foundation, Inc. (www.eclipse.org): Babel, Data Tools Platform (DTP) ODA, Eclipse SDK, Graphics Editor Framework (GEF), Eclipse Modeling Framework (EMF), and Eclipse Web Tools Platform (WTP), licensed under the Eclipse Public License (EPL). Jason Hsueth and Kenton Varda (code.google.com): Protocole Buffer. ImageMagick Studio LLC.: ImageMagick. InfoSoft Global (P) Ltd.: FusionCharts, FusionMaps, FusionWidgets, PowerCharts. Mark Adler and Jean-loup Gailly (www.zlib.net): zLib. Matt Ingenthron, Eric D. Lambert, and Dustin Sallings (code.google.com): Spymemcached, licensed under the MIT OSI License. International Components for Unicode (ICU): ICU library. KL Group, Inc.: XRT Graph, licensed under XRT for Motif Binary License Agreement. LEAD Technologies, Inc.: LEADTOOLS. Microsoft Corporation (Microsoft Developer Network): CompoundDocument Library. Mozilla: Mozilla XML Parser, licensed under the Mozilla Public License (MPL). MySQL Americas, Inc.: MySQL Connector. Netscape Communications Corporation, Inc.: Rhino, licensed under the Netscape Public License (NPL). Oracle Corporation: Berkeley DB. PostgreSQL Global Development Group: pgAdmin, PostgreSQL, PostgreSQL JDBC driver. Rogue Wave Software, Inc.: Rogue Wave Library SourcePro Core, tools.h++. Sam Stephenson (prototype.conio.net): prototype.js, licensed under the MIT license. Sencha Inc.: Ext JS. Sun Microsystems, Inc.: JAXB, JDK, Jstl. ThimbleWare, Inc.: JMemcached, licensed under the Apache Public License (APL). World Wide Web Consortium (W3C)(MIT, ERCIM, Keio): Flute, JTidy, Simple API for CSS. XFree86 Project, Inc.: (www.xfree86.org): xvfb. Yuri Kanivets (code.google.com): Android Wheel gadget, licensed under the Apache Public License (APL). ZXing authors (code.google.com): ZXing, licensed under the Apache Public License (APL).

All other brand or product names are trademarks or registered trademarks of their respective owners, companies, or organizations.

Document No. 110812-2-830103 July 25, 2011

Contents

About Using e.Analysis
Chapter 1
Starting e.Analysis
About Actuate e.Analysis
Launching e.Analysis using an Actuate Basic report
Searching for data in an Actuate Basic report
Launching e.Analysis 6
Launching Actuate e. Analysis using a saved query file
Chapter 2
Viewing data
About data analysis
About the data cube
About categories and measures
About the e.Analysis view
Recognizing features in the e.Analysis view
Using the e.Analysis toolbar
Expanding and collapsing the data
Expanding the data
Collapsing the data
Displaying data in tables, charts, and graphs
Navigating a table
Navigating an analysis view
Navigating a presentation view
Navigating a vertical bar chart
Navigating a horizontal bar chart
Navigating a pie chart
Navigating a line graph
Displaying balloon help
Sorting the data
Sorting data by columns
Sorting data by rows
Canceling sorting on columns or rows
Applying a filter to sort the highest or lowest values
Using filters
Writing filter expressions
Applying filters to columns or rows
Clearing filters on columns or rows

Applying filters on a category axis
Manipulating the data
Displaying categories on rows and columns
Swapping rows and columns
Selecting and deselecting subsets of data
Hiding data31
Expanding to level in a category
Suppressing rows and columns with no data
Suppressing rows and columns with zero values
Restoring the initial view
Restoring the fitted view
Chapter 3
Customizing data
About customizing data
Presenting data
Selecting a chart style
Setting preferences for a chart
Adjusting the fit to page options
Opening the cube in a new window
Displaying variables in the main title, subtitle, and footer
Selecting Preferences
Using Undo and Redo
Analyzing data
Analyzing subcategory data
Displaying data values as a percentage of a total
Applying a performance index function
About exception highlighting52
C1 = 1 - 4
Chapter 4
Exporting data 55
About exporting data56
Exporting data to a spreadsheet56
Exporting data to a document
Saving a cube locally for offline viewing59
Sending cube reports by e-mail59
Chapter 5
Customizing e.Analysis 61
About customizing e.Analysis
Customizing a performance index calculation
Locating the branding kits63

Index	71
Unsupported changes	69
Localizing the user interface	
Understanding Actuate e.Analysis localization limitations	
Customizing the About box	63



About Using e.Analysis

Using e. Analysis provides information about analyzing data from Actuate DHTML reports to understand market trends and relationships, such as differences, averages, and growth trends.

Using e.Analysis includes the following chapters:

- *About Using e.Analysis.* This chapter provides an overview of this guide.
- Chapter 1. Starting e. Analysis. This chapter describes how to navigate an Actuate Basic report or an Actuate query to start using Actuate e.Analysis.
- *Chapter 2. Viewing data.* This chapter describes the Actuate e.Analysis view, how to set up views of data, and how to navigate the various views. The chapter also describes how to use filters to narrow the scope of a data view.
- Chapter 3. Customizing data. This chapter describes how to view and present data in various formats. This chapter also describes ways to analyze data by applying functions to calculate sum, difference, average, ratio of values, minimum value, maximum value, percentage of total, and percentage of growth.
- Chapter 4. Exporting data. This chapter describes how to export data to a spreadsheet, to a word processing program, or to a PDF file.
- Chapter 5. Customizing e. Analysis. This chapter describes how a BIRT iServer System administrator can customize the user interface and set default preferences.

Starting e.Analysis

This chapter contains the following topics:

- About Actuate e.Analysis
- Launching e.Analysis using an Actuate Basic report
- Launching Actuate e.Analysis using a saved query file

About Actuate e. Analysis

Actuate e.Analysis is an application installed as part of BIRT iServer System. The tool enables you to view data in tables, bar charts, pie charts, and line graphs. You can then drill down into that data to determine relationships and trends.

Using Actuate e.Analysis, you choose which data to include in a graphic comparison. You can then manipulate the data display in tables and charts. When the view has the desired appearance, you can save the tables and charts in formats that are immediately available for use in presentations and reports.

Actuate e.Analysis cannot display data correctly unless the operating system on which you start the web browser has the appropriate locale setting. The operating system locale setting determines the fonts available for display. For example, if you use a web browser for which the locale setting is US English to access a report containing Chinese characters, Actuate e.Analysis cannot display Chinese characters, because the fonts are not available.

Using Actuate e.Analysis to analyze data from an Actuate Basic report or Actuate Query requires that Actuate e. Analysis Option is enabled on BIRT iServer. Actuate e.Analysis Option is a licensing option that is enabled on BIRT iServer using a licensing key. For more information about installing and enabling Actuate e.Analysis Option, see *Installing BIRT iServer for Linux and UNIX* and *Installing* BIRT iServer for Windows.

Launching e. Analysis using an Actuate Basic report

Before you can use Actuate e.Analysis, you access and view an Actuate Basic report in your web browser. The following procedure explains briefly how to access Actuate e.Analysis on the web.

How to access a report on BIRT iServer

- **1** Start your web browser.
- **2** If your company has a web site with a link to the login page, choose the link, then go to step 5. If not, go to step 3.
- **3** Type a URL for the Information Console login page, such as the following example shows a URL sample:

http://actuate1:8900/iportal/login.do?repositoryType=Enterprise &serverURL=http://actuate2:8000

where

actuate 1:8900 is the BIRT iServer that runs web pages that provide the interface to the Encyclopedia volume.

- iportal is a keyword that indicates access to Information Console.
- login.do is the web page that displays the login interface.
- repositoryType=Enterprise indicates using an Encyclopedia volume.
- serverURL=http://actuate2:8000 specifies the location of the BIRT iServer
 System that manages the Encyclopedia volume.

Your BIRT iServer configuration and security implementation can require you to use a different URL from this example. For information about the URL to access your Encyclopedia volume, see your BIRT iServer System administrator.

- 4 Press Enter.
- 5 In the Information Console login page, complete the following tasks:
 - Select a volume from the drop-down list.
 - Type your user name.
 - Type your password.
 - Select a language from the drop-down list. Your selection determines the language to use for the user interface. You can change the language setting when you log in to the volume.
 - Select a time zone from the drop-down list. Your selection determines the time stamp BIRT iServer uses for files. You can change the time zone setting when you log in to the volume.
 - Choose Log In.

An initial Encyclopedia volume page appears, as shown in Figure 1-1.

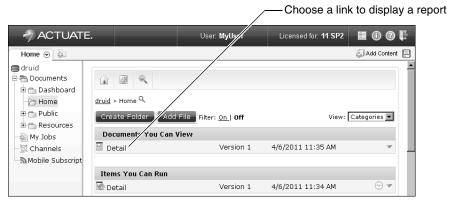


Figure 1-1 An Encyclopedia volume page

6 Under Documents You Can View, choose a link to open a report. A report document opens. Figure 1-2 shows an example of a report document.

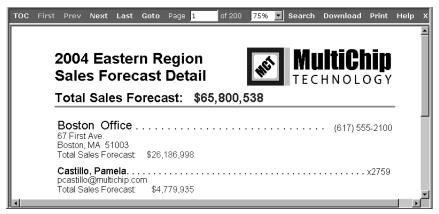


Figure 1-2 An example of a report document

7 To view another document, choose the browser Back button to return to the previous Encyclopedia volume page.

Searching for data in an Actuate Basic report

After you open a report, you can search specific data fields in the report. A report developer specifies the searchable data fields in the report. For Actuate e.Analysis to perform comparisons among multiple items, choose report fields that include examples of both numeric and text data. To enable a successful search and analysis, include at least one nonnumeric report field and at least one numeric report field in the list.

For the search, you can include a maximum of 31 report fields.

How to search data in an Actuate Basic report

1 On the toolbar, choose Search, as shown in Figure 1-3.



Figure 1-3 Choosing Search

The browser window splits into two panes.

2 In the right pane, move the pointer over the data in the report. When the pointer is over a data item that you can include in a search, the pointer becomes a hand and Searchable! appears, as shown in Figure 1-4.



Figure 1-4 A searchable data item in the report

3 To add a report field to your search, move the hand over an item, as shown in Figure 1-4. Choose the item. The item becomes part of a list that contains report fields in the left pane, as shown in Figure 1-5.



Figure 1-5 A list of report fields in the left pane

4 In the left pane, choose Search Now. A list of data links that match your chosen search criteria appears, as shown in Figure 1-6.



Figure 1-6 A list of data links

Launching e.Analysis

Once you complete the data search, launch Actuate e.Analysis.

How to launch e.Analysis

1 To launch Actuate e.Analysis, choose Analyze Results, as shown in Figure 1-7. Analyze Results is not visible unless the Actuate e.Analysis Option is enabled.

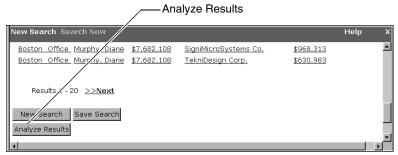


Figure 1-7 Choosing Analyze Results

2 If a Security Warning alerts you to the Actuate e.Analysis installation, choose Run. The view that appears is an initial view of the data that you chose in your search of the report. The initial view is in table format, as shown in Figure 1-8.

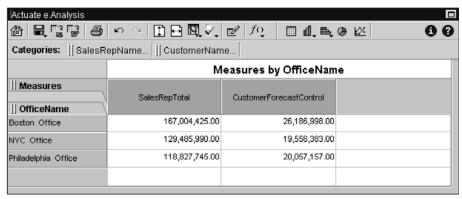


Figure 1-8 The initial view in table format

How to install the Actuate e. Analysis software without a warning

The first time you launch Actuate e.Analysis, Warning—Security appears to alert you about the Actuate e.Analysis installation. To prevent the message from appearing each time you launch Actuate e.Analysis, select Always trust content from this publisher then choose Run, as shown in Figure 1-9.



Figure 1-9 Selecting Always trust content from this publisher

How to avoid the Loading Software message

In Microsoft Internet Explorer, each time you launch Actuate e.Analysis, the Loading Software message appears unless you change your browser cache settings. After you change the settings, the message appears according to your new browser cache settings. In Microsoft Internet Explorer, to change the browser cache settings, complete the following tasks:

- **1** Choose Tools→Internet Options—General.
- **2** On the General page, choose Settings.
- **3** In Settings, under Check for newer versions of stored pages, select Automatically. Choose OK.
- **4** In Internet Options, choose OK.

How to remove a blank browser window to launch Actuate e.Analysis

Using Microsoft Internet Explorer browser, a Blanknav.html browser window may appear when you try to launch Actuate e.Analysis. To display the security message and launch Actuate e.Analysis, do one of the following:

- Close the Blanknay.html window.
- Drag the Blanknav.html window to the side.
 The security message appears under the Blanknav.html window.

In Microsoft Internet Explorer browser, to minimize the appearance of the security messages, you can change the security level for web sites that you trust:

- Choose Tools→Internet Options.
 Internet Options—General appears.
- 2 Choose Security.
 Internet Options—Security appears.

- **3** Choose Custom Level.
 - Security Settings appears.
- **4** On Security Settings—Miscellaneous, under Submit non-encrypted form data, choose Enable. Choose OK.
- **5** On Internet Options, choose OK.

Launching Actuate e. Analysis using a saved query file

To launch Actuate e.Analysis using a saved query file, you must access a saved query file in an Encyclopedia volume using a browser. The following procedure explains briefly how to access Actuate e.Analysis on the web.

How to access a saved query

- 1 Start your web browser.
- **2** If your company has a web site with a link to the login page, choose the link. If not, go to step 3.
- **3** Type an Information Console URL for the login page, such as the following URL sample:

http://actuate1:8700/iportal/login.do?repositoryType=Enterprise &serverURL=http://actuate2:8000

where

- actuate1:8700 is the BIRT iServer that runs web pages that provide the interface to the Encyclopedia volume.
- iportal is a keyword that indicates access to Information Console.
- login.do is the web page that displays the login interface.
- repositoryType=Enterprise specifies the type of Information Console installation.
- serverURL=http://actuate2:8000 specifies the location of the BIRT iServer System that manages the Encyclopedia volume.

Your BIRT iServer configuration and security implementation can require you to use a different URL to view a report in the Encyclopedia volume. For more information, see your BIRT iServer System administrator.

- 4 Press Enter.
- **5** In the Information Console login page, complete the following settings:
 - Select a volume from the drop-down list.
 - Type your user name.

- Type your password.
- Select a language from the drop-down list. Your selection determines the language to use for the user interface. You can change the language setting when you log in to the volume.
- Select a time zone from the drop-down list. Your selection determines the time stamp BIRT iServer uses for files. You can change the time zone setting when you log in to the volume.
- Choose Log In.

An initial Encyclopedia volume page appears, as shown in Figure 1-10.



Figure 1-10 An Encyclopedia volume page

How to launch Actuate e.Analysis

1 In Queries, select the query to execute. Execute Actuate Query appears, as shown in Figure 1-11. The options available in Execute Actuate Query depend on the features that the query developer selects.

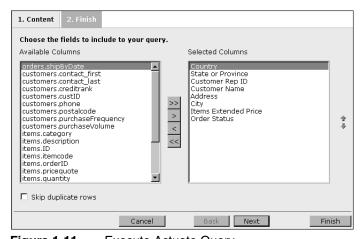


Figure 1-11 Execute Actuate Query

- 2 To move fields from Available Columns to Selected Columns, you can use the arrows. Choose Next.
- **3** In Execute Actuate Query—Finish, complete the following tasks:
 - Select e.Analysis as the output format for the query result, as shown in Figure 1-12.

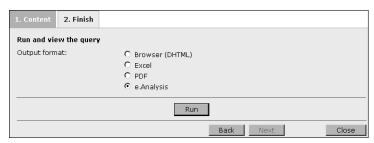


Figure 1-12 Selecting e. Analysis as the output format

For more information about the types of output formats available to the query, see Working with Actuate Query.

- To enable saving the output document in the Encyclopedia volume, you can select Save the output document in the volume, then select from the available options.
- To run the query and view the query output, choose Run. Actuate e. Analysis appears in a browser and presents the query output as a cube when you run the query. The view that appears is an initial view of the data that you chose in your query and is in table format, as shown in Figure 1-13.

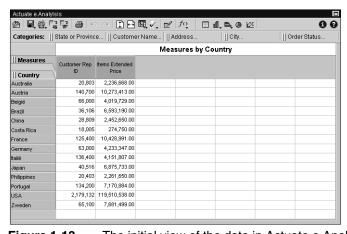


Figure 1-13 The initial view of the data in Actuate e. Analysis

2

Viewing data

This chapter contains the following topics:

- About data analysis
- About the e.Analysis view
- Expanding and collapsing the data
- Displaying data in tables, charts, and graphs
- Displaying balloon help
- Sorting the data
- Using filters
- Searching for categories and subcategories
- Manipulating the data
- Restoring the initial view

About data analysis

Using Actuate e. Analysis, you can view and analyze trends in multiple categories of data simultaneously. Identifying the data and trends among multiple categories is easier than if you used a traditional two-dimensional spreadsheet view. You can apply filters simultaneously to multiple categories so that you can view relationships among them.

Using Actuate e. Analysis, you can answer questions such as:

- How do total sales break down by product?
- What are product A's sales over time?
- How many units of product B shipped to all locations in April?

You can quickly manipulate the data in the view and change how the data display appears.

About the data cube

A data cube is a compressed file of information from your search results. The cube contains summarized data, called categories. Actuate e. Analysis extracts those categories from numeric or textual fields, for example, quantity or customer name.

About categories and measures

A category is a data grouping used by Actuate e. Analysis to create an axis of a cube for presentation of a data view. The view displays two categories of the data at a time. One category appears on the vertical rows axis and one on the horizontal columns axis.

A category lists all the distinct entries found in a specific field. For example, within the payment method category, you can have entries such as VisaTM, American ExpressTM, and MasterCardTM. Categories that contain numeric data are collectively labeled measures. The category bar that appears in the view contains all the categories of the cube. By default, the measures category appears on the right in the category bar. In the initial view, the measures category appears on the columns axis.

A subcategory is a group within a category. Subcategories appear in rows on the vertical axis and in columns on the horizontal axis. For example, within the category labeled OfficeName, you can have the subcategories labeled Boston Office, NYC Office, and Philadelphia Office. Within the measures category, you can have subcategories labeled CurrencyControl, CustomerForecastControl, and SalesRepTotalControl.

About the e.Analysis view

The e.Analysis view is the display of data in the cube. When you start Actuate e.Analysis, the initial view of the cube displays all categories on the rows axis and displays the first measures category on the columns axis. This view is the top level of all of the cube categories in table format. No functions or filters apply to the data that appears in the initial view.

Recognizing features in the e.Analysis view



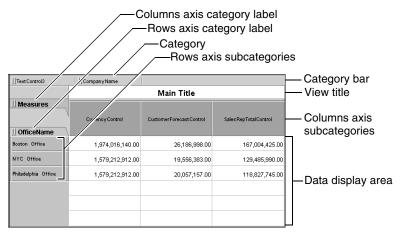


Figure 2-1 The Actuate e.Analysis view features

Using the e.Analysis toolbar

The e.Analysis toolbar supports the following tasks:

- Reorganizing the data view with one click
- Expanding the columns or rows display
- Accessing menus with additional view controls
- Accessing menus to export data

Figure 2-2 shows buttons that control the data display. Each button displays a new graphic view.



Figure 2-2 Toolbar buttons that control the data display

Figure 2-3 shows buttons that change the view with one click. The Vertical fit to page and Horizontal fit to page buttons change the height of the rows or the width of the columns with the first click. A second click returns the previous view. If you want to change actions you make, choose the Undo or Redo button. If you want to remove all changes you make to the view, choose Home. The initial table is restored.

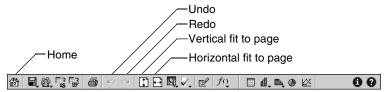


Figure 2-3 Toolbar buttons that change the view with one click

Figure 2-4 shows buttons that access additional menus to perform calculations, set global preferences, choose views, and get help.

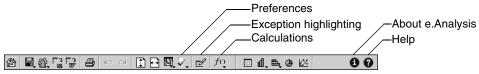


Figure 2-4 Toolbar buttons that access additional menus

Figure 2-5 shows the buttons that access additional menus that enable you to export data in several forms and to e-mail or print the view.

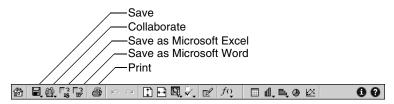


Figure 2-5 Toolbar buttons that access more menus

Expanding and collapsing the data

By expanding and collapsing data, you view detailed or summarized information in the cube. You can expand or collapse data. Each time you expand or collapse the data, the selection of data values changes and the view instantly changes.

Expanding the data

To display detailed information, you expand the categories and data in the data display area and on the axes. You can expand the subcategories on the rows or the columns axis in one of the following ways:

- Choose the plus sign (+) on a subcategory.
- Right-click a subcategory label or data in the data display area to show a context menu. Choose Expand to level and select a subcategory level.
- Double-click a subcategory or data element in the view.

The subcategory expands, displays a lower level of subcategories, and updates the data to reflect your selection.

If a plus sign (+) does not appear next to a data label, the subcategory is fully expanded. If Expand to level does not appear on the context menu, the information is the most detailed you can display. In these cases you cannot expand the data any farther.

Collapsing the data

You can collapse subcategories to display summarized information. To collapse subcategories on the rows or columns axis, do one of the following:

- Choose the minus sign (-) on a subcategory.
- Right-click a subcategory label or data element in the data display area to show a context menu. Choose Collapse.

The subcategory collapses, displays a higher level subcategory, and updates the data to reflect your selection.

Collapsing the data displays summarized information and the most inclusive category label appears.

Displaying data in tables, charts, and graphs

To display and work with the data stored in the cube, choose from the buttons on the toolbar to view the data in the following forms:







Analysis View



Presentation View



Vertical Bar Chart



Horizontal Bar Chart



Pie Chart



Line Graph

Navigating a table



The table compares all of the subcategories on the columns axis with the subcategories on the rows axis. To include more data or less data in the table, expand or collapse the data.

Navigating an analysis view



Choosing View allows you to select between analysis and presentation view. Analysis view presents the data as a table, chart, or graph. You can perform analysis tasks such as arranging data categories and inserting calculated rows and columns.

Navigating a presentation view



Choosing View allows you to select between analysis and presentation view. In the presentation view data is presented as a table, chart, or graph. You can display, hide, or resize a chart or graph legend by selecting and dragging the right edge of the chart or graph. You can also right-click the legend for more options. In a presentation view, categories are not available for analysis tasks such as arranging data categories and inserting calculated rows and columns.

Navigating a vertical bar chart



A vertical bar chart compares all of the subcategories in a bar chart on the columns axis with one or more selected subcategories on the rows axis, as shown in Figure 2-6. The chart appears as a set of vertical bars for the selected data in the rows. To navigate through the data in a vertical bar chart, select any rows axis

subcategory label or labels. The selection changes the base data of the vertical bar chart.

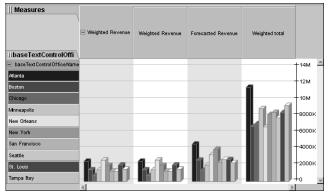


Figure 2-6 A vertical bar chart

If you select a stacked bar chart, you can display data values as segments of a single stacked bar. The height of the bar represents the total value of all the segments in the subcategory, as shown in Figure 2-7.

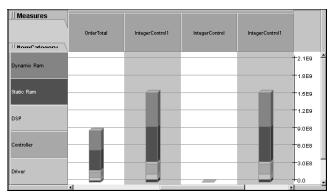


Figure 2-7 A stacked bar chart

If you select a stacked hundred percent bar chart, the chart displays subcategories values as stacked bar segments that add up to 100% in each subcategory.

Navigating a horizontal bar chart



A horizontal bar chart compares all of the subcategories in a bar chart on the rows axis with one or more selected subcategories on the columns axis. The chart appears as a set of horizontal bars for the selected data in the columns. To navigate through the data in a horizontal bar chart, select any columns axis subcategory label or labels. The selection changes the base data of the horizontal bar chart.

Navigating a pie chart



A pie chart compares a selected single base subcategory on the columns axis with one or more selected subcategories on the rows axis. The chart appears as a segmented pie for the selected data in the column and rows. To navigate through the data in a pie chart, select any columns axis subcategory label or labels. The selection changes the base data of the pie chart.

Navigating a line graph



A line graph is a chart that compares a trend for all subcategories on the columns axis with all of the subcategories at the lowest selected level on the rows axis. The chart appears as connected points for the selected data in the columns and rows. To navigate through the data in a line graph, select any rows axis subcategory label or labels. The selection changes the base data of the line graph.

Displaying balloon help

In all of the graphical formats for Actuate e.Analysis, you can use balloon help to find more detail about the data display. Hover the pointer over a graphic element, such as a pie chart segment or a data point on a line graph. The balloon help appears with more information about the data element. If you move the pointer over a pie chart segment, the balloon help always displays the numeric value of the section, not the percent represented by the segment.

For example, in Figure 2-8, the balloon help displays a revenue forecast amount as well as the row and column reference for the pie chart segment. The balloon help also displays the Right click for options item to choose other options.

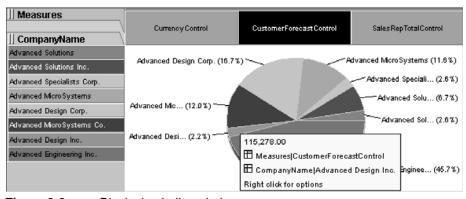


Figure 2-8 Displaying balloon help

Sorting the data

To display trends and deviations, sort columns and rows of data numerically. Use the plus sign (+) or the minus sign (-) to increase or decrease the number of columns and rows that you want to view on each axis.

You can only sort one column subcategory and one row subcategory at the same time. While you view a pie chart, you are unable to sort data.

Sorting data by columns

Sorting data on a column changes the order of the rows that appear.

How to sort data by columns

1 Right-click a subcategory label on the columns axis, such as SalesRepTotal. A menu appears, as shown in Figure 2-9.

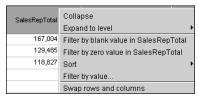


Figure 2-9 Sorting data by columns

2 Choose Sort. The Sort options appear as shown in Figure 2-10.

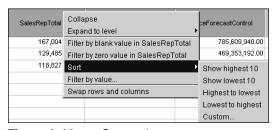


Figure 2-10 Sort options

- **3** Select one of the following sort options:
 - Show highest 10 displays the greatest ten values.
 - Show lowest 10 displays the lowest ten values.
 - Highest to lowest displays the values with the greatest value at the top of the column.
 - Lowest to highest displays the values with the lowest value at the top of the column.

 Custom displays Custom Sort, which enables you to choose to display only a specific number of the highest or lowest values in the column.

An arrow appears in the lower right corner of a sorted subcategory, as shown in Figure 2-11. The arrow points in the direction of the greatest value in the sorted subcategory.



Figure 2-11 An arrow indicates that sorting applies

- **4** To change the sort order, do one of the following:
 - To reverse the sort order, choose the sort arrow.
 - Right-click the subcategory and choose between Sort→Highest to lowest and Sort→Lowest to highest.

Sorting data by rows

You can sort rows of data numerically to display trends and deviations. Sorting data on a row changes the order of the columns in the data display.

How to sort data by rows

1 Right-click a subcategory on the rows axis. A menu appears, as shown in Figure 2-12.

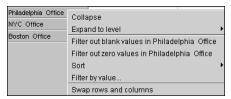


Figure 2-12 Sorting data by rows

2 Choose Sort. The Sort options appear, as shown in Figure 2-13.

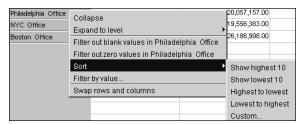


Figure 2-13 Sort options

3 Select one of the following sort options:

- Show highest 10 displays the greatest ten values.
- Show lowest 10 displays the lowest ten values.
- Highest to lowest displays the values with the greatest value in the left column.
- Lowest to highest displays the values with the lowest value in the right column.
- Custom displays Custom Sort, which enables you to choose to display only a specific number of the highest or lowest values in the column.

An arrow appears on the right side of the sorted subcategory, as shown in Figure 2-14. The arrow points in the direction of the greatest value in the sorted subcategory.

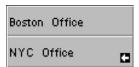


Figure 2-14 An arrow indicates that sorting applies

- **4** To change the sort order, do one of the following:
 - To reverse the sort order, choose the arrow.
 - Right-click the subcategory and choose between Sort→Highest to lowest and Sort→Lowest to highest.

Canceling sorting on columns or rows

After applying sorting, an arrow appears in the lower right corner of the subcategory label to indicate a change in the data display, as shown in Figure 2-15.

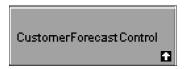


Figure 2-15 An arrow indicates that sorting applies

How to cancel sorting on a columns or rows axis

- **1** Right-click the sorted subcategory.
- 2 On the menu, choose Sort→Cancel sorting. Actuate e.Analysis removes the sorting. The arrow disappears from the subcategory to indicate there is no sorting.

Applying a filter to sort the highest or lowest values

In a subcategory, to determine the lowest or highest subcategories, you can filter and sort the data to display only the highest or lowest values. When you apply a highest or lowest filter, an arrow appears in the lower right corner of a subcategory to indicate sorting of the data.

How to sort the highest or lowest values

- Right-click a subcategory in the column or row. The selected subcategory menu appears.
- 2 Choose Sort→Custom. Sort appears, as shown in Figure 2-16.

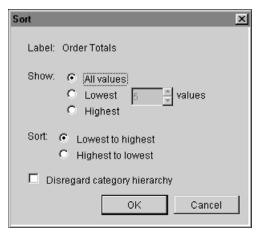


Figure 2-16 Selecting Sort options

- **3** In Sort, you can do the following:
 - In Show, select lowest or highest and enter the number of values you want to appear in the view.
 - In Show, if you select all values, you can select Disregard hierarchy. This option enables sorting data numerically without displaying the value in its category hierarchy.
 - In Sort, select the sort order, lowest to highest or highest to lowest.
- **4** Choose OK. The sorted numbers appear in the view.

Using filters

Using Actuate e. Analysis, you apply a filter that specifies a range of data that appear in the view. You can apply filters simultaneously to multiple categories so that you can view their relationships.

Writing filter expressions

Use the following syntax conventions for filter expressions:

- X to represent the subcategory name
- Parentheses () to indicate the order of the operations
- OR, AND, or NOT if you use more than one expression
- Operators: <, <=, >, >=, =

Do not use commas or dollar signs. For example, if you want to display sales between \$10,000 and \$100,000, inclusive, type the filter expression:

```
(x>=10000) AND (x<=100000)
```

To apply filters to floating point numbers, do not use the expression x=. Use the expressions x> and x<. For example, if you want to display values between \$2.25 and \$10.50, type the filter expression:

```
(x>2.25) AND (x<10.5)
```

If none of the data that appears meets the filter criteria, you see the following message:

There is no data to display.

Applying filters to columns or rows

You can filter the data that appears in a cube by selecting a subcategory on the columns axis or rows axis. This filter selects and displays values on the columns or rows axes that meet certain conditions.

How to apply a filter on a subcategory

- 1 Right-click a subcategory on the columns axis or rows axis. The selected subcategory menu appears.
- **2** On the menu, choose Filter by value, as shown in Figure 2-17.

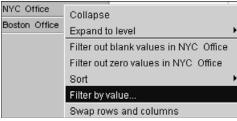


Figure 2-17 Choosing Filter by value

3 In Filter by Value in the Filter field, as shown in Figure 2-18, type the required filter expression using the displayed operators. Choose OK.

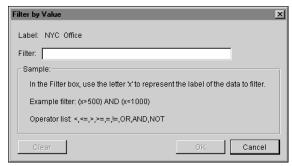


Figure 2-18 Filter by Value

A filter icon appears in the lower right corner of the subcategory to indicate that there is a filter, as shown in Figure 2-19.



A filter icon indicates that filtering applies Figure 2-19

Clearing filters on columns or rows

After applying a filter, a filter icon appears in the lower right corner of the subcategory label to indicate a change in the data display, as shown in Figure 2-20.

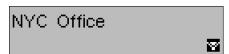


Figure 2-20 A filter icon indicates that filtering applies

How to clear a filter on a columns or rows axis

- **1** Right-click the filtered subcategory.
- 2 On the menu, choose Cancel value filter. Actuate e.Analysis removes the selected subcategory filter. The filter icon disappears from the subcategory to indicate there is no filter.

You can choose Home to clear all filters, cancel all sorting, and return to the default preferences of the initial view.

Applying filters in the category bar

You can filter the data in a cube by selecting one or more subcategories from one or more categories in the category bar.

How to apply a filter in the category bar

- 1 On the category bar, right-click a category label. Select: <category name> displays the chosen category's list of subcategories.
 - In the list, if necessary, choose the plus sign (+) next to a subcategory to display the underlying subcategories. You can also use the Expand to level drop-down list to expand the various subcategories.
- **2** Select the subcategories through which you want to filter the data, as shown in Figure 2-21.

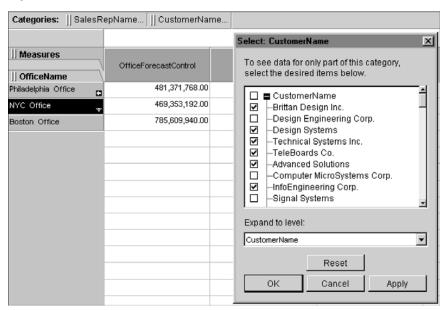


Figure 2-21 Selecting subcategories

Only the data for the specific subcategories you select appears in the display area of the view. A filter icon appears next to the category label in the category bar to indicate the filtering, as shown in Figure 2-22.



Figure 2-22 A filter icon indicates that filtering applies

- **3** To remove the sorting, do one of the following:
 - Choose the subcategory at the top of the list.
 - Choose the minus sign (-).
 - Choose Reset.

Applying filters on a category axis

You can apply filters on the category axis to filter the categories and subcategories that you want to show on a rows or columns axis. You filter the categories and subcategories using the categories and subcategories labels text.

How to apply a filter on a category axis

Apply a filter to specify which category and subcategory labels appear in the view.

1 On an axis, right-click a category label and choose Filter by pattern, as shown in Figure 2-23.

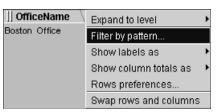


Figure 2-23 Choosing Filter by pattern

Filter by Pattern appears, as shown in Figure 2-24.

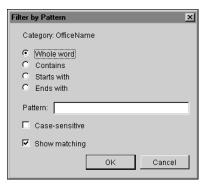


Figure 2-24 Filter by Pattern

- **2** To specify the category or subcategory label to filter, select one of the following:
 - Whole word if you know the exact text in the label
 - Contains if you want to use specific letters or numbers in the label
 - Starts with if you want to use the text with which the label starts
 - Ends with if you want to use the text with which the label ends
- **3** In Patterns, type the letters or numbers you want to filter.

- **4** You can select the following to apply to the filter:
 - Case-sensitive requires that the category text matches the case of the text you type in Patterns.
 - Show matching enables the filter to apply to all subcategories on the axis.
- **5** Choose OK. Actuate e.Analysis applies the filter. A filter icon appears next to the category axis label to indicate the filtering, as shown in Figure 2-25.



Figure 2-25 A filter icon indicates that filtering applies

How to cancel or edit a filter on a category axis

- **1** On an axis, right-click a category label.
- **2** On the menu, do one of the following:
 - To cancel the filter, choose Cancel pattern filter. Actuate e.Analysis removes the filter.
 - To edit the filter, choose Edit pattern filter. In Filter by Pattern, complete the following tasks:
 - Edit the filter criteria.
 - Choose OK to apply the changes.

Searching for categories and subcategories

You can search an axis for category and subcategory labels.

How to search for categories and subcategories

- 1 On the rows or columns axis, right-click a category label. The selected category menu appears.
- 2 On the menu, choose Find. Find appears, as shown in Figure 2-26.



Figure 2-26 The Find dialog box

3 Type one or more characters.

- **4** Choose Find Next. Actuate e.Analysis searches the selected category, navigates to the first category or subcategory label that matches the search string, and highlights the label in the view.
- **5** To find another match, choose Find Next.

Manipulating the data

You can manipulate the data in the following ways:

- Display categories on rows and columns.
- Swap rows and columns.
- Sort the data by rows or columns.
- Select and deselect subsets of data.
- Hide data.
- Suppress rows and columns with no data or with zero values.

Displaying categories on rows and columns

You can display any categories in a cube on the rows or columns axis. When you display a category on a row or column, you can collapse, expand, filter, sort, and hide the data using its subcategories. You can also create a hierarchy of categories by adding as many as four categories to an axis.

How to replace and display a category on a row or column

1 From the categories bar, select and hold the raised move handle on the left side of the category label, as shown in Figure 2-27.

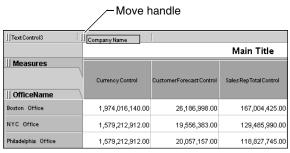


Figure 2-27 Selecting the move handle on a category label

2 Drag the category label and position it over the category you want to replace on the row or column until you see the rectangular highlight box appear, as shown in Figure 2-28.

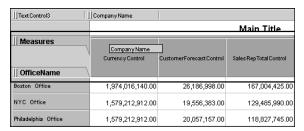


Figure 2-28 Dragging a category label

3 Release the category label. The category appears on the axis and updates the data to reflect your selection.

How to display more than one category on an axis

1 From the category bar, select and hold the raised move handle on the left side of a category label, as shown in Figure 2-29.

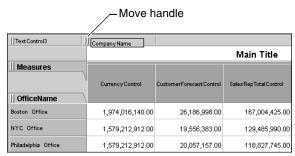


Figure 2-29 Selecting a move handle

2 Drag the category label and position the label to the left or right side of the rows axis subcategory labels until you see a black highlight line appear, as shown in Figure 2-30.

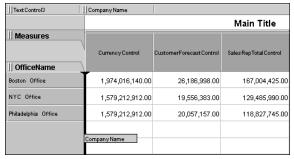


Figure 2-30 Dragging a category label

3 Release the category label. The category label appears on the rows axis, as shown in Figure 2-31.

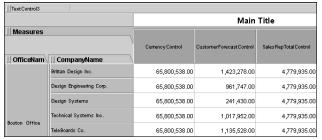


Figure 2-31 The category label appears on the rows axis

The category appears on the rows axis in the place that you released it and updates the data to reflect your change.

By dragging a category label from the category bar to the columns axis, you can display more than one row on the columns axis, as shown in Figure 2-32.

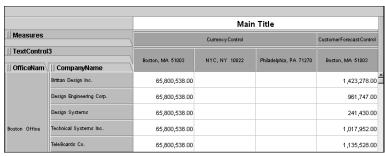


Figure 2-32 Displaying more than one row on the columns axis

Swapping rows and columns

You can view the data in the data display area from a different perspective by swapping the category on one axis with the category on the other axis.

How to swap axes

- 1 Right-click the rows or columns category label.
- **2** Choose Swap rows and columns from the context menu, as shown in Figure 2-33.

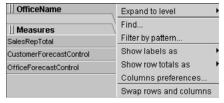


Figure 2-33 Swapping rows and columns

The categories swap on the axes and update the data to reflect your selection.

Selecting and deselecting subsets of data

You can view subsets of data by selecting and grouping subcategories. After you select subcategories, you can hide the selected subcategories, hide the unselected subcategories, or apply a function to the selected subcategories.

How to select a subcategory

- **1** Move the pointer over a subcategory label.
- **2** Choose the subcategory label.

How to select a group of subcategories

- **1** Select one subcategory label.
- 2 To add a subcategory to the current set of selected subcategories, press and hold down Ctrl. Then, select a subcategory label. Using Ctrl keeps the subcategories in the order that you selected them.

How to select a range of subcategories

- **1** Select one subcategory label.
- 2 Press and hold down Shift. Then select the subcategory label of the last subcategory in the range. Using Shift does not preserve the order of the subcategories selected. By default, the selected subcategories appear in order from left to right or from top to bottom. The first subcategory in the sort is the left or top subcategory.

How to deselect a subset of data

Do one of the following:

- Press Esc.
- Press and hold Ctrl. Then, click the selected subcategory label.

Hiding data

To hide a small number of subcategories, select the subcategories you want to hide. Then, choose Hide selected. To hide a large number of subcategories, select the subcategories you do not want to hide. Select Hide unselected.

The Hide option is not available in the pie chart view.

How to hide selected subcategories

- **1** Select one subcategory label.
- **2** To add or remove subcategories in the current set of selected subcategories, press and hold Ctrl. Then, select additional subcategory labels.

3 Right-click the subcategory label of a selected subcategory. The selected subcategory menu appears, as shown in Figure 2-34.

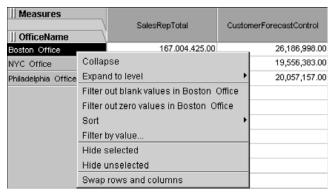


Figure 2-34 Hiding selected categories

- **4** On the context menu, complete one of the following tasks:
 - Choose Hide selected. The selected subcategories do not appear in the display.
 - Choose Hide unselected. The unselected subcategories do not appear in the display.

A filter icon appears next to the category label to which the filter applies as shown in Figure 2-35.



Figure 2-35 A filter icon indicates that a filter applies

How to display hidden subcategories

- **1** Right-click a subcategory or axis label.
- **2** On the menu, choose Cancel hiding. The hidden subcategories appear.

Expanding to level in a category

Using Expand to level, you can quickly expand a category or data item to a specific level in its hierarchy. For example, in a Date category with a Year, Quarter, and Month hierarchy, you can use Expand to level to expand Date to the month level in a single step.

How to expand a category or data item to a specific level

- 1 Right-click a category label or data item label.
- 2 Move the pointer over Expand to level in the menu, as shown in Figure 2-36. Select a level name.

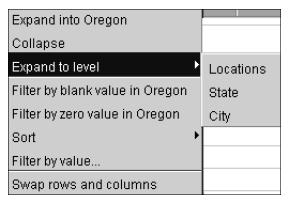


Figure 2-36 Expanding a category or data item

3 To collapse the category or data level, choose Collapse in the menu.

Suppressing rows and columns with no data

By suppressing rows or columns that do not contain any data, you can filter out all empty rows subcategories in a cube. When you suppress empty rows, rows that contain data with zero values appear.

You can suppress all rows and columns that have no data in the cube by setting a general preference or you can suppress subcategories that have no data in one or more rows or columns. The filter expression x!=nan applies to the view or to a selected row, column, or subcategory. In this expression, x!=nan, nan means not a number.

In Preferences, if you set a general preference, the view does not display an indication that a general preference applies to the view.

If you apply a preference to a row, column, or category label, Actuate e.Analysis displays a filter icon to indicate that the view contains suppressed rows or columns. A filter icon appears in a category label as shown in Figure 2-37.



Figure 2-37 A filter icon indicates that a filter applies

How to hide all rows and columns with no data



- 1 On the toolbar, choose Preferences→Rows.
- **2** On Rows, deselect Show blank rows, as shown in Figure 2-38.

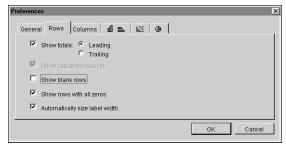


Figure 2-38 Deselecting Show blank rows

- 3 Choose Columns.
- **4** On Columns, deselect Show blank columns, as shown in Figure 2-39.

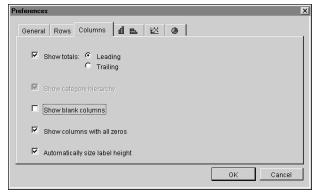


Figure 2-39 Deselecting Show blank columns

Choose OK. All the rows and columns subcategories that do not contain data do not appear.

How to display all rows and all columns with no data



- 1 On the toolbar, choose Preferences→Rows.
- 2 On Rows, select Show blank rows.
- **3** Choose Columns.
- **4** On Columns, select Show blank columns. Choose OK. All the rows and columns subcategories that do not contain data appear.

How to hide rows or columns with no data

- 1 Right-click a subcategory label on a row or column.
- **2** On the subcategory menu, choose Filter out blank values, as shown in Figure 2-40.



Figure 2-40 Filter out blank values

The subcategories in the row or column that do not contain data do not appear. A filter icon appears next to the category label to which the filter applies.

Suppressing rows and columns with zero values

By suppressing rows or columns that contain only data with zeros, you display only the rows or columns that contain values greater than zero.

You can suppress all rows and columns that have a value of zero in the cube by setting a general preference, or you can suppress data that have a value of zero in one or more rows or columns. The filter expression x!=0 applies to the view or to a selected row, column, or subcategory.

In Preferences, if you set a general preference, the view does not display an indication that a general preference applies to the view.

If you apply a preference to a row, column, or category label, Actuate e.Analysis displays a filter icon next to a row, column, or category label to indicate that the view contains suppressed rows or columns. A filter icon appears next to a category label in Figure 2-41.



Figure 2-41 A filter icon indicates that a filter applies

How to suppress all rows and columns with only zeros



- 1 On the toolbar, choose Preferences→Rows.
- **2** On Rows, deselect Show rows with all zeros.
- **3** Choose Columns.
- **4** On Columns, deselect Show columns with all zeros. Choose OK.

How to display all rows and all columns with only zeros



- 1 On the toolbar, choose Preferences→Rows.
- **2** On Rows, select Show rows with all zeros, as shown in Figure 2-42.

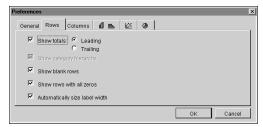


Figure 2-42 Selecting Show rows with all zeros

- **3** Choose the Columns.
- **4** On Columns, select Show columns with all zeros. Choose OK.

How to suppress rows or columns with a value of zero

- **1** Select a subcategory label.
- **2** Right-click the selected subcategory label.
- **3** From the subcategory menu, choose Filter out zero values. The row or column subcategories that have a value of zero do not appear. A filter icon appears next to the subcategory label to which the filter applies.

How to display rows or columns with zero value

- 1 Right-click the subcategory label that contains a filter icon.
- **2** From the subcategory menu, choose Cancel filter.

Restoring the initial view

When you start Actuate e.Analysis, the initial view appears, displaying data in table format with no sorting or filters applied. After applying filters and sorting, you can quickly restore the initial view, removing all filters and sorting and resetting preferences to the default settings.

How to restore the initial view



To restore the initial view, choose Home.

Actuate e.Analysis removes all sorting, filtering, and customizing and displays the data in table format.

Customizing data

This chapter contains the following topics:

- About customizing data
- Presenting data
- Analyzing data
- About exception highlighting

About customizing data

Using Actuate e.Analysis, you can do the following:

- Arrange and present the data in table or chart format.
- Show or hide features in the display to present a custom data view.
- Analyze data by applying functions to compare or combine the data in subcategories.

Presenting data

By customizing the presentation of data, you choose categories and subcategories to view, select ranges of data values, and choose the display type.

Use the options in Table 3-1 to customize your data presentation.

Table 3-1 Presentation options

Presentation features	Effects
Chart style	Displays data in a table, vertical bar chart, horizontal bar chart, pie chart, or line graph
Fit to page	Adjusts the rows and columns to fill the data display area
Main title	Displays text
Preferences	Changes settings to modify how your data appears in the data display area

Selecting a chart style

To select a chart style, you choose one of the chart style buttons to select the corresponding view of the data. The view updates to reflect your selection.

On the toolbar, choose from the following data displays:







Vertical Bar Chart



Horizontal Bar Chart



Pie Chart



Line Graph

Setting preferences for a chart

You can customize a chart's display using Preferences, as described in the Table 3-2.

Table 3-2 Chart preferences

Chart style	Preference selection	Preference value	Effect on chart appearance
Bar	Show 3D visual effect		Select to display three-dimensional visual effects. Deselect to display two-dimensional visual effects.
	Show data values as	Percentage (%)	Displays values of each bar as a percent of the total subcategory.
		Number	Displays numeric values of each bar.
Pie	Show 3D visual effect		Select to display three-dimensional visual effects. Deselect to display two-dimensional visual effects.
	Show data values as	Percentage (%)	Displays percent values of each segment as a percent of the whole pie. Deselect Show data values as to hide the data values.
		Number	Displays the numeric values of each segment.
	Show labels		Select to display labels for each segment.
	Pie slices	Show all slices	Displays all segments.
		Limit display by combining slices that are less than this % of the pie	Sets a value for the smallest pie segment that appears in the view. Smaller segments combine to display as the Other segment. If you choose a percent value that results in the Other pie segment equalling 100%, e.Analysis does not combine the subcategories.
		Limit display by number of slices	Sets a limit on how many pie segments appear in the view. Additional segments combine to display as the Other segment.
			(continues)

Table 3-2 Chart preferences (continued)

Chart style	Preference selection	Preference value	Effect on chart appearance
Line	Show data values as	Percentage (%)	Displays values of each point as a percent of the total subcategory.
		Number	Displays numeric values of each point.
	Show labels		Displays labels for each point.

How to set preferences for a bar chart, pie chart, or line graph



- 1 On the toolbar, choose Preferences→General.
- **2** On Preferences—General, choose one of the following:



- Bar charts
- $\underline{\mathbb{R}}$
- Line graph
- **(4)**
- Pie chart
- **3** Select the preferences you want to apply. Choose OK.

Adjusting the fit to page options

You can adjust the width and height of the view in the following ways:



■ Choose the Vertical fit to page button on the toolbar to expand the rows to fill the height of the data display area. Choose the Vertical fit to page button again to shrink the rows to the previous size.



- Choose the Horizontal fit to page button on the toolbar to expand the columns to fill the width of the data display area. Choose the Horizontal fit to page button again to shrink the columns to the previous size.
- Drag the line between two subcategories to enlarge or shrink the size of the subcategory in the display area.
- Drag the border between the subcategories and the data display area to change the size of the display area.

If the width of columns in the table is too narrow to fully display data values in the cells, the values appear as gray bars in the cells, or pound signs (#) appear in the cell. You can choose the Horizontal fit to page button, or drag the border between the cells to increase the width of the cells, enabling the full number of digits to appear.

Opening the cube in a new window



To open an Actuate e.Analysis cube in a new Java window, on the Actuate e. Analysis title bar, choose the New window button.

A new window opens and fills your screen.

Displaying variables in the main title, subtitle, and footer

You can use text and variables in the main title, subtitle, and footer. The main title can display a maximum of four lines of text. The subtitle and footer appear in documents you save as RTF and PDF files. Use the following syntax for variables in the main title, subtitle, and footer:

%<variable name>%

The supported variables for use in the main title, subtitle, and footer appear in Table 3-3.

Table 3-3 Variables for use in the main title, subtitle, and footer

Variable name	Displays these values	
column-categories	Name of the categories on the columns axis	
company-name	Name of the company, as shown in the About box	
cube-name	Name of the cube, as shown in the About box	
current-view	Current categories in the columns and the rows	
data	Name of the current numerical data	
date-created	Date the cube was created, as shown in the About box	
description	Description of the cube, as shown in the About box	
filters	Names of all category filters currently applied to the cube	
measure	Name of the current measure appearing in the data display area	
product-name	Name of the product, as shown in the About box	
row-categories	Name of the categories on the rows axis	
version	Actuate e.Analysis build number	

How to add a variable to the main title

- **1** In the view, select the view title.
- **2** Type:

%<variable name>%

where <variable name> is one of the supported variables, for example, %company-name%.

3 Press Enter. The variable name appears in the view title.

How to change the main title of the view

- **1** Select Main Title above the columns labels.
- **2** Type the new title or variable name.
- **3** To start a new line, you can type:

\n

Then type text or a variable name. You can display a maximum of four lines in the view title.

4 Press Enter.

Selecting Preferences



You can customize your presentation of the data in the display area with the options on the toolbar in Preferences.

The options include:

- Show leading or trailing column totals
- Show leading or trailing row totals
- Show or hide expand and collapse controls (+) or (-)
- Show or hide gridlines
- Resize width for new labels
- Show labels as hierarchical
- Show labels as columnar
- Show cell value with percentage of total
- Decimal places for percentage of total



Preferences return to the default settings when you choose Home. Your Preferences settings in the Actuate e.Analysis view apply for one Actuate e. Analysis session. If you restart Actuate e. Analysis, the default settings apply to the view.

How to show leading or trailing column totals

In the table, the default settings for Actuate e. Analysis show leading column totals. Most of the illustrations in this document show the table using the default settings. A system administrator can change the default settings to show the leading or trailing column totals.

If you choose to show leading or trailing column totals, the displayed total might combine measures that you do not intend to combine in a sum. For example, Actuate e.Analysis might analyze an order number as a measure and display a sum total of order numbers.



- 1 On the toolbar, choose Preferences→Columns.
- **2** On Preference—Columns, to show leading totals for columns, select Show totals. Select leading.
- **3** To show trailing totals for columns, select Show totals. Select trailing. Choose OK.

The Preferences settings that do not show leading or trailing totals on the rows or columns appear in the table in Figure 3-1.

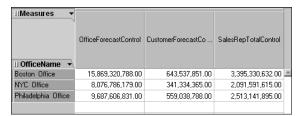


Figure 3-1 Preferences settings that do not show leading or trailing totals

The Preferences settings that show leading totals on the rows and columns appear in the table in Figure 3-2.

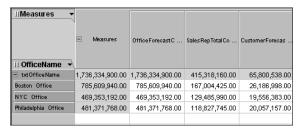


Figure 3-2 Preferences settings that show leading and trailing totals

How to show leading or trailing row totals

If you choose to show leading or trailing row totals, the displayed total might combine measures that you do not intend to combine in a sum. For example, Actuate e.Analysis might analyze an order number as a measure and display a sum total of order numbers.



- **1** On the toolbar, choose Preferences→Rows.
- **2** On Preferences—Rows, to show leading totals for rows, select Show totals. Select leading.
- **3** To show trailing totals for rows, select Show totals. Select trailing. Choose OK.

How to show or hide expand and collapse controls (+) or (-)



1 On the toolbar, choose Preferences→General. Preferences—General appears as shown in Figure 3-3.

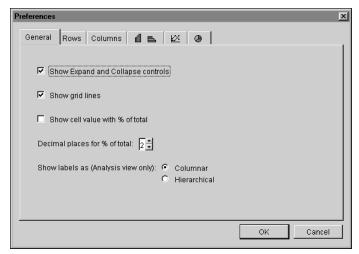


Figure 3-3 Preferences—General options

- **2** To show expand and collapse controls, select Show Expand and Collapse controls.
- **3** To hide drill controls, deselect Show Expand and Collapse controls. Choose OK.

How to show or hide gridlines



- **1** On the toolbar, choose Preferences→General.
- 2 On Preferences—General, to show gridlines, select Show grid lines.
- **3** To hide gridlines, deselect Show grid lines. Choose OK.

How to resize subcategory width for labels



- **1** On the toolbar, choose Preferences→Rows.
- **2** On Preferences—Rows, select Automatically size label width. Choose OK.

How to show or hide row and column hierarchy



- 1 On the toolbar, choose Preferences→General.
- **2** On Preferences—General, in Show labels as (Analysis view only), select Hierarchical.
- **3** Choose Rows.

4 On Rows:

- To show hierarchy for rows, select Show category hierarchy.
- To hide hierarchy for rows, deselect Show category hierarchy.
- **5** Choose Columns.
- 6 On Columns:
 - To show hierarchy for columns, select Show category hierarchy.
 - To hide hierarchy for columns, deselect Show category hierarchy.

Choose OK.

How to show labels as hierarchical



- 1 On the toolbar, choose Preferences→General.
- **2** On Preferences—General, to show hierarchy in labels, in Show labels as (Analysis view only), select Hierarchical.
- **3** To hide hierarchy in labels, in Show labels as (Analysis view only), select Columnar.
- 4 Choose OK.

How to show labels as columnar



- 1 On the toolbar, choose Preferences→General.
- **2** On Preferences—General, to show labels as columnar, in Show labels as (Analysis view only), select Columnar. Choose OK.

Using Undo and Redo



Using Undo and Redo, you can reverse or restore the last ten actions you performed on your data. If you add, delete, or rename a view, you cannot undo or redo those actions.

How to undo or redo an action



Choose Undo to undo an action.



Choose Redo to redo an action.

Analyzing data

With the Calculate option, you can compare and summarize data using the functions that appear in Table 3-4. Applying each of these functions to one or

more selected columns or rows creates a new column or row that displays calculated values.

Table 3-4 Functions

IIO115
Description
Calculates the value of the following formula for the selected subcategories:
a ₁ +a ₂ ++a _n
Calculates the value of the following formula for the selected subcategories:
$(a_1 + a_2 + + a_n) / n$
Calculates the value of the following formula for the two subcategories:
a-b
Calculates a percentage value that is equal to the ratio between the cell's value and the total value for the subcategory in which the cell appears. You can also display each data value in the table as a percentage of a column, row, or grand total.
Calculates the value of the following formula for the two subcategories:
a/b
Calculates the value of the following formula for the two subcategories:
(b-a)/a
Determines the minimum value among the selected subcategories.
Determines the maximum value among the selected subcategories.
Calculates the value of the following formula for each cell:
<pre>(<cell value=""> *) / (<row total=""> * <column total="">)</column></row></cell></pre>
The calculated value determines the cell's performance relative to other cells in the table.

Note that you cannot combine subcategories that are in rows and columns. You must select either rows or columns. The function type appears in the table next to the last subcategory that you selected.

When you use the difference, ratio, or percentage growth functions, the subcategory that you select first is a, and the subcategory that you select second is b.

When you include subcategories that contain empty data fields, Actuate e.Analysis does not use the empty data fields in calculations. As in OLAP tools, including null values in data analysis does not generate an error message.

For a calculation function, if you choose data that results in division by zero, the data field for that calculation shows /0 in the table. When plotting charts, Actuate e.Analysis treats division by zero as an empty cell.

For a subcategory label, you cannot use a backslash (\), a slash (/), an asterisk (*), a dash (-), or any other symbol that normally appears as an operator. When using NOT, place it inside brackets.

If you apply functions both in the rows axis and the columns axis, the columns axis function applies at the intersection of the rows and columns. In the example in Table 3-5, the intersection applies the sum function, A+B, and not the ratio function, C/D.

Table 3-5 An example of the columns axis function taking precedence over the rows axis function

	A	В	A+B	
С	1	2	3	
D	3	4	7	
C/D	0.33	0.50	0.83	

When you analyze ZIP codes, Actuate e.Analysis treats a ZIP code as a measure, unless the report designer identifies the control as a category. Actuate e.Analysis sums measures and uses them in other calculations. This applies if the ZIP codes contain numbers only. For example, if a 9-digit ZIP code contains a hyphen, the ZIP code is not treated as a measure.

By default, Actuate e.Analysis creates cubes with precision of three decimal places. For values in the cube, a BIRT iServer System administrator can specify between 0 and 10 decimal places. When analyzing numbers that contain more than two decimal places, you get different results if you work with numbers without rounding. The number of categories Actuate e.Analysis uses to build the cube affects the results. The differences are typically in the hundredths place. For example, add three numbers, each equal to 1.004. If you round the numbers to two decimal places before the addition, the calculation is 1.00 + 1.00 + 1.00 = 3.00. If you perform the addition before you round the numbers, the calculation is 1.004 + 1.004 = 3.012. The rounded result is 3.01.

Analyzing subcategory data

You can apply the following functions to subcategory data:

- Sum
- Average
- Difference
- Percent of total
- Ratio
- Percentage growth
- Minimum value
- Maximum value

When you apply one of these functions, a new subcategory appears in the table view. Actuate e.Analysis calculates values and displays them in the new subcategory.

How to apply a function to a subcategory

Use this procedure to apply a sum, average, difference, percent of total, ratio, percentage growth, minimum value, or maximum value function to a selected subcategory.

- 1 Select the row or column subcategories to which to apply a function.
 - If the formula for the function uses a and b values, press and hold Ctrl. Select the first subcategory label, a. Then, select the second subcategory label, b.
 - If you want to select a range to sum or average, select the first subcategory label. Then, press and hold Shift and select the last subcategory label.



Choose Calculate.

- **2** On the Calculate menu, choose one of the following functions:
 - Sum
 - Average
 - Difference
 - % of total
 - Ratio
 - % growth
 - Minimum value
 - Maximum value

Calculate appears.

Figure 3-4 shows Calculate with a default label value that appears when you apply a sum function to Appliances and Automotive subcategories.

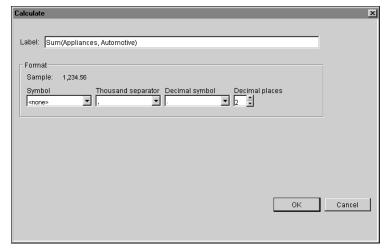


Figure 3-4 The Calculate dialog box

- **3** On Calculate, you can specify the following information:
 - In Label, type the name for the new subcategory.
 - In Format, to specify a number format, select the symbol, thousands separator, decimal separator, and number of decimal places.
 In Sample, you can view an example of the number format.

Choose OK. The new subcategory appears next to the last selected subcategory, as shown in Figure 3-5.

± Appliances	11,281.57
	2,231.82
Sum(Appliances, Automotive)	13,513.39

Figure 3-5 A new calculated subcategory

How to modify a function

- **1** Right-click a function subcategory.
- **2** Choose Edit calculation.
- **3** On Calculate, you can
 - Change the name of the function subcategory.
 - Change the number format.

Choose OK to apply the changes.

How to delete a function

- **1** Right-click a function subcategory.
- **2** Choose Delete calculation.

Displaying data values as a percentage of a total

When working with data in the table, you can display data values as a percentage of the following values:

- Column total
 - Each cell displays a percentage value that is equal to the ratio of the value of that cell compared to the value of the column total.
- Row total
 - Each cell displays a percentage value that is equal to the ratio between the value of that cell compared to the value of the row total.
- Grand total

Each cell displays a percentage value that is equal to the ratio between the value of that cell compared to the table root value, which is the sum of all the cell values.

If you change the display from a table to either a horizontal or vertical bar chart, or a line graph, only the cell values from the table appear in the chart or graph. The percentages do not appear in the chart or graph.

How to show data as a percentage of a total

Use this procedure to display all data values in the table as percentages or as both percentages and cell values.

- 1 Right-click a table cell and choose Show Data as.
- **2** Choose one of the following options:
 - % of column total
 - % of row total
 - % of grand total
- **3** To display both a cell value and the percentage of the total in a table cell, rightclick a table cell and choose Show cell value with % of total. A cell value and a percentage appear in each cell, as shown in Figure 3-6.

167,004,425.00 [40	.21 %] 26,18	6,998.00 [39.80%]
129,485,990.00 [31	.18 %] 19,55	6,383.00 [29.72 %]
118,827,745.00 [28	.61 %] 20,05	7,157.00 [30.48 %]

Figure 3-6 Displaying a cell value and a percentage in each cell The table maintains any sorting that applies to the columns and rows axes.

Applying a performance index function

You can use the performance index function to compare the value of each cell to the other cells in a table. For example, you can use the performance index to determine which products over-performed or under-performed in a particular market.

The following formula determines the performance index:

```
(<cell value> * ) / (<row total> * <column
 total>)
```

If the performance index value is:

- Equal to one, the individual cell's performance matches the group performance
- Greater than one, the individual cell's performance is above the group performance
- Less than one, the individual cell's performance is below the group performance

If a BIRT iServer administrator enables the performance index functionality, Performance Index appears in the list of functions on Calculate.

How to add a performance index function



- **1** Choose Calculate.
- **2** On Calculate, choose Performance Index.
- **3** On Calculate, select the formatting options to apply to the performance index calculation. Choose OK. The performance index calculation appears in each table cell.
- **4** To show cell values and the performance index calculation values:
 - 1 Right-click a cell.
 - 2 Choose Show cell values with percent of total. Each cell displays a value and a performance index calculation, as shown in Figure 3-7.

ItemCategory	Controller	,	DSP		Driver		Dynamic R	am	ttemCateg	ory
Patterson, Mary	714,779	[0.74]	608,940	[2.41]	344,040	[0.54]	701,249	[1.36]	2,369,008	[1.00]
Patterson, Steve	1,329,945	[1.15]	398,650	[1.32]	466,640	[0.61]	640,748	[1.04]	2,835,983	[1.00]
Thompson, Allen	1,440,442	[1.18]	109,650	[0.34]	982,050	[1.21]	476,658	[0.73]	3,008,800	[1.00]
Thompson, Leslie	655,923	[2.05]	12,070	[0.14]	22,400	[0.11]	97,812	[0.57]	788,205	[1.00]
Tseng, Foon Yue	271,156	[0.39]	44,880	[0.25]	1,066,630	[2.31]	333,268	[0.89]	1,715,934	[1.00]
Vanauf, George	101,541	[0.63]	12,070	[0.29]	114,720	[1.08]	166,582	[1.94]	394,913	[1.00]
SalesRepName	4,513,786	[1.00]	1,186,260	[1.00]	2,996,480	[1.00]	2,416,317	[1.00]	11,112,843	[1.00]

Figure 3-7 Displaying a value and a performance index calculation

About exception highlighting

You can use exception highlighting to reveal anomalies and significant trends in data. With exception highlighting, you use color to highlight table cells based on the cell value or how the cell value compares to other values. You can apply more than one exception highlighting rule to cells. For example, to analyze sales among different departments, you can display cells with values that are less than \$2500 with red background color and cells with values greater than \$10,000 with green background color.

If more than one exception highlighting rule applies to the same table cell, the exception highlighting rules apply in the order in which they appear in the Exception Highlighting dialog box. The first exception highlighting rule in the list takes precedence over the second rule, the second rule takes precedence over the third rule, and so on.

How to apply exception highlighting



- 1 On the toolbar, choose Exception Highlighting.
- 2 In Exception Highlighting, choose New. A new rule appears in Exception Highlighting, as shown in Figure 3-8.
- **3** In Rule Properties, specify the following properties:
 - Type a name for a label to identify the exception highlighting rule.
 - Specify the exception condition, operator, and value using the drop-down lists.
 - In Rule Properties, if Condition is set to % of row total, % of column total, or % of grand total, then type a percentage value in Value. For example, in Value, type 20 for 20%, rather than 0.2.
 - Specify the font color and fill color.
 - In Apply to, select one of the following options to which to apply the exception highlighting rule:
 - All rows and columns

□ This row or column: <selected row or column name>

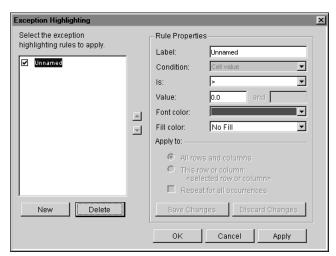


Figure 3-8 Exception Highlighting dialog box

- **4** Choose Save Changes.
- **5** Choose OK or Apply.

Exporting data

This chapter contains the following topics:

- About exporting data
- Exporting data to a spreadsheet
- Exporting data to a document
- Saving a cube locally for offline viewing
- Sending cube reports by e-mail

About exporting data

After you manipulate the data and arrange the view, you are ready to export the data. Because Actuate e.Analysis is a Java applet, you cannot directly print the view. You export the view or the data to an application that supports printing. You can export the data to the following formats:

- CSV file, which contains comma-separated values in text format
- Microsoft Excel
- PDF file for viewing using Adobe Acrobat Reader
- RTF file for viewing using Microsoft Word or a plug-in
- TSV file, which contains tab-separated values in text format

Exporting to PDF or RTF saves or prints the charts. Exporting to a CSV, spreadsheet, or TSV exports only the data, not the charts.

Actuate e. Analysis does not support exporting to PDF and RTF for the Chinese, Japanese, and Korean languages.

Because data is written to your computer's hard disk during data export, the browser may display a security message. You must grant permission before the data transfer to your computer.

Exporting data to a spreadsheet

You can use the Save as Microsoft Excel option to export the data you view in a cube to a spreadsheet program installed on your computer. Using this option to export the data to a spreadsheet program saves cube data values, row heading labels, and column heading labels in a Microsoft Excel file. You can then work with the data in a Microsoft Excel spreadsheet. Choosing Save as Microsoft Excel exports only the data values that are visible in the table view, chart, or graph, not the values that a hidden or collapsed category contains.

How to export data to a spreadsheet



- 1 Choose Save as Microsoft Excel. Save as Microsoft Excel (*.xls) appears.
 - For some report servers, a Java security message appears. You must choose Grant to display Save as Microsoft Excel (*.xls).
- **2** In Save in, select a location for the file.
- **3** In File name, type a file name with the extension, .slk or .xls. For spreadsheets, the default file format is .slk. Microsoft Excel recognizes both .xls and .slk extensions.

- **4** If required, in Save as type, select the file type.
- **5** Choose Save. If you have a spreadsheet plug-in installed with your browser, the spreadsheet appears, but you can only view the document.

The recommended limit for data export to a spreadsheet is 64,000 rows by 256 columns. Exceeding the limit may result in incorrect data transfer.

If you export data to a spreadsheet, you can export functions only if the functions do not rely on a hidden row or column. If a function does rely on a hidden column or row, the function is preserved during exporting, but the function is not translated into cell references.

Exporting data to a document

You can export data to text documents such as an RTF file, a tab-separated text file, a comma-separated text file, or a PDF file.

How to export data to an RTF file



- **1** Choose Save as Microsoft Word.
- **2** In Page Setup, make selections for the following settings:
 - Paper size and orientation
 - Margins
 - Output Select Subtitle or Footer to enable typing text or a variable name.
- **3** Select Show Save as dialog box. Choose OK.

If you do not select this option, Actuate e.Analysis saves the file using the default file name and location. The new file overwrites any previous file with the same name in the default location.

- **4** In Page Range, select the page range. Choose OK.
- **5** In Save as Microsoft Word (*.doc), in Save in, select a location for the file.
- **6** In File name, type a name for the file using the extension, .doc.
- **7** If required, in the Save as type field, select the file type. Choose Save. If you have a document plug-in installed with your browser, the document appears, but you can only view the document.

When you export bar charts and line graphs to an RTF file, Actuate e.Analysis sets the scale range for the charted data. The scale range changes to present a meaningful scale for each set of data.

How to export data to a tab-separated text file

Data that you export to a tab-separated file does not include special characters, such as dollar sign (\$) and greater than (>).



- 1 Choose Save→Save As→Tab-Separated Values (.tsv).
- **2** In Save as Separated Values (*.tsv), in Save in, select a location for the file.
- **3** In File name, type a name for the file using the extension, .txt or .tsv.
- **4** If required, in the Save as type field, select the file type. Choose Save.
- **5** Open the saved file using a text editor such as Notepad.

How to export data to a comma-separated text file

Data you export to a comma-separated file does not include special characters, such as a dollar sign (\$) and greater than (>).



- 1 Choose Save→Save As→Comma-Separated Values (.csv).
- **2** In Save as Separated Values (*.csv), in File name, type a name for the file using the extension .txt or .csv.
- **3** If required, in Save as type, select a file type. Choose Save.
- **4** If you have a spreadsheet plug-in installed with your browser, and you have the extension .csv on the file name, the spreadsheet appears. If you do not have a spreadsheet plug-in, open the saved file using a text editor such as Notepad.

How to export data to a PDF file

You can export the view to a PDF file for viewing, saving, or printing. You must have Adobe Acrobat Reader or Adobe Acrobat installed to view a PDF file.



- **1** Choose Save→Save As→Adobe PDF (.pdf).
- **2** In Page Setup, select the settings needed for your document, which include:
 - Paper size and orientation.
 - Margins.
 - In Output, you can select Subtitle and Footer to enable typing text or a variable name, which appears in the document.
- **3** To enable saving the PDF file before printing, select Show Save as dialog box. Choose OK.

If you do not select Show Save as dialog box, Actuate e.Analysis saves the file using the default file name and location. The new file overwrites any previous file with the same name in the default location.

4 In Page Range, select the page range and choose OK.

- **5** In Save as PDF (*.pdf), in Save as Adobe PDF (*.pdf), type a file name for your document and select a location. Choose Save. The document opens in Adobe Acrobat Reader.
- **6** To print the file, from the File menu, choose Print.
- **7** Select your print options. Choose OK.

When you export bar charts and line graphs to a PDF file, Actuate e.Analysis sets the scale range for the charted data. The scale range changes to present a meaningful scale for each set of data.

Saving a cube locally for offline viewing

You can save a cube locally on your computer's hard disk, which enables you to work offline without the need for a network or an Internet connection. BIRT iServer System saves the title of the view on the web server. When you work offline, the main title resets to the maintitle parameter contained in your HTML file.

How to save a cube locally



- 1 On the toolbar, choose Save→Work Offline.
- **2** In Save Offline, type a name for your cube in File name. Choose Save. The cube opens in a fresh browser window. The address bar shows the location of the saved cube.
- **3** To quickly access the cube in the future, bookmark the cube in your browser window.

Sending cube reports by e-mail

You can send a cube report via e-mail to a person or group of people. The cube report contains the current table, chart, or graph, and is delivered as a document attached to an e-mail message. The send mail feature is available only if your machine has the following applications:

- Microsoft Internet Explorer with Microsoft JVM enabled
- Microsoft Outlook as the e-mail client with MAPI enabled

How to send a report



- 1 On the toolbar, choose Collaborate→Send report through mail client. Select from the following report formats:
 - PDF

- Word
- Excel
- Tab-Separated Values
- Comma-Separated Values
- **2** In Page Setup, select page setup options. Choose OK.
- **3** In Message, in your e-mail, type your e-mail address.
- 4 In To and CC, type the e-mail addresses of the people to whom you want to send the report.
- **5** In Subject, type an appropriate subject for your message.
- **6** Type a message to send with the report.
- **7** Choose Send. The report is sent to the e-mail addresses listed.

Customizing e.Analysis

This chapter contains the following topics:

- About customizing e.Analysis
- Customizing a performance index calculation
- Locating the branding kits
- Customizing the About box
- Understanding Actuate e. Analysis localization limitations
- Localizing the user interface
- Unsupported changes

About customizing e.Analysis

This chapter describes how a BIRT iServer System administrator can customize Actuate e.Analysis by completing the following tasks:

- Customizing a performance index calculation
- Customizing the About box
- Localizing the user interface

A BIRT iServer System administrator can also customize the initial view of Actuate e.Analysis by showing or hiding toolbar buttons, setting default user preferences, and replacing occurrences of the Actuate product name with a different product name in the browser window and applet title bars. For more information about specifying Actuate e.Analysis display settings, see Configuring BIRT iServer.

Customizing a performance index calculation

The performance index function compares the value of each cell to the other cells in a table. A BIRT iServer System administrator can enable or disable the performance index calculation by modifying the experience levels file for one or more of the following applications:

- Information Console
- Management Console

How to customize a performance index calculation

- 1 In a text editor that supports UTF-8 encoding, open experience.levels:
 - For Information Console, to customize the /iPortal context root, open \Program Files\Actuate11\iPortal\iportal\eanalysis\experience.levels.
 - For Management Console, to customize the /acadmin context root, open \Program Files\Actuate11\iServer\servletcontainer\mgmtconsole \eanalysis\experience.levels.

experience.levels contains the following code:

```
<?xml version="1.0" encoding="UTF-8"?>
  <EXPERIENCE LEVELS xmlns:xsi="http://www.w3.org/2001</pre>
        /XMLSchema-instance">
     <NUMBER OF LEVELS>1</NUMBER OF LEVELS>
     <DEFAULT EXPERIENCE LEVEL>1</DEFAULT EXPERIENCE LEVEL>
     <EXPERIENCE LEVEL>
```

2 To enable Performance Index calculation, remove the following line from the code:

```
<hIDEITEM>PERFORMANCE INDEX</hIDEITEM>
```

- **3** Save the file.
- **4** To view the change, clear the browser cache and close all browser instances before you start another applet.

Locating the branding kits

To customize the About box and localize Actuate e.Analysis, you work with the following branding kits:

Sun Microsystems JDK 1.4.1 or later

The Sun JDK is available at the following URL:

```
http://java.sun.com/products/
```

Microsoft Cabinet Software Development Kit

The Microsoft Cabinet Software Development Kit is available at the following URL:

```
http://msdn.microsoft.com/library/default.asp?url=/library
/en-us/dncabsdk/html/cabdl.asp
```

Customizing the About box

When you enable Actuate e.Analysis Option for BIRT iServer System, the About box looks like the one in Figure 5-1.

A BIRT iServer System administrator can change some information that appears in the About box, using the following resources:

- AboutBox.properties, which is in resource.jar and resource.cab
- The Sun Microsystems jar.exe utility, which is in \JDK1.4.1\bin

cabarc.exe, which is part of the Microsoft Cabinet Software Development Kit

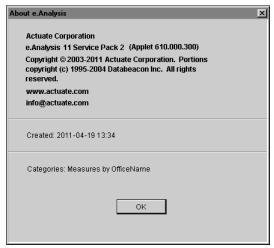


Figure 5-1 The About box

Table 5-1 contains a list of the properties of the About box and indicates which properties you can set using resource.jar, resource.cab, and the applet variables.

Table 5-1 Setting properties to customize the About box

Property	Customize using resource.jar and resource.cab	Customize using an applet variable
Title bar (About box)	Yes	No
Company Name	Yes	No
Product Name	Yes	No
Version	Yes	No
Copyright	Yes	No
OEM Copyright year	Yes	No
Web Site/Contact Info	Yes	No
Email	Yes	No
Date Created	No	Yes
Description	No	Yes

How to customize the About box

1 Copy resource.jar and resource.cab from the following locations:

- For Management Console that uses Apache Tomcat for Actuate Information Console service, resource.jar and resource.cab are in \Program Files\Actuate11\iServer\servletcoontainer\mgmtconsole \eanalysis.
- For Information Console, resource.jar and resource.cab are in \Program Files\Actuate11\iPortal\iportal\eanalysis.
- **2** Paste resource.jar and resource.cab in C:\Temp.
- **3** Modify the string values for the About box:
 - 1 Choose Start→Programs→Command Prompt.
 - **2** Change directory to C:\Temp.
 - 3 At the command prompt, type: <path to jdk>\bin\jar.exe xvf resource.jar
 - 4 Open C:\Temp\com\in\databeacon\resources\AboutBox.properties in a text editor, such as Notepad.

AboutBox.properties contains the keys and string values, as shown in Table 5-2.

Table 5-2 Modifying AboutBox.properties to customize the About box

Key name	Default string value	Description
CUSTOMIZED_COMPANY_NAME	Actuate Corporation	Company name in About Box.
CUSTOMIZED_PRODUCT_NAME	e.Analysis	Product Name in About Box.
CUSTOMIZED_TITLE_BAR	Actuate e.Analysis	About box title bar text.
CUSTOMIZED_RELEASE_NUMBER	11 Service Pack 2	Product release number.
CUSTOMIZED_COPYRIGHT_YEAR	2003-2011	Copyright year in copyright message.
CUSTOMIZED_WEB_ADDRESS	www.actuate.com	Company web address.
CUSTOMIZED_EMAIL_ADDRESS	info@actuate.com	Company e-mail address.
CUSTOMIZED_COPYRIGHT		Company copyright. Actuate and Databeacon copyrights should always appear after this message.
CUSTOMIZED_EXPORT_FILENAME	eanalysis	Default export file.
CUSTOMIZED_TITLE_OFFSET	2	Offset of the title bar text from the left side of the box.

- 5 To customize the About box text, modify the string values. Do not change the key names.
- 6 Save the customized AboutBox.properties file in the \com\in \databeacon\resources directory.
- **4** To create new JAR and CAB files:
 - To create a new JAR file, at the command prompt, type:

```
<path_to_jdk>/bin/jar.exe cvf resource.jar
  com\in\databeacon\resources\*.properties
```

■ To create a new CAB file, at the command prompt, type:

```
<path_to_cab_utility>/cabarc.exe -r -p -s 6144 n resource.cab
com\in\databeacon\resources\*.properties
```

- **5** Copy the customized resource.jar and resource.cab files and paste them in the appropriate installation directories from which you copied them in step 1.
- **6** To view the changes in AboutBox.properties in a web browser, you must close and restart the browser.

Understanding Actuate e.Analysis localization limitations

Before you begin the process of localizing the user interface for Actuate e.Analysis, you should review the following localization limitations:

- You cannot use a comma as the decimal separator in the Filter by Value dialog box with the French numeric format.
- Multilingual data is not always displayed correctly in dialogs.
- The following languages are not supported:
 - Arabic
 - Hindi
 - Hebrew
 - Farsi
 - Urdu
 - Japanese Gaiji
- Asian character input is supported only with the Microsoft virtual machine.
- Subcategory names cannot be sorted if they contain non-Latin 1 characters.

- If the About box uses a localized date format and you build the cube on a BIRT iServer System running in a different locale, the About box displays the date using US English format.
- The workstation locale setting determines the fonts available for display. For example, if the report contains Chinese characters, you must set the workstation locale to Chinese to display these characters correctly.
- Right to left character display is not supported.
- If the JVM runs on a Solaris platform or a Sun VM runs on a Microsoft Windows platform, Thai dates use the Buddhist calendar, not the Gregorian calendar.

Localizing the user interface

A BIRT iServer System administrator can customize Actuate e.Analysis to display localized strings in the user interface. A BIRT iServer System administrator can set the user interface to display the following languages:

- English (United States)
- French
- German
- Indonesian
- Japanese
- Korean
- Simplified Chinese
- Spanish
- Thai
- Traditional Chinese

To localize or customize the strings, modify the files that are listed in Table 5-3. These files are in resource.jar and resource.cab.

Table 5-3Localized string files

Language	Localized string file name	
English (United States)	StringBundle_en_US.properties	
French	StringBundle_fr_FR.properties	
German	StringBundle_de_DE.properties	
		(continues)

Table 5-3 Localized string files (continued)

Language	Localized string file name
Indonesian	StringBundle_id_ID.properties
Japanese	StringBundle_ja_JP.properties
Korean	StringBundle_ko_KR.properties
Simplified Chinese	StringBundle_zh_CN.properties
Spanish	StringBundle_es_ES.properties
Thai	StringBundle_th_TH.properties
Traditional Chinese	StringBundle_zh_TW.properties

How to localize the user interface

You need access to the Sun Microsystems jar.exe utility and Microsoft Cabinet Software Development Kit to complete this procedure.

- 1 Copy resource.jar and resource.cab from the following locations:
 - For Management Console that uses Apache Tomcat for Actuate Information Console service, resource.jar and resource.cab are in \Program Files\Actuate11\iServer\servletcontainer\mgmtconsole\eanalysis.
 - For Information Console, resource.jar and resource.cab are in \Program Files\Actuate11\iPortal\iportal\eanalysis.
- **2** Paste resource.jar and resource.cab in C:\Temp.
- **3** Modify the string bundle files:
 - 1 At the command prompt, change directories to C:\Temp.
 - 2 At the command prompt, type:

```
<path to jdk>\bin\jar.exe xvf resource.jar
```

3 Using a text editor, modify the string bundle files.

If your modifications include characters that are encoded with more than one byte, such as Chinese and Japanese, you must convert the native encoding to an encoding that is compatible with Actuate e.Analysis.

To convert the encoding, use native2ascii.exe, which is available as part of the Sun Microsystems JDK at the following URL:

http://java.sun.com/products/

- 4 To customize the string bundle files, modify the string values. Do not change the key names.
- 5 Save the customized string bundle files in \com\in\databeacon \resources directory.

Follow Actuate's naming conventions when you save the string bundle:

StringBundle_<languageCode>_<countryCode>.properties where

- <languageCode> is a valid ISO Language Code. These codes are lowercase, two-letter codes as defined by ISO-639.
- <countryCode> is a valid ISO Country Code. These codes are uppercase, two-letter codes as defined by ISO-3166.
- **4** Create new JAR and CAB files:
 - To create a new JAR file, at the command prompt, type:

```
<path_to_jdk>/bin/jar.exe cvf resource.jar com\in
\databeacon\resources\*.properties
```

■ To create a new CAB file, at the command prompt, type:

```
<path_to_cab_utility>/cabarc.exe -r -p -s 6144 n resource.cab
com\in\databeacon\resources\*.properties
```

- **5** Copy the customized resource.jar and resource.cab files and paste them in the installation directories from which you copied them in step 1.
- **6** To view the changes in AboutBox.properties in the web browser, close the browser, then restart it.

Unsupported changes

Actuate does not support changes to the following information:

- Copyright information in the About box
- The security warning message, as shown in Figure 5-2



Figure 5-2 Security warning message

Index

Symbols () (parentheses) in expressions 23 * (asterisks) characters 47 / (slash) characters 47 \ (backslash) characters 47 # (number signs) in cells 40 % directive 41, 42 % Growth command 48 % of column total option 50 % of grand total option 50 % of row total option 50 + control 44 - (hyphen) characters 47 - control 44	average function 46, 48 averages 48 axis defaults 13 axis labels See also labels filtering on 26, 27 searching on 27 selecting 16, 17, 18 axis subcategories. See subcategories B backslash (\) characters 47 balloon help 18 bar charts See also charts
Numerics 2D charts 39 3D charts 39 A About box 41, 63–66, 69 AboutBox.properties file 65 accessing context menus 15, 18 e.Analysis 2, 6, 8 queries 8 addition operations 47	displaying percentages in 50 exporting 57, 59 navigating through 16, 17 setting preferences for 39, 40 bar height 17 blank columns or rows 33 Blanknav.html 7 bookmarks 59 branding kits 63 browsers. <i>See</i> web browsers build numbers 41 buttons 13
addressing e-mail 60 administrators 62 Adobe Acrobat Reader 56, 58 Always option 6 analysis view 16 Analysis View button 16 Analyze Results button 6 analyzing data 2, 12, 16, 45–52 AND keyword 23 Apache Tomcat for Actuate Information Console service 65, 68 applying filters 22, 22–27 arithmetic mean 48 asterisks (*) 47 Average command 48	cab files 64, 66, 67, 68, 69 cabarc.exe 64 cache 7 Calculate command 48 Calculate menu 48 calculations 45–52 default precision for 47 editing functions for 49 null values and 47 Cancel filter command 36 Cancel hiding command 32 Cancel pattern filter command 27 Cancel sorting command 21

Cancel value filter command 24	exporting 57, 59
canceling data filters 27	hiding data for 31
canceling sort operations 21	labeling data points in 40
case-sensitive filters 27	navigating through data in 16, 17, 18
Case-sensitive option 27	plotting values for 47, 50
categories	printing 56
applying filters to 12	saving 56
clearing data filters for 24	selecting style 38
collapsing/expanding 32	selecting type 16, 17, 18
defined 12	setting preferences for 39–40
display restrictions for 22	sorting restrictions for 19
displaying 13, 28–30	viewing balloon help for 18
editing data filters for 27	viewing percentages in 50
editing functions in 49	clearing data filters 24, 25
expanding 15	Collaborate button 59
filtering data in 22, 23, 24, 26	Collapse command 15, 33
overview 12	collapsing data 15, 33
pivoting 30	colors 52
removing functions from 50	column headings 41
replacing 28	column-categories variable 41
searching for 27	columns
viewing hierarchy of 44	See also fields
viewing multiple 12, 29	applying functions to 47
viewing subcategories of 12	changing order of 20
viewing subsets of data in 31	comparing subcategories for 16, 17, 18
viewing trends 12	data categories and 12
category bar 12, 24	displaying blank values in 34
category labels	displaying categories on 28–30
See also labels	displaying category hierarchies for 45
adding 44	displaying leading/trailing totals 42-43
filtering on 25, 26, 27	displaying subcategories 15
moving 28, 29	displaying totals as percentages in 50
searching on 27	displaying zero values in 35, 36
changes, undoing 14, 45	expanding 19
changing	exporting functions for 57
data filters 27	filtering on 23, 24
defaults 42	referencing subcategories in 47
numeric formats 49	resizing 14, 40
security levels 7	searching on 4, 5
sort order 20, 21	sorting on 19–20
views 13, 15	suppressing blank 33–35
character filters 26	suppressing zero values in 35, 36
character searches 27	swapping 30
characters 47, 58, 68	columns axis labels 17, 18
charts	See also category labels
See also specific type	columns axis subcategories. See subcategories
displaying 16	Columns command 34, 43

command buttons (menus) 14	customizing 38, 42
comma-separated text files 56, 58, 60	customizing sort operations for 22
company names 42, 64, 65	displaying 2, 12, 13, 16, 38
company-name variable 41	expanding levels of 32
comparisons	exporting 56–59
applying exception highlighting to 52	grouping 12, 31
chart types and 16, 17, 18	hiding 31, 33, 35
multiple categories and 12	highlighting exceptions 52
multiple fields and 4	overview 28
selecting functions for 45–52	replacing categories of 28
subcategories and 16	resizing cells for 40
compressed files 12	searching for 4, 27
connections 59	selecting range of values for 48
context menus 15, 18	sorting 19–22, 51
copying resource files 64, 66, 68	summarizing 12, 43
copyright information 64, 65, 69	undoing changes to 45
country codes 69	viewing details of 15
CSV files 56, 58, 60	viewing subsets of 31
cube reports	viewing summary information for 15
displaying 3	viewing trends 12
saving 58	data categories. <i>See</i> categories
searching 4–5	data cubes
sending by e-mail 59	applying exception highlighting to 52
setting preferences for 42	collapsing levels in 33
viewing offline 59	creating axis of 12
cube-name variable 41	default view for 13
cubes. See data cubes	displaying 41
currency filters 23	executing queries for 9
current-view variable 41	expanding levels in 32
Custom command 22	filtering in 22, 23, 24, 26
Custom option 21	hiding subcategories in 31, 33, 35
Custom Sort dialog 20, 21, 22	opening in new windows 41
Custom sort option 20	overview 12
customizing	pivoting categories in 30
About box 63–66	resizing subcategories in 40, 44
data 38, 42	saving 59
e.Analysis 62, 63, 69	selecting subcategories in 31
sort operations 22	setting preferences for 33, 35
title bars 41, 62, 65	suppressing blank values in 33–35
11, 02, 00	suppressing zero values in 35–36
D	viewing categories in 12, 28–30
_	viewing data in 12, 15, 16
data	data filters
See also data cubes	applying to multiple categories 12
analyzing 2, 12, 16, 45–52	canceling 27
applying performance indexes to 51, 62–	changing 27
63	clearing 24
	Cicumia 21

data filters (continued)	spreadsheets 57, 58
default views and 13	subcategories 12, 15
entering criteria for 23	summary information 15
resetting 25	truncated values 40
setting 22–27	zero values 35, 36
sorting with 22	Disregard hierarchy preference 22
data ranges 22, 48	division by zero 47
data variable 41	document files
date-created variable 41	exporting to 57–59
dates 32	documents
decimal places	See also cube reports
default 47	attaching to e-mail 59
setting 49	exporting to Microsoft Word 56, 57
decimal separators 49	sending Microsoft Word 60
default views 13, 62	viewing PDF 58
defaults	downloading branding kits 63
changing 42	drill controls 44
restoring 36, 42	diffi controls 11
Delete calculation command 50	E
deleting	-
functions 50	e.Analysis
delimited text files 56	analyzing data with 12
deploying cube reports 59	canceling sort operations for 21
description variable 41	canceling value filters 24
deviations 19, 20	changing About box for 63
Difference command 48	changing defaults for 42
difference function 46, 48	changing security levels for 7
display options 38, 42	customizing 62, 63, 69
	data groupings for 12
displaying	disabling security warnings for 6
balloon help 18	disabling software messages for 7
blank columns or rows 34	displaying balloon help for 18
categories 13, 28–30	interface described 13
category hierarchies 44	launching 2, 6, 8
chart legends 16 charts 16	limitations of 66
	localizing user interface for 67
cube reports 3	opening new windows for 41
data 2, 12, 13, 16, 38 data cubes 41	opening search windows for 4
data subsets 31	overview 2, 13, 38
a	restarting 42
tunctions 47	restoring defaults for 36, 42
hidden subcategories 32	views described 16
leading/trailing totals 42–43	e.Analysis application
multiple rows 30	overview v
PDF documents 58	e.Spreadsheet reports 56
percentages 18, 50	See also spreadsheets
query results 10 search results 12	Edit calculation command 49
Search results 12	

Edit pattern filter option 27 editing. <i>See</i> changing editors 58, 62, 65 e-mail entering address in About box 64, 65 sending cube reports as 59 empty columns or rows 33 empty data fields 47 encoding 68 Encyclopedia volumes	file names 56, 58 files attaching to e-mail 59 copying resource 64, 66, 68 creating properties 66 exporting to 57–59 overwriting 58 setting default export 65 fill colors 52 Filter by pattern command 26
opening cube reports in 2	Filter by Pattern dialog 26
error messages 47	Filter by value command 23
Excel spreadsheets	Filter by Value dialog 23
displaying 57	filter icon 24, 25, 27, 33
exporting to 56–57	Filter out blank values command 34
sending as e-mail 60	Filter out zero values command 36
exception highlighting 52	filters
Exception Highlighting dialog 52	applying to multiple categories 12
executing queries 9	canceling 27
Expand to level command 15, 32	changing 27
Expand to level list 25	clearing 24
expanding data categories 15, 32	default views and 13
experience levels 62 experience.levels files 62	entering criteria for 23
experience levels mes 62 export files 65	resetting 25 setting 22–27
exporting data 56–59	sorting with 22
limitations for 56, 57, 58	filters variable 41
expressions	Find command 27
filtering with 23, 27	Find dialog 27
restrictions for 23	Find Next command 28
suppressing blank values with 33	finding data 4, 27
suppressing zero values with 35	fit to page options 40
	floating point numbers 23
F	fonts 2, 52
fields	footers 41
See also columns	forecasting 18
applying filters to 23, 24, 26	formats
categorizing distinct entries for 12	changing 49
clearing data filters for 24	e-mail attachments and 59
editing data filters for 27	selecting number 49
entering in functions 47	functions
hiding empty values in 33	analyzing data with 45–52
hiding zero values in 35	default views and 13
searching specific 4, 5	deleting 50
sorting data in 19, 21	exporting 57
truncated values in 40	

generating PDF documents 58 reports for offline viewing 59 grand totals 50 graphic views 2 graphical user interfaces 62, 67 graphs. See charts; line graphs gray bars in cells 40 gridlines 44 grouping data 12, 31 GUIs 62, 67	Internet Explorer changing cache settings for 7 changing security levels for 7 removing blank windows for 7 iServer 2 J jar files 64, 66, 67, 68, 69 jar.exe utility 63 K keyboard shortcuts 31, 48
Н	L
hand cursor 4 headers 41, 42 help 18 Hide selected command 31, 32 Hide unselected command 31, 32 hiding blank values 33–35 chart legends 16 data 31, 33, 35 drill controls 44 gridlines 44 subcategories 31	labels e.Analysis views 13 filtering on 25, 26, 27 highlighting 52 moving 28, 29 resizing subcategories for 44 searching on 27 selecting 16, 17, 18 setting preferences for 39, 45 language codes 69 language settings 3, 67 launching e.Analysis 2, 6, 8
zero values 35–36 Hierarchical preferences 44, 45 Highest to lowest command 20, 21	leading totals 42,43 legends 16 licensing keys 2
Highest to lowest option 19, 21 highlight line 29 highlighting data 52	Line Graph button 16, 38 line graphs
Home button 14, 36, 42 Horizontal Bar Chart button 16, 38	displaying percentages in 50 exporting 57,59 labeling data points in 40
horizontal bar charts 17 See also bar charts	navigating through 18 setting preferences for 40
Horizontal fit to page button 14, 40 hyphens (-) 47	links 3, 5 Loading Software messages 7 locales
Information Console 62 accessing Encyclopedia from 3	converting multi-byte encoding for 68 displaying data for specific 2 exporting and 56
customizing context roots for 62 customizing e.Analysis for 65, 68 opening saved queries from 8	selecting language settings for 3 specifying language settings for 67 localizing e.Analysis 67 locating data 4, 27

login pages 2, 8 Lowest to highest command 20, 21 Lowest to highest option 19, 21 M mail. See e-mail Main Title bar. See title bars Management Console	offline viewing 59 opening comma-separated files 58 cube reports 2 multiple views 41 saved queries 10 search windows 4
customizing context roots for 62 customizing e.Analysis for 65, 68 Maximum Value command 48 maximum value function 46 measure variable 41 measures category 12, 43 menus accessing context 15, 18 selecting commands 14	tab-separated files 58 operating systems 2 operators 23, 47 options 38, 42 OR keyword 23 output document 10 overwriting report files 58
Message dialog 60 messages 6, 7, 56, 69 See also e-mail Microsoft Cabinet SDK 63, 64 Microsoft Excel. See Excel spreadsheets Microsoft Word documents 56, 57, 60 Minimum Value command 48 minimum value function 46 moving labels 28, 29 multibyte characters 68	page footers 41 page headers 41, 42 parentheses in expressions 23 passwords 3 patterns 26 PDF files attaching to e-mail 59 exporting to 56, 58 saving reports as 41 Percent of total command 48
naming conventions 69 nan value 33 native2ascii.exe 68 network administrators. See administrators New window button 41 nonnumeric fields 4 NOT keyword 23, 47 null values 47 numeric fields 12 numeric fields 12 numeric formats changing 49 selecting 49 numeric searches 4 numeric values 12, 18, 39, 43, 47 See also values	percent of total function 46 percentage growth function 46, 48 percentages 17, 39, 48, 50 displaying as numbers 18 Performance Index command 51 performance index function 46, 51 performance indexes 62–63 PERFORMANCE_INDEX value 63 Pie Chart button 16, 38 pie charts See also charts displaying data in 18 displaying numeric values for 18 hiding data for 31 labeling sections in 39 limiting number of slices 39 setting preferences for 39, 40 sorting restrictions for 19 Pie Slices preference 39

pivoting categories 30	resizing
plug-ins 57, 58	chart legends 16
pound signs in cells 40	columns 14, 40
precedence 23	rows 14
precision 47	subcategories 40, 44
preferences	views 40
restoring defaults 36, 42	resource files 64, 66, 68
setting chart 39–40	restoring defaults 36, 42
setting cube 33, 35, 42–45	Rich Text Formats 56
presentation view 16	rounding 47
Presentation View button 16	row-categories variable 41
printing 56, 59	rows
product names 62, 64, 65	applying functions to 47
product-name variable 41	changing order of 19
properties 64	comparing subcategories for 16, 17, 18
properties files 66, 67	data categories and 12
r r	displaying blank values in 34
Q	displaying categories on 28–30
	displaying category hierarchies for 45
queries	displaying leading/trailing totals 43
accessing e.Analysis from 8,9	displaying multiple 30
opening saved 10	displaying subcategories 15
running 9	displaying totals as percentages in 50
saving results 10	displaying zero values in 35, 36
query files 8	expanding 19, 40
D	exporting functions for 57
R	filtering on 23, 24
raised move handle 28, 29	referencing subcategories in 47
range of values 22, 48	resizing 14
Ratio command 48	sorting on 20–21
ratio function 46, 48	suppressing blank 33–35
ratios 48	suppressing zero values in 35, 36
records. See rows	swapping 30
Redo button 45	rows axis labels 16, 18
redoing changes 45	See also category labels
relationships 2, 12, 22	rows axis subcategories. See subcategories
release numbers 65	Rows command 33, 43
removing. See deleting	RTF files 41, 56, 57
renaming views 42	running queries 9
replacing categories 28	ranimiz queries
report files	S
attaching to e-mail 59	
overwriting 58	Save as Microsoft Excel icon 56
reports. See cube reports	Save as Microsoft Word command 57
reserved characters 47, 58	Save as PDF dialog 59
resetting data filters 25	Save as Separated Values dialog 58
Resize label width preference 44	Save Offline dialog 59

saving	exporting to 56–57
charts 56	sending as e-mail 60
cube reports 58	stacked bar charts 17
data cubes 59	See also bar charts
queries 10	starting e.Analysis 6, 8
string bundle files 69	string bundle files 68
Search icon 4	subcategories
search results 12	analyzing in charts 16, 17, 18
search windows	applying filters to 22
launching e.Analysis from 6	canceling filters for 27
opening 4	canceling sort operations on 21
searching 4–5, 27	changing filters for 27
security warnings 6, 7, 56, 69	choosing multiple 31
Send report command 59	collapsing 15, 33
sending e-mail 59	comparing 16
setting preferences 39, 42–45	defined 12
Show 3D visual effect preference 39	deselecting 31
Show blank columns preference 34	editing functions in 49
Show blank rows preference 33, 34	entering in expressions 23
Show category hierarchy preference 45	expanding 15
Show cell value option 50	filtering on 23, 24, 26
Show cell values with command 51	getting lowest/highest 22
Show Data as command 50	grouping 31
Show data values as preference 39	hiding 31, 33, 35
Show Expand and Collapse controls	referencing in functions 47, 49
preference 44	removing filters 25
Show grid lines preference 44	removing functions from 50
Show highest 10 option 19, 21	resizing 40, 44
Show labels preference 39, 45	searching for 27
Show lowest 10 option 19, 21	selecting 31
Show matching option 27	setting chart preferences for 39
Show radio buttons 22	sorting on 19, 20, 22
Show rows with all zeros preference 35, 36	sorting restrictions for 22
Show Save as dialog 58	suppressing blank values in 34
Show totals preferences 43	viewing hidden 32
slash (/) characters 47	subcategory labels
Sort command 19, 20	See also labels
sort options 19, 20	adding 44
sort order	filtering on 26
changing 20, 21	selecting 16, 17, 18
specifying 22	Submit non-encrypted data message 8
Sort radio buttons 22	subsets (data) 31
sorting arrow 20, 21	subtitles 41
sorting data 19–22, 51	subtraction 48
special characters 47, 58	Sum command 48
spreadsheets	sum function 46
displaying 57, 58	summarizing data 12, 43

Sun Microsystems JDK 63	user preferences. See preferences
suppressing blank columns or rows 33–35	V
zero values 35–36	values
Swap rows and columns command 30	See also data
swapping rows and columns 30	appearing as gray bars 40
symbols 47	applying exception highlighting to 52
system administrators. See administrators	averaging 48
system settings 2	calculations and null 47
_	categorizing distinct entries for 12
T	customizing sort operations for 22
table 16, 40, 42	displaying blank 34
Table button 16, 38	displaying cell 50
table view	displaying performance indexes with 51
restoring initial 14	displaying zero 35, 36
tab-separated text files 56, 58, 60	getting lowest/highest 22
text 41	resizing cells for 40
text editors 58, 62, 65	rounding 47
text fields 12	searching for 4, 27
text files 56, 57, 58, 59	selecting range of 48
text searches 4	sorting highest to lowest 20, 21
thousands separators 49	sorting lowest to lowest 20, 21
3D charts 39	specifying range of 22
time stamps 3	suppressing blank 33–35
time zones 3	suppressing zero 35–36
title bars	variables 41, 42
adding variables to 41, 42	version information 64
customizing 41, 62, 65	version variable 41
setting offset for 65	Vertical Bar Chart button 16, 38
shown 13	vertical bar charts 16
toolbars 13	See also bar charts
totals 42, 43, 47, 50	Vertical fit to page button 14, 40
trailing totals 42, 43	viewing
trends 2, 12, 18, 19, 20	balloon help 18
truncated values 40	blank columns or rows 34
TSV files 56, 58, 60	
2D charts 39	category biographies 44
2D Charts 3)	category hierarchies 44 chart legends 16
U	charts 16
Undo button 45	cube reports 3
undoing changes 14, 45	data 2, 12, 13, 16, 38
URLs 2,8	data cubes 41
creating for Information Console 2, 8	data subsets 31
user interfaces 62	functions 47
localizing 67–69	hidden subcategories 32
user names 3	leading/trailing totals 42–43

multiple rows 30 PDF documents 58 percentages 18, 50 query results 10 search results 12 spreadsheets 57, 58 subcategories 12, 15 summary information 15 truncated values 40 zero values 35, 36 views changing 13, 15 choosing specific 16 collapsing data categories for 15 customizing 41 default 13 displaying hidden categories in 32 displaying multiple categories 12, 29 expanding data categories for 15 features described 13 hidden subcategories and 33 hiding subcategories in 32 opening multiple 41 renaming 42 resizing 40 resizing columns and rows in 14 restoring defaults for 36, 42

restoring previous 14
selecting chart styles for 38
setting display options for 38
setting preferences and 33, 35
setting preferences for 40, 42
undoing/redoing actions in 45
volume administrators. See administrators

W

warnings 6, 7, 56, 69
web addresses 64, 65
web browsers
bookmarking reports 59
changing cache settings for 7
changing security levels for 7
customizing views for 62
displaying cube reports with 2
exporting and 56
spreadsheet plug-ins and 57, 58
Word documents 56, 57, 60
Work Offline option 59

Z

zero values 33, 35 zip codes 47