## Contents

*About This Document* ................................................................. v


### Chapter 1 • Publishing SAS Web Report Studio Reports to Roambi Views

- Overview of Publishing Reports .................................................. 2
- Overview of Roambi Views ............................................................ 2
- Before You Begin ........................................................................ 8
- Start the Roambi Publisher .......................................................... 10
- Publish a Report to a Roambi View ............................................. 10
- Modify a Published Report .......................................................... 13
- Options for Refining a Report ...................................................... 14
- Specify an Expiration Time for a Report ........................................ 20
- Recall a Published Report ............................................................ 21
- Example Report That Uses the Elements View ............................ 22
- Example Report That Uses the CataList View and Has Two Report Sections 25

### Chapter 2 • Viewing Published Reports on a Mobile Device

- Overview of Viewing Reports on a Mobile Device ......................... 33
- About Recalled and Expired Reports ........................................... 34
- Software and Hardware Requirements for Viewing Reports ............ 35
- Overview of the Roambi Visualizer Interface ............................... 35
- Establish a Connection to the Roambi Server ............................... 37
- Download a Report ................................................................. 38
- View a Report ........................................................................... 39
- Refreshing a Report ................................................................. 40
- Tips for Viewing Report Objects ............................................... 40

### Appendix 1 • Refresh Options for Reports

### Index
About This Document

Audience

Roambi ES for SAS integrates Roambi ES with the SAS Enterprise BI Server. Roambi ES for SAS transforms SAS Web Report Studio reports into Roambi (RBI) files, which can be downloaded to compatible mobile devices.

This document first describes how to publish SAS Web Report Studio reports as Roambi files. The document also describes how to view those reports on the device.

The following list summarizes each section of the document and states the intended audience:

- **Chapter 1, “Publishing SAS Web Report Studio Reports to Roambi Views,” on page 1** describes how to publish SAS Web Report Studio reports as Roambi files.

  The audience for this section is the SAS Web Report Studio designer. Designers must be familiar with report structure and features in order to determine the best Roambi view to use for a report. Designers can also manipulate the report structure when they refine the report.

- **Chapter 2, “Viewing Published Reports on a Mobile Device,” on page 33** describes how to view published reports on a mobile device.

  The audience for this section is anyone who wants to view the reports.

- **Appendix 1, “Refresh Options for Reports,” on page 49** explains how reports are refreshed on the mobile device.

  The audience for this section is anyone who wants to know details about the report refresh options.
About This Document
What’s New in Roambi ES for SAS 9.2, 9.3, and 9.4

Overview

Roambi ES for SAS integrates Roambi ES4 with the SAS Enterprise BI Server. Roambi ES4 has the following new features and enhancements that are specific to SAS:

- new views
- administrative enhancements
- report publishing enhancements

*Note:* SAS 9.4 no longer supports the same application servers as Roambi ES software. For more information, see the [third-party software reference](#).

This document contains only the information about Roambi ES that is specific to SAS. For complete details about the Roambi ES4 release, see the Roambi release notes that are included with your installation.

New Views

Roambi ES for SAS has the following new views:

- The Layers view provides a comprehensive dashboard view of your data, from the high-level summary to the low-level details.
- The Squares view contains a matrix of colored squares that enable you to quickly see key performance metrics.
- The Pulse view expresses the relationships between key performance indicators (KPIs) over time.

Administrative Enhancements

Roambi ES for SAS has the following administrative enhancements:

- A new administrator's console makes it easy to configure and customize many Roambi features. Some of these features are new, and other features were previously configured in properties files.
• Administrators can temporarily disable a portal.

• Administrators can specify a primary authentication portal. This portal is typically the SAS portal and uses SAS metadata authentication.

• Administrators can specify a theme to be used for Roambi on all devices connected to a portal. Only one theme can be active at a time. Administrators can also specify the logo to display for the portal.

Themes can be created and customized for a variety of different uses. Documentation about themes can be found in the RoambiThemes.zip package that is included with your Roambi installation.

• Administrators can modify the display language for Roambi. Roambi supports the following languages: English, French, German, Italian, Spanish, Brazilian Portuguese, Simplified Chinese, Traditional Chinese, Korean, Japanese, and Russian.

Note: Information about security and administration can be found in the Roambi ES4 Administration Guide that is included with your Roambi installation. For information about administrative features that are specific to SAS, see the Roambi ES for SAS: Installation, Configuration, and Deployment Guide.

Report Publishing Enhancements

When you create and publish Roambi content based on SAS Web Report Studio reports, the following enhancements are available:

• SAS Stored Process report objects are supported.

• A dual axis option is available when you create charts for your report summary cards. When you add a second group to the chart, you can use a second axis to display the group data.

• When you publish a report, you can specify an expiration time for the RBI file. Expiration times can be set in units of weeks, days, hours, or minutes.

• You can recall a published report. When you recall a report, Roambi prevents the report from being downloaded on any device. Roambi also deletes the file from all devices on which it has been downloaded.
Chapter 1
Publishing SAS Web Report Studio Reports to Roambi Views

Overview of Publishing Reports ........................................... 2
Overview of Roambi Views .................................................... 2
About the Cardex View ....................................................... 3
About the CataList View ..................................................... 3
About the Elements View .................................................... 4
About the Layers View ....................................................... 5
About the PieView ............................................................ 5
About the Pulse View ........................................................ 6
About the Squares View ..................................................... 7
About the SuperList View ................................................... 7
About the Trends View ...................................................... 7

Before You Begin ............................................................. 8
Supported and Unsupported SAS Web Report Studio Features ........... 8
Roambi Features Supported in Each View ................................ 9
General Considerations and Restrictions .................................. 9

Start the Roambi Publisher ................................................ 10

Publish a Report to a Roambi View ....................................... 10
Step One: Select a Roambi View and Import a Report .................... 10
Step Two: Refine the Report (Optional) ..................................... 12
Step Three: Publish the Report ............................................. 12

Modify a Published Report ................................................ 13

Options for Refining a Report ............................................. 14
The User Interface for Refining a Report .................................. 14
Main Steps to Refine a Report ............................................. 15
Card Title Tab ................................................................. 15
Chart Options Tab ........................................................... 15
Charts Tab ...................................................................... 15
Global Settings Tab .......................................................... 16
Key Column ................................................................. 16
Layout Tab ................................................................. 17
List Layout Tab ............................................................ 18
Options Tab ................................................................. 19
Periods ................................................................. 19
Pie ................................................................. 19
Pie Values .............................................................. 19
Swipe Tab ................................................................. 19
Tab Title Tab ............................................................ 19
Titles Tab ................................................................. 19
Overview of Publishing Reports

Roambi ES for SAS enables you to create Roambi content based on SAS Web Report Studio reports. The results are interactive charts and graphs that can be viewed on selected mobile devices. You use a straightforward process to import report data into one of several Roambi views. During this process, you can refine the view by changing titles, grouping data, changing the color scheme for graphics, and more. The final report is published as a Roambi (RBI) file.

To create and publish reports, you use the Roambi Publisher, which is included with Roambi ES for SAS. You should be knowledgeable about report structure and features in order to determine the best Roambi view to use for a report. You can also manipulate the report structure when you refine the report.

A batch utility is also available for updating or creating RBI files with new source data. Based on which arguments you use, you can replace an RBI file or create a new file. The new file can be in the current repository or in a different SAS Metadata Repository (Roambi Publisher calls these enterprise portals). For more information about the batch utility, see the Roambi ES4 Administration Guide that is included in your Roambi installation.

See Also

- “Software Required to View Reports on a Mobile Device” on page 35
- “Supported Mobile Devices” on page 35

Overview of Roambi Views

A Roambi view is a template that produces a defined presentation of data. All views are suitable for SAS Web Report Studio list tables and crosstabulation tables. Graphs can also be used in some views. The following sections summarize the Roambi views that SAS supports. Each section states which type of report is most suitable for the view and known restrictions for using the view. For general restrictions that apply to multiple views, see “General Considerations and Restrictions” on page 9. When viewed on small devices, such as the iPhone, only one report object can be viewed at a time. Users
can swipe to move from one report object to another. For more information about each of the Roambi views, see the tutorials at http://www.roambi.com/help-resources.html.

**About the Cardex View**

The Cardex view makes it easy to find and access particular information, such as a customer name. Rather than scan rows of data, you can finger through the virtual cards that are organized and tabbed. You can also search the list. The Cardex view supports side-by-side comparison of records (iPad only).

Use the Cardex view when you want to present data grouped by one dimension. That dimension defines the tabs. The Cardex view supports a maximum of 1,200 cards, where each card corresponds to a row in the report table. The view is not suitable for reports that present subtotals and grand totals.

**About the CataList View**

The CataList view provides comprehensive access to your data, from the highest level summary to the lowest level detail of any record. The view contains a summary card that shows the grand total row of the report table. You can drill down into the details from the first-level view. Multiple summary cards can be used to compare the items in your report by any available metric.

The first image below shows high-level sales totals. The second image is obtained by drilling down to the detail for one of the categories. You can view the other categories by using the navigation arrows.
Use the CataList view when you want to present hierarchical information. The view organizes your data into hierarchical, categorized lists that enable you to drill down into the details. You can use group breaks to define the hierarchy.

This view is ideal for list tables and crosstabulation tables. Each break in the vertical axis defines the levels in the CataList view. Crosstabulation tables must contain subtotals for rows, columns, or both. The Roambi software does not compute totals.

The view supports micro charts that compare trends in your list. These can contain growth calculation and trending icons. For an example that shows micro charts, see “Example Report That Uses the CataList View and Has Two Report Sections” on page 25.

**About the Elements View**

The Elements view combines multiple tables, charts, and graphs into a single convenient dashboard. This view is useful for quick ad hoc comparisons and analysis. The Elements view most closely matches the original report.
**About the Layers View**

The Layers view provides a comprehensive dashboard view of your data, from the high-level summary to the low-level details. This view supports up to five layers of data. Examples of layers are country, state, city, and product.

The first image below shows high-level sales data by country. The second image includes individual metrics for a country. You display the individual metrics by swiping from the right side of the screen. You can then scroll through the list of countries to see metrics for each country.

You can also sort the list. For example, you might sort the list so that countries with the highest monthly sales appear at the top. For more information, see “Working with the Layers View” on page 43.

Use the Layers view when you want to present hierarchical information in a convenient dashboard layout. This view is ideal for list tables and crosstabulation tables. Each break in the vertical axis defines the layers in the view. Crosstabulation tables must contain subtotals for rows, columns, or both. The Roambi software does not compute totals.

The view supports micro charts that compare trends in your list. These can contain growth calculation and trending icons. For an example that shows micro charts, see “Example Report That Uses the CataList View and Has Two Report Sections” on page 25.

**About the PieView**

The PieView provides a fully interactive, graphical summary of your data in any defined metric. Users can also conduct side-by-side comparisons of different data and charts (iPad only).
You can rotate the pie in order to view information about a different slice. You can also drill down into details.

Use the PieView when you want to compare numeric values between elements of one dimension. The values must already be summarized for each element of the dimension. The PieView shows up to 10 slices, the top nine items and a special slice called “Others” that groups the other items. You can configure a maximum of 12 PieViews per report.

**About the Pulse View**

The Pulse view expresses the relationships between key performance indicators (KPIs) over time. Chart tiles enable quick comparisons of different metrics, such as sales versus revenue or actual sales versus target sales.

You can apply filters to subset the data that is used in the report. The view also enables you to compare the data based on different metrics. For example, you might compare the number of units sold versus the target sales estimates.
About the Squares View

The Squares view provides a grid heat-map approach to your hierarchical data. The colored squares enable you to quickly see key performance indicators of your business. You can enlarge particular areas of the view and examine individual columns and rows. From the squares, you can drill down to obtain more information.

You can sort the data using default or custom sort criteria and thresholds. The view also enables you to compare the data based on different metrics. For example, you might compare the number of units sold versus the target sales estimates.

For more information, see “Working with the Squares View” on page 44.

About the SuperList View

The SuperList view provides enhanced features for viewing tables. You can navigate through rows while titles remain in place. The SuperList enables sorting, filtering, and column reordering. The view also provides instant charts that enable you to quickly find information.

Use the SuperList view when you need to present tabular information and the input report table has a key column. The key column is the left-most column and is typically an identifier for the row. In the display, the product group is the key column.

About the Trends View

The Trends view provides a dashboard style interface that enables you to track the performance of important metrics over different periods of time. The view uses built-in trend line algorithms that make it especially useful for identifying trends in your data.

The following two displays show sales figures in dollars followed by sales percentages.
Use the Trends view when you need to analyze your key performance indicators across different periodicities. You can produce charts that enable analysis, comparisons, and trends to obtain accurate projections on the data. This view has no limits on data points. For more information about limits that are imposed on the other views, see “General Considerations and Restrictions” on page 9.

**Before You Begin**

This section contains information that is useful to know before you publish your reports as RBI files.

**Supported and Unsupported SAS Web Report Studio Features**

The following table shows which SAS Web Report Studio features are supported when you publish reports to Roambi, and which features are not supported.

<table>
<thead>
<tr>
<th>Supported Features</th>
<th>Features That Are Not Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>list tables</td>
<td>images</td>
</tr>
<tr>
<td>crosstabulation tables</td>
<td>text objects</td>
</tr>
<tr>
<td>graphs</td>
<td>geographical maps</td>
</tr>
<tr>
<td>multiple report objects (tables, graphs)</td>
<td>SAS reports created by the Output Delivery System or any application other than SAS Web Report Studio</td>
</tr>
<tr>
<td>SAS Stored Process objects</td>
<td></td>
</tr>
<tr>
<td>filters</td>
<td></td>
</tr>
<tr>
<td>prompts (not cascaded, not shared)</td>
<td></td>
</tr>
<tr>
<td>data formatting</td>
<td></td>
</tr>
<tr>
<td>sections (only one at a time per Roambi view)</td>
<td></td>
</tr>
<tr>
<td>group breaks</td>
<td></td>
</tr>
<tr>
<td>security, row-level security</td>
<td></td>
</tr>
</tbody>
</table>
**Roambi Features Supported in Each View**

The following table specifies which Roambi features are supported in the individual views. As noted in the table, some features are supported only on iPad devices. In addition, support for some features is qualified for certain views. For example, with the Elements view, the sort feature is supported only for tables.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Cardex</th>
<th>CataList</th>
<th>Elements</th>
<th>Layers</th>
<th>PieView</th>
<th>Pulse</th>
<th>Squares</th>
<th>SuperList</th>
<th>Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookmarks</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Favorites</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Search</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Filter</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sort</td>
<td>No</td>
<td>Yes</td>
<td>Tables</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Two levels</td>
<td>Yes</td>
<td>Tables</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Periods</td>
</tr>
<tr>
<td>Drill down</td>
<td>No</td>
<td>Yes</td>
<td>Tables</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Interactive charts</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Summary cards</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**General Considerations and Restrictions**

**List Tables and Crosstabulation Tables**

Here are some considerations and restrictions for tables:

- Roambi supports up to 999 columns. If your report exceeds this number, you might need to filter the columns by using parameters. For example, if the horizontal axis measures data by year and month, you might filter the query to include only the year. If your purpose is to show a trend, then consider using the Trends view.

- If the report contains summary information, the report must calculate subtotals for rows, columns, or both. Roambi does not calculate subtotals.

**Roambi Charts**

Roambi charts support a maximum of 400 data points. If you need to show trend charts, consider using the Trends view. The Trends view does not limit the number of data points.

**Report Sections**

SAS Web Report Studio reports can have multiple sections. Each section can contain one or more report objects, such as tables and graphs. Multiple sections can be used to present different views of the data.
Roambi supports reports that have multiple sections, but only one section can be applied to a view at a time. If your report has two sections, you must create two views, one for each section.

---

**Start the Roambi Publisher**

1. In your browser, log on to Roambi ES for SAS using the URL provided by your site administrator.

   Enter your user name and password for a user who is defined in SAS metadata. If more than one portal location (metadata repository) is available on the logon page, select the portal to which you want to connect. Most often, you will use the primary authentication portal, which is listed above the other portals.

   An administrator's console appears with one or more of the following tabs. The permissions associated with your user account determine which tabs are available to you.

   ![Tabs]

2. Click the **Roambi Publisher** tab. If the tab is not visible, check with your site administrator to ensure that you have the correct permissions.

---

**Publish a Report to a Roambi View**

Publication is a three-step process, described below. If you need help for any window, you can click '?' at the bottom of the window. In addition, Roambi provides comprehensive user guides, best practices, and use cases on its website at [www.roambi.com/help-resources.html](http://www.roambi.com/help-resources.html).

**Step One: Select a Roambi View and Import a Report**

Before you begin publishing reports, in SAS Management Console, create a folder to contain the published Roambi (RBI) files. This folder must be visible to the users who need to download the reports to their devices. You can create multiple, secured folders for different sets of users.

1. If you have not done so, log on to Roambi ES for SAS and start the Publisher. For more information, see **“Start the Roambi Publisher” on page 10**.

2. From the Roambi Publisher main window, open the type of view that you want to create. Roambi displays a window that contains a description of the view and a link to the best practices for that view.

   **TIP** If this is the first time you are creating this view, it is recommended that you look at the best practices document.

3. Click **Select This View** when you are ready to create the view. The publisher window appears and displays the SAS metadata repository folder tree.

   **Note:** If a logon page appears, enter your user name and password for a user who is defined in SAS metadata. The user must have permissions to see and execute the reports that are to be published. If more than one metadata repository (portal
location) is available, select the repository to which you want to connect. When you are finished, click Login.

The Publisher window contains a navigation bar with buttons for the three stages of publication: importing, refining, and publishing. The button for the current stage is highlighted blue. Once you have imported the data into the view, buttons become available to refine the report and publish the report.

At any time, you can cancel the operation and return to the main Roambi window by clicking the Views button next to the Import button.

4. Navigate the folder tree until you find the report that you want to publish. Select the report.

5. Click Import. The report data is imported into the view.

If the report has prompts, a page appears in which you can specify the prompt values.

If the report contains multiple sections, a page appears in which you can select a section. Roambi views can have only one section. In the following display, the report contains one section, which is labeled Section1 in the left pane.

If the report (or report section) contains more than one report object, select the report objects that you want in the view. Roambi refers to these objects as blocks. A blue background indicates that the block is selected. All blocks are selected by default.

Note: Not all views support multiple blocks. For example, the CataList view accepts only one block. Therefore, only one block is selected by default.

6. Do either of the following:
   - To accept the default selections, click Continue. The report preview appears on the page.
To change the default selections, do the following:

1. Click a block to deselect it. The report object is removed from the report. Clicking the block again reselects it.
2. When the appropriate blocks are selected, click **Apply**.
3. Click **Continue**.

7. If the window displays the **Regroup Data** option, you can select that option to transpose the report’s header data. By default, summary card groups are created based on the data columns. Click the **Regroup Data** button to create groups based on body axis fields.

8. Do either of the following:
   - Click **PUBLISH** to publish the report now.
   - Click **Continue** to refine the report before you publish it.

**Step Two: Refine the Report (Optional)**

If you choose to refine the report, you can control what information is displayed in the summary cards. You can also group data columns, change column labels, change the color scheme for charts, and so on. For more information, see “Options for Refining a Report” on page 14.

You can also refine a report after the report has been published. For more information, see “Modify a Published Report” on page 13.

**Step Three: Publish the Report**

When you publish a report, the report is stored in the SAS metadata folder tree and can be accessed from a mobile device. Roambi provides several options for publishing the report (RBI file).

*Display 1.1  The Publish Window*
The Publish window contains the following tabs:

**Publish Options**

contains the following general publishing options:
- report title and summary.
- optional e-mail addresses for sending the report to one or more recipients.
- whether to e-mail a copy to you.
- whether to include your contact information with the report.
- how the report is updated.
- an optional file expiration time. For more information, see “Specify an Expiration Time for a Report” on page 20.

The Roambi Update list box displays None by default. You have the following options:

- **None**
  The source SAS Web Report Studio report is not executed when the user downloads the RBI file to a device, or anytime after download. For both the device and the Roambi server, the data in the RBI file is the same as when the report was created.

- **Manual Refresh**
  When the device user downloads the RBI file, the source SAS Web Report Studio report is executed with the device user’s credentials. The device has the most recent data, possibly newer than the RBI file in the Roambi server. The device user can also refresh the report to obtain subsequent updates.

- **Auto Refresh**
  When the device user downloads the RBI file, the source SAS Web Report Studio report is executed with the user’s credentials. In addition, the RBI file is refreshed when the user starts the Roambi application and opens the report. The device user can also refresh the report to obtain subsequent updates.

For complete information about how reports are refreshed, see Appendix 1, “Refresh Options for Reports,” on page 49. In addition, that topic contains refresh information for reports that are created in batch mode.

**Change Location**

displays the SAS metadata folder tree. Navigate to the folder where you want to store the report RBI file. The location defaults to the most recently accessed folder, which is the folder from which you selected the source report.

**My Info**

contains personal information, such as name, title, e-mail address, and so on.

When you have selected the report file location and specified the options that you want, click PUBLISH.

---

**Modify a Published Report**

You can refine, or modify, a published report.

1. If you have not already done so, log on to Roambi ES for SAS and start the Publisher. For more information, see “Start the Roambi Publisher” on page 10.

2. From the Roambi Publisher window, open the **Open an Existing Roambi** view.
3. On the next window, click Select This View. The publisher window appears and displays the SAS metadata folder tree.

4. Navigate the folder tree until you find the report that you want to modify. Select the report.

5. Click Import. The report preview appears on the page.

   **Tip** You can also open a report that was created during this session from the Publish Manager. Click the Publish Manager drop-down list box in the upper right corner of the window, and select the report from the list.

6. Click Continue to refine the report. For more information, see “Options for Refining a Report” on page 14.

7. When you have finished refining the report, click PUBLISH to publish the report. You can either replace the existing RBI file or save the report to a new location. For information about publishing options, see “Step Three: Publish the Report” on page 12.

---

**Options for Refining a Report**

When you import a report, you can make modifications to the report. For example, you can control what information is displayed in summary cards. You can also change the appearance of the report. For example, you can group data columns, change column labels, change colors for charts, and so on.

**The User Interface for Refining a Report**

When you refine a report, Roambi loads an editor that looks similar to the following display, but that contains the data in your report.

**Display 1.2 Editor for Refining a Report**

The editor window is organized into the following three sections:
tabs (across the top of the editor)
   enable you to modify different elements of the report. In the display, the Options tab is selected. The options are specific to the currently selected view.

main pane (left side of the window)
   contains the items that you can modify. This pane interacts with the preview pane. For example, to change the field title that is displayed for the Total Revenue column, select Total Revenue in the preview pane and then make your change.

preview pane (right side of the window)
   interacts with the main pane of the editor to facilitate making changes to a report. In addition, the PREVIEW button, when available, enables you to preview your report.

If you need help while working in the editor, you can click ? at the bottom of the window.

You can also obtain tutorials for each of the Roambi views at http://www.roambi.com/help-resources.html.

Note: The editor for the Pulse and Squares views looks different from the editor shown here. For more information, see “Editor for the Pulse and Squares Views” on page 20.

Main Steps to Refine a Report

1. If you have not already done so, create the report or open an existing report that you want to refine. For instructions, see “Step One: Select a Roambi View and Import a Report” on page 10 or “Modify a Published Report” on page 13.

2. Click any of the available tabs to specify options.

3. When you finish refining the report, click Publish.

The following sections summarize what you can do on each tab. Not all of these tabs are available with each Roambi view. The tabs that are displayed vary depending on the view.

Card Title Tab

Select a different data column to use for the labels that appear in summary cards. The preview pane lists the columns in the report. The icon indicates the column that is currently used for the labels. Scroll to select a different column.

Chart Options Tab

Create and modify charts that are displayed in trend reports.

To specify a chart, select the chart that you want. After you specify a chart, the window displays options for modifying the chart. For example, you can specify a color scheme.

Charts Tab

Create and modify charts that are displayed in summary cards of your reports. The data columns must be organized into groups.
To specify a chart for a group, select the group in the preview pane, and then select the chart that you want for the group. After you specify a chart, the window displays options for modifying the chart. For example, you can specify a color scheme.

The **Add a Series** option enables you to combine variable groups. To add a series, click and drag the **Add a series** button to the variable in the preview page that you want to add.

Depending on the type of chart, when you add a second series to the chart, the dual axis option might become available. The following display shows a dual Y axis.

![Edit Chart Series](image)

The left axis bracket shows which variable uses the left axis. The right axis bracket shows which variable uses the right axis.

You can do the following:

- switch the axes by clicking the axis switch button.
- disable the dual axis feature by changing **Dual Y Axis** to **OFF**.

**Global Settings Tab**

Specify settings that affect the whole graph. For example, in some views, you can specify the number of rows that column headings can display.

**Key Column**

Select the column that you want to use as the key column of a SuperList view.
The key column is the left-most column and is typically an identifier for the row. In the display, the product group is the key column.

**Layout Tab**

Control the information that is displayed in the summary cards and how that information is organized. The available columns are listed on the main pane and in the preview pane. The following display shows three columns listed in the preview pane.

In the preview pane, you can do the following:

- To remove a column from the report, click to the left of the column name, and then click the remove button.

  To restore a column that you have removed, drag the column from the main pane to the preview pane.

- To move a column, click to the right of the column name. Then click and drag the move handle to the desired position.

- To create a group, drag one column onto another. Groups are indicated with orange bars.

If the report contains multiple report objects, you can specify the report objects that you want in the view. Roambi refers to these objects as blocks. Toggle the ON and OFF buttons to select blocks.
**List Layout Tab**

Modify the micro charts that have been created for your charts.

If you have selected a chart on the **Charts** tab, Roambi creates a micro version of the chart that provides a quick summary of the items in a list. On the **List Layout** tab, you can change the appearance of those micro charts.

The following display highlights some of the actions that you can perform:

1. You can add growth icons to the list. Growth icons indicate graphically the change for each list item relative to the first and last list items. You can specify options for growth icons, such as the icon style and the data column used to determine the icon’s value.

2. You can customize the labels that appear on the right and left of the chart.

3. If the table contains summary information, then you can hide the summary item by changing **Hide Summary** to **ON**.

The **Hide All** option (on the left side of the pane) enables you to disable a list of all items. By default, device users can see all items in a single list.

For example, the following view provides information about product sales. By tapping **Summary**, users can drill down to summary details. By tapping **All**, users can see the product groups for all the product sales (clothes and shoes). On the **List Layout** tab, you can hide or show the **All** and the **Summary** links.
Options Tab

Refine options that are specific to the Roambi view and the report that you are publishing. For example, if the report contains groups, you can change the name of a group. Select the group in the preview pane and change the name in the main pane.

Periods

Select and reorder the time periods that you want in a Trends view. For example, instead of showing the year, quarter, and month, you might show only the year and quarter. Toggle the ON and OFF buttons to select blocks.

Other options enable you to specify attributes, such as the label, for each period.

Pie

Customize how the slices in a PieView chart are labeled. In the preview pane, choose the data column that you want to use for labels.

Pie Values

Specify which columns appear in a PieView chart.

Swipe Tab

Configure what information is available to swipe through the list. Click an item in the preview pane to make it swipeable.

If an item in the summary card is swipeable, then it appears in the list view. Charts that you create on the Charts tab are automatically swipeable. You swipe items in the tree view by dragging your finger from right to left over the swipeable information.

Tab Title Tab

Specify which column to use for the titles of the tabs in the Cardex view.

Titles Tab

Specify the title for each block of a report. If the SAS Web Report Studio report objects have titles, then those titles are shown. Otherwise, the default titles are Block1, Block2, Block3, and so on.
Editor for the Pulse and Squares Views

The editor for the Pulse and Squares views resembles the following display.

The following tabs on the left side of the window enable you to modify different elements of the report:

Grid
changes the default hierarchical dimensions for your report. You can also specify filters for the report.

Comparisons
defines benchmarks and comparisons of those benchmarks. Comparisons can be made in a number of ways, including between two measures and between a measure and its target measure.

Filters
specifies filters to subset the data used in the report. The filters are permanent and cannot be changed on the device.

You can obtain tutorials for working with these views at http://www.roambi.com/help-resources.html.

Specify an Expiration Time for a Report

When you publish a report, you can specify an expiration time for the report (RBI) file. Expiration times can be set in units of weeks, days, hours, or minutes. The timer is activated when the user downloads the file on a mobile device.
When the expiration time has elapsed, the file is deleted from all devices on which it has been downloaded. (The file remains listed in the Roambi library, but the user must download the file again in order to view it.)

This option is available during Step Three of the publishing process. For information about the publishing process, see “Publish a Report to a Roambi View” on page 10 or “Modify a Published Report” on page 13.

1. On the **Publish Options** tab of the Publish window, change **File Expiration** to **ON**.

   The File Expiration Settings dialog box appears.

   ![File Expiration Settings](image)

   2. Specify the period of time until the RBI file expires on a device. Click either **Weeks**, **Days**, **Hours**, or **Minutes** and enter the numeric value in the text box. For example, to force the file to expire in two hours, click **Hours** and enter 2 in the text box.

---

**Recall a Published Report**

After publishing a report, you might decide that the report is incorrect or was published in error. You can recall the published report. When you recall a report, Roambi prevents the report from being downloaded on any device. Roambi also deletes the file from all devices on which it has already been downloaded. (The file is listed in the Roambi library, but when the user tries to open it, a recall message is displayed and the file is deleted.)

1. If you have not already done so, log on to Roambi ES for SAS and start the Publisher. For more information, see “Start the Roambi Publisher” on page 10.

2. From the Roambi Publisher window, open the **Open an Existing Roambi** view.

3. On the next window, click **Select This View**. The Publisher window appears and displays the SAS metadata folder tree.

4. Navigate the folder tree until you find the report that you want to recall. Select the report.

5. Click the recall button, which is below the **Locations** list. A message box asks you to confirm removal of this file from all devices to which the report has been published.

6. Click either **Recall** or **Cancel**.
Note: When you recall a report, the report is not deleted from the repository on the Roambi server.

To restore the report file, you must open the report and republish it.

---

**Example Report That Uses the Elements View**

**About This Example**

This example uses data from the fictional Orion Star retail chain. Orion Star products are organized in a hierarchy consisting of four levels:

- product line (clothes and shoes)
- product category (clothes, shoes)
- product group (Eclipse Clothing, Green Tomato, Knitwear, Tracker Shoes, and so on)
- product (Big Guy men’s fleece hood, Eclipse Signature cap, and so on)

Each product has a cost price and a sales price. All prices are in U.S. dollars.

The report consists of a table, a pie chart, a bar chart, and a line plot. The report presents data by product group.

**Source Report**

The SAS Web Report Studio report consists of a table, a pie chart, a bar chart, and a line plot. The two items of interest are the line plot and the pie chart.

**Roambi Output**

Here is how the RBI file appears on an iPad. When viewed on small devices, such as the iPhone, only one report object can be viewed at a time. Users can swipe to move from the pie to the line plot, and vice versa.
The device user can rotate the pie in order to view information about a different slice. For the line plot, users can drag the vertical slider to obtain a different measure. The following display shows both changes to the plots.

Display 1.4  Pie and Line Charts Shown with a Different Metric

The display show sales information for the Eclipse Clothing product group. Device users can use the arrow buttons on the window to scroll through the different product groups in the category (31–45 years).

Publication Steps

Here are the high-level steps for publishing the report.
1. The SAS Web Report Studio report was imported into the Roambi Elements view using the instructions found in “Step One: Select a Roambi View and Import a Report” on page 10.

2. The report contained four report objects, all of which were selected by default. This example retained the defaults.

3. The report was refined after clicking Continue.

4. Though the original report contained a table and three graphs, this example used only two graphs. 
   In the Layout tab, the table and the bar chart were disabled by changing the ON button to OFF.

5. The Titles tab shows the title for each block. By default, the titles were Block1, Block2, Block3, and Block4. (These were the default titles because the source report objects did not have titles. Otherwise, the source report object titles would be shown as the defaults.)
   To change a title for a block, the example selected the block and entered the new title in the Item Title text box. The titles were changed for the pie chart and the line plot.
6. The report was published using the information found in “Step Three: Publish the Report” on page 12.

Example Report That Uses the CataList View and Has Two Report Sections

About This Example

This example uses data from the fictional Orion Star retail chain. For more information about this data, see “Example Report That Uses the Elements View ” on page 22.

The report contains two sections, and each has a crosstabulation table. The first section shows sales by product. The second section shows sales by year and also includes a bar chart. The items of interest are the tables in the two sections.

Source Report

Here are the tables from the two sections of the SAS Web Report Studio report.
Sales by Product

Here is how the Sales by Product Group RBI file appears on an iPad. This is the high-level view.

The initial window corresponds to the Product Category column of the original report. By tapping Clothes, users can see the product groups for clothes. By tapping Shoes, users can see the product groups for shoes. By tapping All, users can see the product groups for both clothes and shoes.

The following display shows the product groups for clothes.
From this window, users can drill down to sales totals for any product group. Users can also see subtotals for all clothing sales by tapping **Summary**.

From the high-level view, the **Summary** link enables users to drill down to summary details.

The Total Revenue column summary is shown by default.

Device users can move the vertical slider to a different point in the line in order to see a summary for the Total Cost and Profit columns. This information corresponds to the totals row of the original report, shown below.
Note: The subtotal for shoes is available from the product group listing for shoes.

**Sales by Time**
Here is how the Sales by Time RBI file appears on an iPad.

![Sales by Time iPad screenshot](image)

This window provides a summary of the original report.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Revenue</th>
<th>Total Cost</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$5,117,410.63</td>
<td>$1,137,043.80</td>
<td>$3,980,375.83</td>
</tr>
<tr>
<td>1999</td>
<td>$5,027,410.14</td>
<td>$1,300,843.00</td>
<td>$4,526,567.14</td>
</tr>
<tr>
<td>2000</td>
<td>$6,934,455.56</td>
<td>$1,545,285.45</td>
<td>$5,389,170.36</td>
</tr>
<tr>
<td>2001</td>
<td>$5,721,237.67</td>
<td>$1,289,822.55</td>
<td>$4,431,415.12</td>
</tr>
<tr>
<td>2002</td>
<td>$6,764,225.17</td>
<td>$1,492,854.10</td>
<td>$5,271,371.08</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$30,364,758.42</strong></td>
<td><strong>$6,765,852.90</strong></td>
<td><strong>$23,598,905.53</strong></td>
</tr>
</tbody>
</table>

From the main window, users can tap a year to drill down to the sales details. The following display shows sales revenue for the year 2002.

![Sales details for 2002](image)

Users can move the vertical slider to a different point in the line in order to see a summary for the Total Cost and Profit columns. Users can also click the navigation arrows at the top of the window to see the sales details for different years.
**Publication Steps**

Here are the high-level steps for publishing the report.

1. The SAS Web Report Studio report was imported into the Roambi CataList view using the instructions found in “Step One: Select a Roambi View and Import a Report” on page 10.

2. The report contained multiple blocks that correspond to the two sections and the report objects. The first section, Sales by Product, was selected by default. The second section, Sales by Time, was not selected. The Sales by Product section contains one table, which was also selected by default.

   This example retained the default settings.

3. The report was refined after clicking **Continue**.

4. On the **Charts** tab, the example specified a line chart to be displayed on the summaries.
5. On the **List Layout** tab, the example specified growth icons by changing the **Show Growth Icons** value to **ON**.

![Available Charts](image)

The example retained all the other defaults for the growth icon.

6. The report was published using the information found in **“Step Three: Publish the Report” on page 12**.

7. The example created a second CataList view and imported the same report as in **step 1 on page 29**.

8. For this view, the example selected the **Sales by Time** section, and then selected the table for that section. The selections were applied by clicking the **Apply** button.

![Multi-Block Import Settings](image)

9. The report was refined after clicking **Continue**.

10. On the **Charts** tab, the example specified an area chart to be displayed on the summaries.
11. On the **List Layout** tab, the example specified growth icons by changing the **Show Growth Icons** value to **ON**.

The example retained all the other defaults for the growth icon.

12. The report was published using the information found in “**Step Three: Publish the Report**” on page 12.
# Overview of Viewing Reports on a Mobile Device

After SAS Web Report Studio reports have been published to Roambi (RBI) files, you can use Roambi software to view the reports on a mobile device. This chapter describes the following:

- what software is required to view reports

---

**Introduction to Viewing Reports**

- what software is required to view reports
• how to establish a connection to the Roambi server
• how to download and view reports
• what you need to know about refreshing a report when the underlying SAS Web Report Studio data is updated
• tips for navigating reports to obtain the information that you need

Note: To publish the SAS reports, report designers import the report data into one of several predefined Roambi views. For more information about these views, see “Overview of Roambi Views” on page 2.

**Main Steps for Viewing Reports**

Here are the high-level steps to access and view reports.

1. Establish a connection to the Roambi server. This is a one-time task that you must perform before you can access reports that reside on that server.
2. Connect to the Roambi server and download the report. You must download a report before you can view it.
3. After you have downloaded a report, you can open and view the report.

For help with navigating the Roambi view that is used by the report, tap the Help icon at the top of the report screen.

**About Roambi Passcodes**

Roambi passcodes provide an additional level of security and help control user access to the Roambi application on a mobile device. If your administrator has enabled the Roambi passcode feature, then you must enter a passcode before you can access the Roambi application on your mobile device. Your administrator specifies whether you always enter the passcode or only when your device is offline.

You are prompted to set your unique passcode the first time you start Roambi on the device. The passcode consists entirely of numbers. Your administrator specifies the minimum length required for a passcode, which is indicated in the passcode entry box.

After you initially set the passcode, you are prompted to enter the passcode when you use Roambi.

**About the Examples in This Chapter**

The examples in this chapter were created using the Apple iPad. Though specific instructions might differ for the other supported devices, the general concepts are the same. In addition, the Roambi Visualizer interface varies a little among the supported devices, but the core functionality is largely the same.

**About Recalled and Expired Reports**

Roambi provides two ways in which report creators can control whether a report remains on devices. If a report that you previously downloaded indicates that you must download it again, it is possible that the report has been recalled or it has an expiration date.
**Recalled Reports**

After publishing a report, the report creator can recall the published report.

When a report has been recalled, Roambi prevents the report from being downloaded on any device. Roambi also deletes the file from all devices on which it has already been downloaded. You might see the report name in the Roambi library, but when you try to open the report, a recall message appears and the file is deleted.

To restore the report file, the report must be republished.

**Expired Reports**

When a report is published, report creators can specify an expiration time for the RBI file. Expiration times can be set in units of weeks, days, hours, or minutes.

When a report has expired, Roambi deletes the file from all devices on which it has been downloaded. The file is listed in your Roambi library but must be downloaded again. To view an expired report, tap the **Tap to Download** link for the report.

**Software and Hardware Requirements for Viewing Reports**

**Supported Mobile Devices**

You can view the reports on the following devices:

- Apple iPad
- Apple iPhone
- Apple iPod Touch

**Software Required to View Reports on a Mobile Device**

To view reports on a mobile device, you must install Roambi Visualizer on the device. The method used to download and install the Visualizer varies with the device. For example, to download the software on an iPad, use the App Store and search for Roambi.

For information about Roambi, see [www.roambi.com/](http://www.roambi.com/).

**Overview of the Roambi Visualizer Interface**

The Roambi Visualizer has two primary windows: Roambi main window and the Connect window. You can use these windows to view reports and to connect to the Roambi server.
The Roambi Main Window

Here is an example (partial view) of the Roambi main window, which displays the items in your library. Once you download a report, the report is stored in the library.

Display 2.1  Roambi Main Window

From this window, you can do the following:

• select a report in the list. The selected report is displayed in the right pane. From there, you can open the report.

• delete reports from the list.

• sort the list by title, file size, download date, or update date.

• perform other tasks that are available from the menu bar, such as adding accounts and managing favorites.

Note: You can tap the Connect button in the upper left corner to open the Connect window.

The Connect Window

Here is an example (partial view) of the Connect window, which enables you to set up connections to Roambi ES servers and to download reports.
Display 2.2  Connect Window

From this window, you can do the following:

- select a Roambi server account in the Accounts list to access the content on that server. A small arrow next to an account means that the Roambi server has more than one portal. (A portal corresponds to a SAS repository.)

  The right pane displays the file folder content of the selected portal.

- navigate the folders in the right pane until you reach a report of interest. You can then download the report, or you can view the report if it is already downloaded.

- remove and add portals by using the Edit and plus buttons, respectively.

  Note: You can tap the Library button in the upper left corner to open the Roambi main window.

Establish a Connection to the Roambi Server

Before you can access reports, you must be able to connect to the Roambi server on which the reports reside. There is a one-time task that you must perform to establish a connection.

To establish a connection to the Roambi server:

1. If you are in the main Roambi window, tap the Connect button in the upper left corner.

   The Connect window appears.

2. In the Accounts pane, tap the plus button.
The Add Account window appears.

3. Tap Roambi ES.

The Add Account window displays a Roambi Server URL text box.

4. Enter the URL for the Roambi ES server deployment.

The URL looks similar to the following.

http://RoambiServer:Port/roambi/SourceManager

You must provide your server name and port. The following display shows an example.

Tap DONE on the keypad. The Add Account window expands to show the available portal or portals on the server. The window also contains text boxes for entering the credentials to connect to the portal.

5. If more than one portal is listed, select the portal to which you want to connect. The portal name is determined by the administrator who configured the server. If you have any questions about a portal, contact your administrator.

6. Provide the user name and password for connecting to the portal, and tap DONE on the keypad.

7. Tap Save in the Add Account window. After the credentials are verified, the new account is added and a connection is established with the Roambi server.

Download a Report

Before you can download a report from the Roambi server, you must be able to connect to that server. If you have not already established a connection, see “Establish a Connection to the Roambi Server” on page 37.

In addition, you might be prompted for your passcode. For more information, see “About Roambi Passcodes” on page 34.
1. If you are in the main Roambi window, tap the **Connect** button in the upper left corner.

   The Connect window appears.

2. In the left pane, select the portal that is associated with the connection that you created previously. The right pane displays the SAS folders that you have permission to access in that portal.

   *Note:* If you cannot access the portal or the portal’s content, your Roambi administrator might have blocked your device. There are several ways in which the administrator can restrict access to Roambi. Contact your administrator for more information.

3. Tap to expand the folders until you reach the folder that contains the reports that have been published for you.

4. Beneath the report that you want to download, tap the **Tap to Download** link. An example report is shown below.

   - **Sales Figures by Age**
     - Created 6/28/11  CatList
     - **Tap To Download**  140 KB

   After you tap the link, the link text changes to “Downloading.” When the file is downloaded, a small blue circle appears next to the report name, indicating that the report is newly downloaded.

   - **Sales Figures by Age**
     - Updated 5/28/11  CatList
     - **Downloaded 6/28/11**  138 KB

You can now tap the report to view it. In addition, the report is added to your report library in the Roambi main window.

---

**View a Report**

After you have downloaded a report, you can open your report library and view the report.

1. If you are in the Connect window, tap the **Library** button in the upper left corner.

   The Roambi main window appears.

2. Locate the report in the list.

   By default, reports are listed alphabetically. You can sort the list by title, file size, download date, or update date. To do this, click the sort button, shown here, and specify how you want to sort the list.

   *Note:* If a report that you previously downloaded indicates that you must download it again, it’s possible that the report has been recalled or that it has an expiration
time. For more information, see “About Recalled and Expired Reports” on page 34.

3. Tap the name of the report. The right pane displays options for viewing the report. You can do the following:
   • open the report
   • e-mail the report (if your account has been set up for e-mail)
   • bookmark the report


For a video and help with navigating the Roambi view that is used by the report, tap the Help icon \( \text{?} \) at the top of the report screen. You can also obtain tutorials for these views at [http://www.roambi.com/help-resources.html](http://www.roambi.com/help-resources.html).

---

### Refreshing a Report

Refreshing a report involves executing the original SAS Web Report Studio report to obtain the most current data. When a report is published as a Roambi (RBI) file, the report is saved with one of the following refresh options:

- **Manual refresh**: When you download the RBI file to your device, the source SAS Web Report Studio report is executed with your credentials. You can also refresh the report afterward to obtain subsequent updates. To refresh a report, tap the Refresh button \( \text{✓} \) in the report window.

- **Automatic refresh**: When you download the RBI file to your device, the source SAS Web Report Studio report is executed with your credentials. In addition, the RBI file is refreshed each time you start the Roambi Visualizer and open the report. You can also refresh the report manually by tapping the Refresh button \( \text{✓} \) in the report window.

- **No refresh**: The report data on your device is the same as when the report was created. The SAS Web Report Studio report is not executed after that time. You do not have an option to update the report (there is no Refresh button).

After a refresh, Roambi displays a message indicating that an update is available. You can choose to open the updated file now or later.

*Note:* The message indicates that the report has been updated even if there has been no change to the content.

For complete information about how reports are refreshed, see Appendix 1, “Refresh Options for Reports,” on page 49.

---

### Tips for Viewing Report Objects

The following sections provide tips for navigating the different features in Roambi reports. For a video and help with navigating the Roambi view that is used by the report, tap the Help icon \( \text{?} \) at the top of the report screen. You can also obtain tutorials for the views at [http://www.roambi.com/help-resources.html](http://www.roambi.com/help-resources.html).
**Working with Summary Lists**

Some reports provide a high-level summary list that shows the grand total row of the report table. Typically, you can drill down into the details from the high-level view.

The image below (on the left side) shows high-level sales totals. In the high-level view, you can do the following:

- tap **Total Revenue** to see details about total revenue, cost, and profit.
- tap one of the age categories to see details about that category. The image on the right shows this detail view.

<table>
<thead>
<tr>
<th>High-Level Sales Totals</th>
<th>Detail for an Age Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales Figures by Age Group</strong></td>
<td><strong>Sales Figures by Age Group</strong></td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td><strong>15-30 years</strong></td>
</tr>
<tr>
<td>15-30 years</td>
<td>$10,234,946.95</td>
</tr>
<tr>
<td>31-45 years</td>
<td>$38,052,176.99</td>
</tr>
<tr>
<td>46-60 years</td>
<td>$77,310,535.30</td>
</tr>
<tr>
<td>61-75 years</td>
<td>$47,788,798.19</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$10,234,946.95</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td>$2,593,982.60</td>
</tr>
<tr>
<td><strong>Profit</strong></td>
<td>$7,641,964.35</td>
</tr>
</tbody>
</table>

In the detail view, you can see the other age categories by using the navigation arrows.

*Note:* Reports can have more than two drill-down levels.

**Working with Pie Charts and Sliders**

Some reports contain pie charts. You can rotate the pie in order to view information about a different slice. In the following example, the pie is rotated to display sales for a different age group.
Other reports have a line plot with a vertical slider.

You can drag the vertical slider to a different data point in order to obtain a different measure. In the example, dragging the slider shows total revenue for a different year.

**Working with the Cardex View**

The Cardex view makes it easy to access particular information, such as a customer name.
With a Cardex report, you can do the following:

• finger through the virtual cards to find the information that you need

• drag information from a card to another pane in order to compare records side-by-side (iPad only)

• search and filter the list by tapping the search button on the report window

Working with the Layers View

The Layers view provides a dashboard view of your data, from a high-level summary to the low-level details. This view supports up to five layers of data. Examples of layers are country, state, city, and product.

The first image here shows high-level sales data by country. The second image includes individual metrics for a country. To display the individual metrics, tap and swipe the edge from the right side of the screen. You can then scroll through the list of countries to see metrics for each country.

You can also sort the list. For example, you might sort the list so that countries with the highest monthly sales appear at the top.

To sort the list, tap the upper left corner of the table (in the first column above the first row). The Manage Levels pane appears.
The layers are listed on the left side of the pane. Each layer can be sorted by a different column. Tap a layer to specify its sort criteria.

Tap Apply to apply the sort criteria.

**Working with the Squares View**

Colored squares enable you to quickly see key performance indicators of your business. Tap an area to enlarge the area and examine individual columns and rows.

The first image here shows the Squares view. The second image shows the view with a particular area enlarged. This is referred to as a *fish-eye view*. You can drag the fish eye to different areas of the grid.

You can drag horizontally to highlight individual columns and their titles. In this example, each column is a product.
Similar highlighting is available for rows.

Tap a category in the list to see a detail view of squares for that category. In the example, tapping Canada displays the following detail view.

The small box above the squares contains a threshold range for the active variable, such as sales or growth. The red (left) and green (right) buttons represent the lower and higher end of the threshold, respectively.

Tap a colored button to see a detail view of all squares that match the color. In the example, tapping Canada and then tapping the green button shows all the Canadian green squares, which correspond to sales above 8%. You can change the threshold range by tapping the down-arrow and adjusting a slider.
A small toolbar on the left above the squares enables you to further customize the display.

The toolbar has the following buttons:

- The **Value** button enables you to change the metric. Tap the button to cycle through **Value**, **%**, **Variation**, and **% Variation**. This button is available from any detail view of the squares.

- The up and down arrows display the detail view in ascending or descending order of the current metric. For example, suppose you change the **Value** button to **Percent** and then tap the down arrow. The squares are displayed in descending order of sales percentages from left to right, and from top to bottom across the screen.

- The circular button displays the detail view in alphabetic order. In the example, the squares are displayed alphabetically by product name.

- When the squares are sorted in alphabetical order, you can tap the list button to show the sorted items in a list view.
The Squares view also enables you to compare the data based on different metrics. For example, you might compare the number of units sold versus the target sales estimates.

To compare data, tap **Comparison** in the upper left corner of the table.

In the following example, you can change the year, the variable used for the analysis (currently sales), and the threshold values for the selected variable.

**See Also**

“Overview of Roambi Views” on page 2
Appendix 1

Refresh Options for Reports

The following tables show how reports (RBI files) are refreshed on the mobile device. The first table is for reports that are created using the Roambi Publisher interface. The second table is for reports that are created in batch mode.

**Table A1.1 Refresh Options for Reports Published Using the Roambi Publisher Interface**

<table>
<thead>
<tr>
<th>Refresh Option</th>
<th>Client Action on the Mobile Device</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Download the report</td>
<td>The source SAS Web Report Studio report is not executed. For both the device and the Roambi server, the report data is the same as when the report was created.</td>
</tr>
<tr>
<td></td>
<td>Refresh the report</td>
<td>The action is not available.</td>
</tr>
<tr>
<td></td>
<td>Open the report</td>
<td>The device user opens the downloaded report.</td>
</tr>
<tr>
<td></td>
<td>Open the Roambi application</td>
<td>No change to the report.</td>
</tr>
<tr>
<td>Manual Refresh</td>
<td>Download the report</td>
<td>The source SAS Web Report Studio report is executed with the user’s credentials. The device has the most recent data, possibly newer than the RBI file in the Roambi server.</td>
</tr>
<tr>
<td></td>
<td>Refresh the report</td>
<td>The source SAS Web Report Studio report is executed with the user’s credentials. The device has the most recent data, possibly newer than the RBI file in the Roambi server.</td>
</tr>
<tr>
<td></td>
<td>Open the report</td>
<td>The device user opens the downloaded report.</td>
</tr>
<tr>
<td></td>
<td>Open the Roambi application</td>
<td>No change to the report.</td>
</tr>
</tbody>
</table>
The refresh behavior is different for reports that are published in batch mode.

*Note:* RBI files created in batch mode with the `-connected` option behave like manually published RBI files. (See the previous table.) Row-level security is applied based on the credentials that are used in the batch command.

For more information about the batch utility, see the *Roambi ES4 Administration Guide* that is included with your Roambi installation.

### Table A1.2 Refresh Options for Reports Published in Batch Mode

<table>
<thead>
<tr>
<th>Refresh Option</th>
<th>Client Action on the Mobile Device</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Download the report</td>
<td>The source SAS Web Report Studio report is not executed. For both the device and the Roambi server, the report data is the same as when the report was created.</td>
</tr>
<tr>
<td>Refresh the report</td>
<td></td>
<td>The action is not available.</td>
</tr>
<tr>
<td>Open the report</td>
<td></td>
<td>The device user opens the downloaded report.</td>
</tr>
<tr>
<td>Open the Roambi application</td>
<td></td>
<td>No change to the report.</td>
</tr>
</tbody>
</table>
**Refresh Options for Reports**

<table>
<thead>
<tr>
<th>Refresh Option</th>
<th>Client Action on the Mobile Device</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Refresh</td>
<td>Download the report</td>
<td>The source SAS Web Report Studio report is not executed. For both the device and the Roambi server, the report data is the same as when the report was created.</td>
</tr>
<tr>
<td></td>
<td>Refresh the report</td>
<td>The source SAS Web Report Studio report is not executed. If the RBI file in the server has a newer timestamp, then the new RBI file is downloaded to the device.</td>
</tr>
<tr>
<td></td>
<td>Open the report</td>
<td>The device user opens the downloaded report.</td>
</tr>
<tr>
<td></td>
<td>Open the Roambi application</td>
<td>No change to the report.</td>
</tr>
<tr>
<td>Auto Refresh</td>
<td>Download the report</td>
<td>The source SAS Web Report Studio report is not executed. For both the device and the Roambi server, the report data is the same as when the report was created.</td>
</tr>
<tr>
<td></td>
<td>Refresh the report</td>
<td>The source SAS Web Report Studio report is not executed. If the RBI file in the server has a newer timestamp, then the new RBI file is downloaded to the device.</td>
</tr>
<tr>
<td></td>
<td>Open the report</td>
<td>The device user opens the downloaded report.</td>
</tr>
<tr>
<td></td>
<td>Open the Roambi application</td>
<td>A refresh is triggered when the report is opened. The source SAS Web Report Studio report is not executed. If the RBI file in the server has a newer timestamp, then the new RBI file is downloaded to the device.</td>
</tr>
</tbody>
</table>
Index

**B**
- batch CLI 2
  - refresh setting for a report 0
  - blocks in a report 10

**C**
- card, summary 3
- Card Title tab, Roambi Publisher 15
- Cardex view 3
  - example 25
- CataList view 3
- Chart Options tab, Roambi Publisher 15
- Charts tab, Roambi Publisher 15
- CLI
  - See batch CLI
  - command line interface
    - See batch CLI
- Connect window, Roambi Visualizer 35
- connecting to the Roambi server
  - downloading a report 38
  - establish a connection 37

**D**
- devices
  - See mobile devices
  - downloading a report to a mobile device 38
  - dual axis option 15

**E**
- Elements view 4
  - example 22
  - establishing a connection to the Roambi server 37
  - example
    - CataList view 25
    - Elements view 22
  - expiration time for a report 20, 34
  - expired reports, about 34

**F**
- features
  - Roambi 9
  - Web Report Studio 8

**G**
- Global Settings tab, Roambi Publisher 16

**I**
- importing a report to Roambi 10

**K**
- Key Column tab, Roambi Publisher 16

**L**
- Layers view 5, 43
- Layout tab, Roambi Publisher 17
- library, Roambi Visualizer 35
- limitations for publishing reports 9
- List Layout tab, Roambi Publisher 18

**M**
- mobile devices
  - supported devices 35
  - modifying a published report 13

**N**
- navigating reports on a mobile device 40

**O**
- open a report on a mobile device 39
Options tab, Roambi Publisher 19
  overview
    publishing reports to Roambi views 2
    viewing reports on a mobile device 33

P
  passcodes 34
  periodicities 19
  Periods tab, Roambi Publisher 19
  Pie tab, Roambi Publisher 19
  Pie Values tab, Roambi Publisher 19
  Pie view 5
  prompts in a report 10
  publishing a report 12
    expiration setting 12, 20
    refresh setting 12
  publishing a report to a Roambi view 10
  restrictions 9
  publishing overview 2
  Pulse view 6

R
  RBI file 2
  recall a report 21
  recalled reports, about 34
  refining a report 14
    after report is published 13
    Card Title tab 15
    Chart Options tab 15
    Charts tab 15
    during report creation 12
    Global Settings tab 16
    Key Column tab 16
    Layout tab 17
    List Layout tab 18
    Options tab 19
    Periods tab 19
    Pie tab 19
    Pie Values tab 19
    Swipe tab 19
    Tab Title tab 19
    Titles tab 19
  refresh setting for a report 12, 0
  refreshing a report on a mobile device 40
  report blocks 10
  report library, Roambi Visualizer 35
  report prompts 10
  report sections 9, 10
  reports
    expiration 34
    modifying 13
    overview of viewing on a mobile device 33
    publishing to a Roambi view 10
    recalling 21, 34
    software required for viewing on a mobile device 35
    requirements for viewing reports on a mobile device 35
    restrictions for publishing reports 9
    Roambi Batch
      See batch CLI
    Roambi features in each view 9
    Roambi views
      See also views
        publishing a Web Report Studio report 10
          supported features 9
    Roambi Visualizer interface 35

S
  sections in a report 9, 10
  securing a device
    passcodes 34
  software required to view reports on a mobile device 35
  Squares view 7, 44
  Summary card 3
  SuperList view 7
  supported features
    Roambi 9
    Web Report Studio 8
  supported mobile devices 35
  supported Roambi features in each view 9
  supported Web Report Studio features 8
  Swipe tab, Roambi Publisher 19

T
  Tab Title tab, Roambi Publisher 19
  tips for viewing reports on a mobile device 40
  Titles tab, Roambi Publisher 19
  Trends view 7

U
  unsupported features
    Roambi 9
    Web Report Studio 8

V
  viewing reports
    supported mobile devices 35
  viewing reports on a mobile device
    downloading a report 38
    opening a report 39
overview 33
refreshing a report 40
software requirements 35
tips for viewing reports 40
views 2
Cardex 3
CataList 3
Elements 4
Layers 5, 43
PieView 5
publishing a Web Report Studio report 10

Pulse 6
Squares 7, 44
SuperList 7
supported Roambi features 9
Trends 7

W
Web Report Studio features 8