

# **SAS<sup>®</sup> Strategy Management 5.4 User's Guide**



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# About This Book

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## Audience

SAS Strategy Management is designed for the following users:

Scorecard modeler

Designs and builds strategy models in SAS Strategy Management. This entire User's Guide provides useful information for scorecard modelers.

Business user and analyst

Navigates through and views strategy content and information.

Business users should read “Part 5. Viewing and Navigating Content in Portlets.”

Depending on the business user's organization, “Part 7. Creating Reports” might be of interest.

Data entry user

Enters strategy data and other information into a SAS Strategy Management project.

Data entry users should read “Part 6. Entering Data.”





# What's New in SAS Strategy Management 5.4

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## Overview

SAS Strategy Management 5.4 provides the following changes and improvements:

- new Forms and Workflow feature
- new Rules feature
- improvements to the Link Definition feature
- new mobile tablet feature
- new Import a Document feature
- new Firefox web browser support
- improvements to the Save as SAS Information Map feature
- new functions to use in formulas
- new diagram tile in the SAS Strategy Management enhanced portlet

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## Forms and Workflow Feature

The Forms and Workflow feature, coupled with the Rules feature, provide data validation and approval control.

- **manage forms:** Data-entry forms are easy to create and duplicate.
- **links:** Forms can include a link that provides access to key information.
- **column selections:** Forms now use column selections to specify data views in forms.
- **workflow:** The Workflow feature enables you to define a process and its participants, to start and stop the workflow, and to review the status of the workflow.
- **data-entry portlet:** The new data-entry portlet provides you with rule warnings and a larger entry box for entering text. The portlet also provides you with a way to restrict the date that users can navigate to, the ability to use one form for more than one period, and the ability to make and share comments.

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## Rules Feature

SAS Strategy Management provides a new way to define rules that you can use to evaluate values entered into a cell.

- **reuse rules:** The Rules feature enables you to define a rule once and then apply that rule in multiple places in SAS Strategy Management.
- **duplicate a rule:** The copy function creates a duplicate rule by placing it in the Rules list. You can create a new rule by using the copy as a template.
- **define four types of rules:** The Rules feature provides four different types of rules: Numeric, text, choices (a list of choices from which the user selects), and formula.
- **required entry option:** The required entry option provides a way to ensure that data is entered before a form is submitted.
- **customizable error message:** The formula rule provides a way to display a customized error message to the data-entry user. The message can provide information about the formula and how it validates data.

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## Improvements to the Link Definition Feature

SAS Strategy Management has increased the ways that you can use link definitions to provide links to information. You can now create links from elements, data-entry forms, threshold condition windows, gauges, non-metric text, and web addresses.

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## Mobile Tablet Feature

You can save the content of a SAS Strategy Management enhanced portlet as a SAS Mobile BI report. You can view SAS Strategy Management content on the iPad tablet. This feature also includes blacklisting support.

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## Import a Document Feature

The Import a Document feature enables you to import a document for use in SAS Strategy Management. Doing so registers the document as DAV content in the SAS Content Server. After you import a document, you can use it as a target when defining a link by using the link type File. This feature can import many types of documents including Microsoft Office file types, graphic and video file types, PDF, ASCII, HTML, and others.

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## **Firefox Web Browser Support**

SAS Strategy Management expands its browser options with support for the Firefox web browser.

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## **Improvements to Save as SAS Information Map Feature**

The SAS Information Map feature now provides an option to save an information map with all of the scorecards in the project.

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## **Functions to Use in Formulas**

SAS Strategy Management provides the new YTD and VAL functions to make formulas easier to create and understand.

---

## **Diagram Tile in the SAS Strategy Management Enhanced Portlet**

The SAS Strategy Management enhanced portlet provides a new tile that displays diagram views.



# Accessibility Features of SAS Strategy Management 5.4

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## Overview

SAS Strategy Management 5.4 has been tested with assistive technology tools. It includes accessibility and compatibility features that improve the usability of the product for users with disabilities, with exceptions noted below. These features are related to accessibility standards for electronic information technology that were adopted by the U.S. Government under Section 508 of the U.S. Rehabilitation Act of 1973 (2008 draft proposal initiative update). Applications are also tested against Web Content Accessibility Guidelines (WCAG) 2.0, part of the Web Accessibility Initiative (WAI) of the Worldwide Web Consortium (W3C). For detailed information about the accessibility of this product, send e-mail to [accessibility@sas.com](mailto:accessibility@sas.com) or call SAS Technical Support.

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## Documentation Format

Please contact [accessibility@sas.com](mailto:accessibility@sas.com) if you need this document in an alternative digital format.

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## User Interface Layout

SAS Strategy Management provides a way to describe and build strategies. SAS Strategy Management also provides different ways to view the strategies. The application window contains three main sections:

- The top of the window contains the menu and toolbar.
- The left side of the window contains the navigation pane. The pane contains a tree of objects. You can open these objects (one at a time) into the content pane next to the navigation pane.
- The right side of the window contains the content pane. You can view lists of available content or a view of the currently selected content.

For more information about the layout and features of the Builder user interface, see [Chapter 5, “The SAS Strategy Management Builder Interface,” on page 37](#).

For more information about the different types of views, see [Chapter 3, “What Is a View?” on page 19](#). For information about classic-style portlets, see [Chapter 31, “Navigating and Viewing Classic-Style Portlets,” on page 291](#). For information about

enhanced portlet layout and features, see [“Your First Look at the SAS Strategy Management Enhanced Portlet”](#) on page 278.

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## Themes

To change themes in SAS Strategy Management, contact your system administrator. For more information, see “Accessibility Configuration” in the *SAS Strategy Management: System Administration Guide*.

---

## Keyboard Shortcuts

The following table contains the keyboard shortcuts for the application. In the user interface, the shortcuts are displayed within parentheses in tooltips and menu labels.

*Note:* Some application-level keyboard shortcuts do not work when you first open an application. When that happens, press Tab to place the focus on the application, and then try the keyboard shortcut again.

*Note:* When you use a keyboard shortcut to activate a button, first give the focus to the field or section that the button is associated with before you use the keyboard shortcut. For example, if a table has an associated  button, you must first move the focus to the table before you press Ctrl+?.

### Keyboard Shortcuts

| Task                                                                                                                                                                | Keyboard Shortcut                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Open a Help pop-up window from the  button.                                      | Ctrl+?<br><i>Note:</i> This shortcut does not work on some keyboards (for example, the Italian keyboard).     |
| Zoom in.                                                                                                                                                            | Ctrl++                                                                                                        |
| Zoom out.                                                                                                                                                           | Ctrl+-                                                                                                        |
| Reset the zoom state.                                                                                                                                               | Ctrl+0                                                                                                        |
| Maximize view (collapses the category pane and the tile pane, and hides the status bar and the application bar, which includes the menu bar and the workspace bar). | Ctrl+Alt+Shift+M<br><i>Note:</i> This keyboard shortcut does not work when the focus is on the workspace bar. |
| or                                                                                                                                                                  |                                                                                                               |
| Exit maximized view (expands the category pane and the tile pane, and shows the status bar and the application bar).                                                |                                                                                                               |

| Task                                               | Keyboard Shortcut                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Open a pop-up menu.                                | <p>Shift+F9 (if a menu is available in that context)</p> <p><i>Note:</i> If you use Shift+F9 to display the pop-up menu, then it is always displayed in the top left corner of the user interface control that you are using.</p>                                                                                                                                                                                                                                                                                                    |
| Rename the selected tab.                           | <p>Make sure that the focus is on the tab. Press F2 and specify the new name. To commit your changes, press Enter. To cancel your changes, press Esc.</p>                                                                                                                                                                                                                                                                                                                                                                            |
| Close the selected tab.                            | <p>Make sure that the focus is on the tab, and then press Delete.</p> <p><i>Note:</i> Some tabs cannot be closed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                |
| Switch in and out of Edit mode for a table cell.   | <p>To enter Edit mode, select a cell and press F2.</p> <p>To exit Edit mode, press Esc.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Navigate between table headings and table content. | <p>For a two-dimensional table, first make sure that the focus is on the table and that you are not in Edit mode. Press Ctrl+F8 to switch the focus between column headings and table cells. Use the arrow keys to navigate from heading to heading.</p> <p>For a multidimensional table, first make sure that the focus is on a table cell and that you are not in Edit mode. Press Ctrl+F8 to switch the focus between column headings, row headings, and table cells. Use the arrow keys to navigate from heading to heading.</p> |
| Navigate the content rows of a table               | <p>When table cells are in Edit mode:</p> <ul style="list-style-type: none"> <li>• Press Tab and Shift+Tab to move from cell to cell horizontally across columns.</li> <li>• Press Enter and Shift+Enter to move from cell to cell vertically across rows.</li> </ul> <p>When table cells are not in Edit mode, use the arrow keys to move from cell to cell.</p>                                                                                                                                                                    |
| Sort columns in a table.                           | <p>To sort a single column, navigate to the column heading of the column that you want to sort. Press spacebar to sort the column.</p> <p>To sort additional columns, navigate to the column heading of each additional column that you want to sort. Press Ctrl+spacebar.</p>                                                                                                                                                                                                                                                       |

## Exceptions to Accessibility Standards

Exceptions to accessibility standards are documented in the following table.

*Note:* The JAWS issues occur when JAWS is used with Internet Explorer. Other browsers were not tested with JAWS, unless noted.

### *Exceptions to Accessibility Standards*

| Accessibility Issue                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Workaround                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Using JAWS with this application can sometimes cause Internet Explorer to stop responding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Using JAWS 13 or later might resolve the issue.                                                                                                                                                                                                      |
| JAWS cannot read some of the controls in the application, such as images, icons, and buttons.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No workaround is available.                                                                                                                                                                                                                          |
| JAWS cannot read the tooltips of items in trees and lists.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No workaround is available.                                                                                                                                                                                                                          |
| JAWS refers to table controls as list boxes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | When JAWS reports that a control is a list box, keep in mind that it might actually be a table.                                                                                                                                                      |
| JAWS does not correctly read the states in a tri-state check box tree if JAWS is not in Forms mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Disable JAWS' Virtual PC cursor when you work with the check box tree. Tab to the tree, and press Insert+Z to disable the Virtual PC cursor. When you finish interacting with the tree, press Insert+Z to re-enable the Virtual PC cursor.           |
| The keyboard shortcuts that are used to interact with editable tables can conflict with keyboard shortcuts for JAWS' forms mode.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | As a best practice, disable JAWS' Virtual PC cursor when you work with tables. Tab to the table, and press Insert+Z to disable the Virtual PC cursor. When you finish interacting with the table, press Insert+Z to re-enable the Virtual PC cursor. |
| JAWS does not correctly read the information in a table: <ul style="list-style-type: none"> <li>JAWS cannot read the column headings of a table.</li> <li>When table cells are not editable and the focus is on the body of the table, JAWS reads an entire row at a time instead of cell by cell.</li> <li>When table cells are editable, and the focus is on the body of the table, JAWS reads only the first row of the table. If you use the arrow keys to select a cell or row, then JAWS does not read anything. If you press Enter to edit a cell, then JAWS reads the row that contains the edited cell.</li> </ul> | No workaround is available.                                                                                                                                                                                                                          |



| Accessibility Issue                                                                                                                                                                        | Workaround                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| When you are in a table cell, if you press Home, End, Page Up, or Page Down, the selected cell will change to be one in the first column of the currently displayed columns for the table. | Use the arrow keys to navigate through the cells of the table.                                                                                                  |
| Sometimes, you cannot use F2 to put a table cell into Edit mode.                                                                                                                           | When you are in the cell that you want to edit, press Ctrl+F8 twice for two-dimensional tables and three times for multidimensional tables.                     |
| You cannot use the keyboard to scroll to the left and the right in some tables.                                                                                                            | No workaround is available.                                                                                                                                     |
| You cannot use the keyboard to activate the links within how-to topics and Help pop-up windows.                                                                                            | Use the <b>Help</b> menu to access the linked documents.                                                                                                        |
| You cannot use Shift+F10 to open a pop-up menu.                                                                                                                                            | Use Shift+F9 to open pop-up menus that are created for the SAS application. The generic menu that is provided by the Flash player cannot be opened by Shift+F9. |
| Visual focus for the menu bar is indicated with an outline around the entire menu bar instead of around individual menus.                                                                  | To select individual menus, use the left or right arrow key.                                                                                                    |
| Sometimes, after the focus leaves an area of the web browser that is controlled by the Flash player, you will not be able to use the keyboard to return the focus to that area.            | Use your pointer to bring the focus back into the area.                                                                                                         |
| If you use the Ctrl++ keyboard shortcut to zoom in to a secondary window, the outer edges of that window can become hidden from view if you zoom in too far.                               | Use the keyboard to access the hidden parts of the window.                                                                                                      |
| When you use the Ctrl++ keyboard shortcut to zoom, the bottom entries of a drop-down menu can become hidden from view if you zoom in too far.                                              | Use the keyboard to access the hidden entries in the menu.                                                                                                      |
| The Ctrl++ and Ctrl+- keyboard shortcuts for zooming in and out do not work on some menus unless the menus are first opened.                                                               | Open the menu before you use the keyboard shortcut.                                                                                                             |
| The Ctrl++ and Ctrl+- keyboard shortcuts for zooming in and out do not work on all elements in the application window (for example, tooltips and button labels).                           | No workaround is available.                                                                                                                                     |
| JAWS does not explain how to open a drop-down menu or drop-down list.                                                                                                                      | Press Ctrl+down arrow to open the control.                                                                                                                      |

| Accessibility Issue                                                                                                                                                                        | Workaround                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| JAWS cannot access the Advanced Formula Editor.                                                                                                                                            | No workaround is available.                                                                                                                                                                 |
| You cannot open the Color dialog box.                                                                                                                                                      | Use Alt+down arrow to open the Color dialog box.                                                                                                                                            |
| Buttons do not have accelerator keys.                                                                                                                                                      | No workaround is available.                                                                                                                                                                 |
| JAWS cannot navigate the template hierarchy tree in the New Project wizard.                                                                                                                | No workaround is available.                                                                                                                                                                 |
| When you open the Selected Scorecards page from the Edit Elements page, the focus does not move correctly when you tab through the controls. Instead, the focus moves with the arrow keys. | Use Tab only to navigate around the frame of the page. Doing so avoids using the arrow keys.                                                                                                |
| On newly opened or refreshed pages, the focus resets to the toolbar.                                                                                                                       | No workaround is available.                                                                                                                                                                 |
| JAWS cannot read some controls on the Trend Analysis page in the SAS Strategy Management Builder.                                                                                          | No workaround is available.                                                                                                                                                                 |
| JAWS cannot read the labels on some controls.                                                                                                                                              | No workaround is available.                                                                                                                                                                 |
| When using JAWS to expand and collapse a node in a tree, an error occurs. After this error, JAWS re-enables the virtual PC cursor.                                                         | Every time this error occurs, you must disable the virtual PC cursor in JAWS.                                                                                                               |
| JAWS does not skip navigation at the top of the page.                                                                                                                                      | Pressing Enter causes JAWS to read the skip menu message again. Pressing Tab causes JAWS to read the message again. However, pressing Tab a second time moves the focus and skips the menu. |
| JAWS cannot read the application time-out message. The ability to extend the session is lost.                                                                                              | Contact your system administrator to correct this problem. For more information, see “Accessibility Configuration” in the <i>SAS Strategy Management: System Administration Guide</i> .     |
| JAWS detects two unlabeled tab stops in the application banner.                                                                                                                            | Press Tab twice to move the focus forward.                                                                                                                                                  |
| On the Project and Template Manager page, when tabbing through the interface, the focus does not read the Hide icon (<<) that hides the left pane.                                         | No workaround is available.                                                                                                                                                                 |
| On the Project and Template Manager page, after you create a new template, the focus is not restored to the SAS Strategy Management content area.                                          | Navigate the application interface to return to the location of the last change.                                                                                                            |

| Accessibility Issue                                                                                                                          | Workaround                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| In the New Element wizard, keystrokes intended for a drop-down list exits the wizard instead.                                                | Press Alt+down arrow to operate the drop-down list.                              |
| JAWS does not open <b>Image</b> drop-down list.                                                                                              | Move focus forward and then back to the drop-down list.                          |
| JAWS does not detect Information or Error messages.                                                                                          | No workaround is available.                                                      |
| In the New Element wizard, JAWS cannot read the label for the <b>Description</b> field. Instead, JAWS reads “General Options Edit.”          | The field is available for use. Be aware of the different label that JAWS reads. |
| In the Time Period Set wizard and the Import Configuration wizard, you cannot tab to the button that expands the next section of the wizard. | No workaround is available.                                                      |
| In the Time Period Set wizard, you cannot tab, edit, or select the table cells of the wizard.                                                | No workaround is available.                                                      |
| On the Import Configuration page, you cannot tab to the button in the Status column heading.                                                 | No workaround is available.                                                      |
| In the Hierarchy Import Configuration wizard, you cannot tab to <b>Select Source Data</b> or to <b>Map to Hierarchy</b> .                    | No workaround is available.                                                      |
| In some steps of the Content Import Configuration wizard, you cannot tab to the <b>Next</b> and <b>Cancel</b> buttons.                       | No workaround is available.                                                      |
| In a data-entry portlet, you cannot tab among the cells of a form.                                                                           | No workaround is available.                                                      |



## **Part 1**

---

# Introduction to SAS Strategy Management

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## Chapter 1

# About SAS Strategy Management

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## What Is SAS Strategy Management?

SAS Strategy Management enables you to describe your strategy, regardless of the performance management framework that you have chosen. SAS Strategy Management aligns the actions of an organization to optimize strategic outcomes. You can define, plan, execute, and validate your strategy—all using SAS Strategy Management.

- **Define:** Formalize strategy and goals and the relationships between key performance indicators using strategy maps and diagrams.
- **Plan:** Set targets, thresholds, priorities, and weights associated with strategic objectives and metrics. Align strategies to support those of the organization.
- **Execute:** Monitor progress toward targets and goals. Receive alerts to areas of underperformance. Visually depict impact between leading and lagging indicators. Share feedback and commentary.
- **Validate:** Prove that a strategy delivers expected results. Statistically quantify impact, priorities, and relationships and perform what if analysis.

---

## What Is a Performance Management Framework?

*A performance management framework* is a system that is supported by measures of performance. The framework enables you to combine financial and nonfinancial

measures of performance, as well as leading and lagging indicators. Such measures can help your organization:

- Optimize your strategy and manage organizational activities.
- Test strategies before you implement them.
- Evaluate results and accomplishments.
- Correct your strategy to reflect lessons learned.

A performance management framework, for example—a balanced scorecard, can be used to evaluate an organization's impact from several perspectives, including:

- customers
- learning and growth of employees
- internal business processes
- financial results

---

## Why Use a Performance Management Framework?

A performance management framework can help your organization achieve the following goals:

- Reverse a losing competitive position.
- Keep pace with new technological advances.
- Respond to changing labor markets.
- Adjust to changes in your employees and staff.
- Comply with government management reforms.

---

## Benefits of Using SAS Strategy Management

- Improve governance, focus, and alignment. Your organization can collaboratively gain agreement, direction, and priorities for the short, medium, and long term of key initiatives and goals. You can translate this understanding through a series of connected strategy maps, themes, objectives, and metrics that guide and align the strategic activities of an organization.
- Share fact-based information quickly. Managers can cascade information about current performance and overall strategy within their own teams, and then allocate the right mix of resources—people, money and technology—to achieve strategic goals regardless of the timeline.
- Show visual connections of objectives and metrics. You can monitor performance and visually identify opportunities and threats through cause-and-effect strategy maps and diagrams. Automated alerts ensure that actions are taken in a timely manner. You can share feedback and commentary on results to improve understanding and document various actions and expectations.



- Identify and quantify potential strategic flaws. You can apply embedded statistical routines within the solution to validate the strategy and perform ad hoc what-if analysis. Where necessary, you can update the strategy based on the results, and cascade the updates to managers and employees.
- Improve accuracy, consistency, and timeliness of information. You can automate and schedule the extraction, cleansing, and transformation of data used to populate the various metrics. SAS provides web-based, manual data entry for metrics that are not currently captured electronically.

---

## Why Use SAS Strategy Management?

You can use Strategy Management to make sure your organization is executing the right activities in the right way. Strategy Management enables organizations to communicate and measure their progress. Doing so means you can make sure your organization has accomplished what it set out to do. Strategy Management helps employees and teams understand their goals and priorities. With this understanding, it is easier to translate goals into activities that the organization can execute.

You can use SAS Strategy Management to accomplish the following tasks:

- Focus on key indicators of success. You can uncover information clearly, accurately, and quickly.
- Expose relationships between activities and how these relationships affect shareholder value.
- Understand which activities drive others and what impact these activities have on your organization's performance.
- Identify potential problems by understanding root causes.

When you can uncover information and relationships to make cause and effect clear, you can understand why certain activities are more important than others. You can then use time and resources more efficiently.

---

## SAS Strategy Management Users

SAS Strategy Management serves the following users:

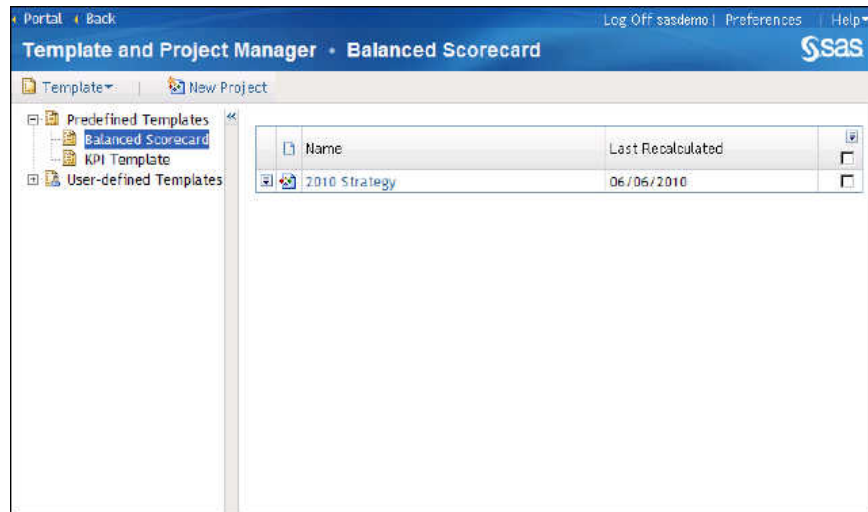
- The builders, or scorecard modelers, that are technical users of Strategy Management.
- The viewers, or business users, that use the views created by the scorecard modelers in Strategy Management.
- The data-entry users that enter data into a project in Strategy Management by using data-entry forms created by scorecard modelers.

---

## SAS Strategy Management Features

SAS Strategy Management provides the following features:

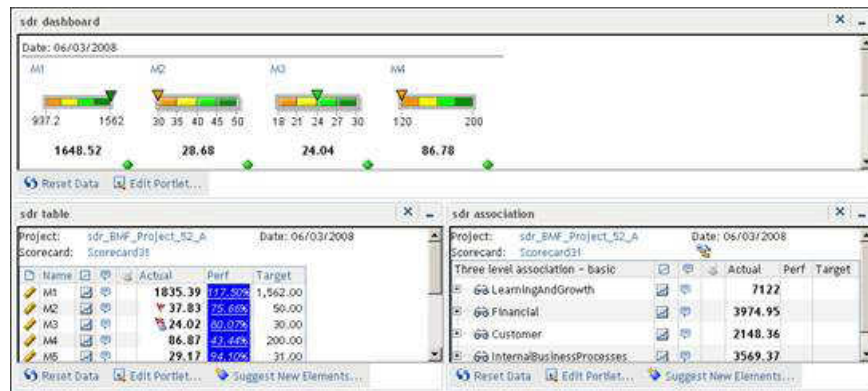
- SAS Strategy Management Builder



By using the Builder, scorecard modelers can create and model their organization's strategy in SAS Strategy Management.

For information about building a strategy, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9. Also, see “Part 2. Describing and Building Your Strategy.”

- SAS Strategy Management views



By creating views, scorecard modelers provide strategy data to their business users. For detailed information about views, see [Chapter 3, “What Is a View?”](#) on page 19. Also, see “Part 3. Navigating Data and Creating Views in SAS Strategy Management Builder.”

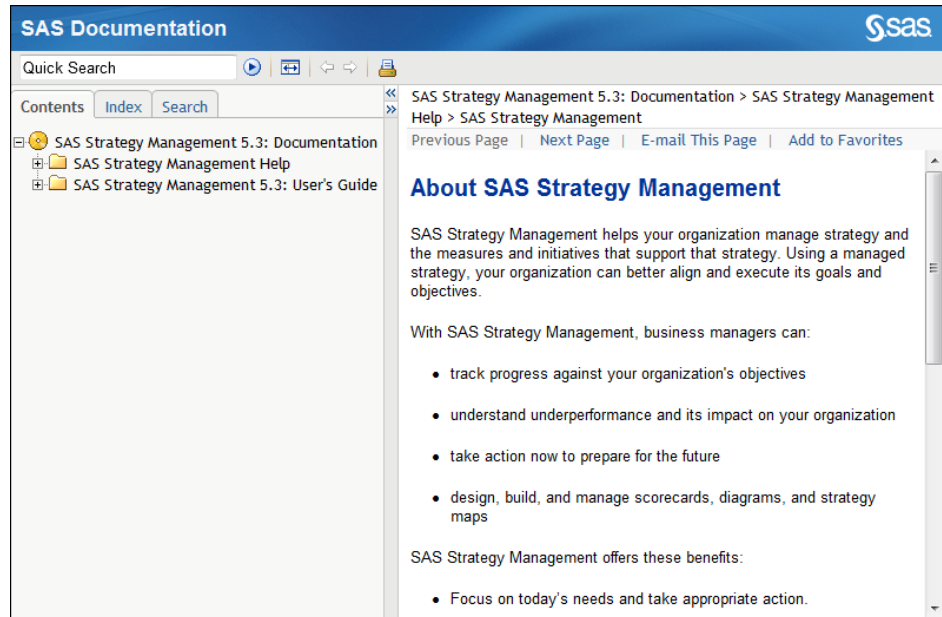
*Note:* Strategy Management information can also be viewed in SAS BI Dashboard. For more information, see [Appendix 4, “View SAS Strategy Management Data in SAS BI Dashboard,”](#) on page 361.

## Accessing Help and Documentation for SAS Strategy Management

SAS Strategy Management provides the following types of documentation:

*SAS Strategy Management: User's Guide*

This document, available as a web document and as a PDF file, provides detailed information about the concepts and tasks that are related to using Strategy Management. To access this document, click **Help** ⇒ **Help Contents** in the SAS Strategy Management Builder application. The SAS Documentation window appears.



In the left pane, on the **Contents** tab, expand **SAS Strategy Management** ⇒ **SAS Strategy Management User's Guide**. Click **View as PDF** to access the PDF file. Click and expand any of the remaining topics or folders to view the web document version of the User's Guide.

**Embedded help**

Help pop-ups and tooltips provide brief descriptions of various tasks and fields to help you use the Strategy Management enhanced portlet effectively.

To access Help pop-ups for more information about a current topic, click  when it appears next to a field or area in the user interface. You can also place the mouse pointer over an element in the user interface to view the associated tooltip for more information.

*SAS Strategy Management: Enhanced Portlet Quick Start Guide*

This document, available as a web document and a PDF file, provides detailed information about the tasks that are related to using the Strategy Management enhanced portlet. You must be in the enhanced portlet to access this document. In the portlet toolbar, click .

*Note:* The information contained in this document is also available in the *SAS Strategy Management: User's Guide*.

**Help**

Help topics about tasks and concepts are available in the SAS Strategy Management Builder. To access this help, click **Help** ⇒ **Help Contents** or **Help** ⇒ **Help on This Page**. If you are in a list or wizard, click **Help**.

You can also find information about SAS Strategy Management on the SAS Customer Support site at <http://support.sas.com/documentation/onlinedoc/stm/index.html>. The product page includes the documentation for the current version of SAS Strategy Management.

*Note:* You must have a password to access the documentation on this web page. If you do not have the password, contact SAS technical support.

## Chapter 2

# How Do You Describe a Strategy?

---

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---

## The Parts of a Strategy

A strategy created in SAS Strategy Management consists of the following parts:

### Templates

Describe the type of strategy that you are creating. Defining a template is the first step in creating your strategy in SAS Strategy Management. You can create a template or use a predefined template.

### Projects

Store and manage the content for your strategy. You can have one or more projects associated with a template.

### Scorecards

Collect content or information about a specific topic, such as a business unit or product. You can have one or more scorecards in a project. Scorecards are arranged hierarchically.

---

## Templates

### Overview

In SAS Strategy Management, your first step is to define a template. The template defines the type of strategy that you are creating by describing the key parts of the strategy.

### Examples of Templates

Before defining your template, you must identify your methodology. There are many models and methodologies that can describe a strategy. The following methodologies are examples:

- A customized model that you create or that your organization creates
- Balanced scorecard
- Business process
- European Foundation for Quality Management (EFQM)
- Governance, Risk, and Compliance (GRC)
- Six sigma

### Parts of a Template

#### ***The Element Types***

After you determine your methodology, you must describe the parts of the strategy in the template.

First, you must define what types of information you want the strategy to store. For example, you might want your strategy to include goals and measures. This type of information is called *element types*. You can have project element types and scorecard element types:

- *Project element types* are available to all projects (and the scorecards contained in a project) that are associated with a template. For example, a project element type might be named “Contacts,” and contains data that are employee names. The labels and values for a project element type are exactly the same for all of the scorecards contained in a project.
- *Scorecard element types* are available to one or more scorecards. For example, a scorecard might include an element type named “Strategic Objectives,” and contains data that are names of a company's strategic objectives. The labels and values for scorecard element types are different for each scorecard in a project.

#### ***The Metric Attributes***

Next, you must describe types of values that help you to measure, group, or track your strategy results. Each value type is a standard of measurement for the strategy to use as a basis for evaluation or comparison. This type of value is called a *metric attribute*. Actual and Target are examples of metric attributes.

**TIP** Every metric attribute that you define in a template is available to all of the scorecards and projects that are based on the template.

### **The Language Setting**

Last, you specify the language for your strategy to use to display information in SAS Strategy Management. The user-defined language setting enables you to localize your custom-defined content in the strategy. You might use the user-defined language setting in the following ways:

- To display a different language depending on which locale is using SAS Strategy Management
- To display terminologies that are used in different parts of the same company or in separate divisions of recently merged companies
- To display short and long versions of labels

**TIP** If you do not specify a language in the Strategy Management template, a default language is automatically used. Template content is displayed in the default language that is set in the Information Delivery Portal preferences.

The language setting enables the use of another language set, but does not perform translation. When you specify another language, the default language text is not translated. You must provide the text in the language that you specified by entering the text in SAS Strategy Management.

*Note:*

- The SAS Strategy Management program interface, such as menus and message text, are translated based on language localization settings. Contact your SAS representative to determine which languages are shipped with SAS Strategy Management.
- Data in a template is displayed in different languages, depending on the scorecards that are in an associated project.
- Date and number formatting is not affected.

## **Predefined Templates**

### **Overview**

SAS Strategy Management provides the following predefined templates: Balanced Scorecard template and key performance indicator (KPI) template. If you have chosen either of these methodologies to describe your strategy, these templates enable you to define your strategy in SAS Strategy Management quickly.

*Note:* The user-defined template selection enables you to describe an entirely custom strategy. This selection does not provide any components that are already defined.

### **Balanced Scorecard Template**

The Balanced Scorecard template reflects the Balanced Scorecard methodology for measuring performance. The Balanced Scorecard template contains the following components:

- A project element type named Contacts
- Scorecard element types named Objective, Measure, Initiative, Perspective, Vision, and Mission

- Metric attributes named Actual, Target, Status, and Performance
- A language named U.S. English.

### KPI Template

The KPI template is used to measure key performance indicators. The KPI template contains the following components:

- A scorecard element type named KPI
- Metric attributes named Performance, Actual, and Target
- A language named U.S. English.

Projects that are created by using the KPI template do not provide the following features and functions:

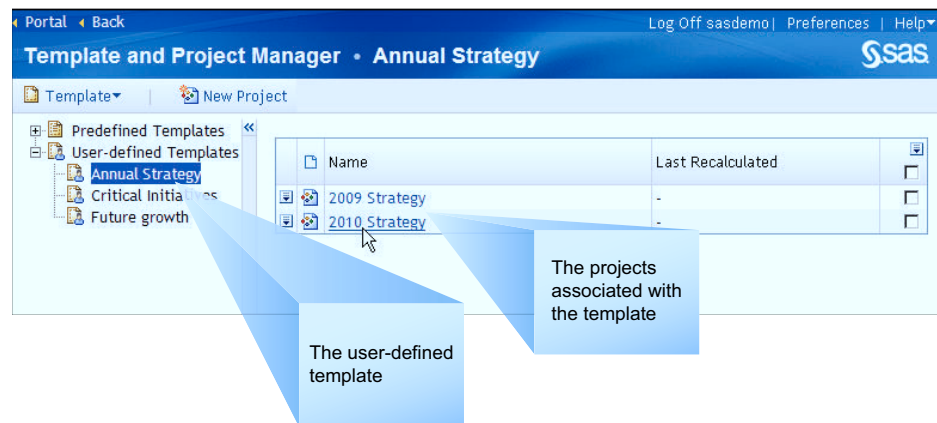
- the following features cannot be displayed:
  - association table in the Builder
  - classic-style association portlet
  - association tile in the enhanced portlet
- diagrams cannot show relationships
- regression analysis is not available

**TIP** If you copy the predefined KPI template, you can create projects by using the template copy that provide the missing features and functions.

## Projects

As you work with SAS Strategy Management, you must organize complementary information and content about your strategy. This organization is accomplished by using *projects*. A project is a top-level container to store and manage all the content in your strategy. The project also provides global settings for your strategy.

Each project is associated with one template. *Associated projects* are the projects that are associated with the current template. Associated projects share the same project element types, scorecard element types, metric attributes, and languages.



Within the project, you can create and manage the following content:



- Scorecards
- Ranges
- Column selections
- Forms

The following tasks are examples of the work that you can do when you are in a project:

- Create a data entry form and enter data by using that form
- Perform calculations
- View data in the following ways:
  - Tables
  - Aggregate tables
  - Gauges (also called dashboards)
  - Hierarchies
  - Diagrams

For more information about views and viewing data, see [Chapter 3, “What Is a View?”](#) on page 19.

---

## Scorecards

A *scorecard* is a collection of content or information about a specific topic. You can have one or more scorecards in a project. The scorecards can be at a single level or can be arranged in a hierarchical structure. A project can have one or more root-level scorecards. Each root-level scorecard can have child scorecards that are arranged in a hierarchy. For example, a root-level scorecard might represent a corporation's balanced scorecard. At successively lower levels of the hierarchy, there might be scorecards for geographical areas, divisions, or departments.

**Figure 2.1** A Project and Its Scorecards

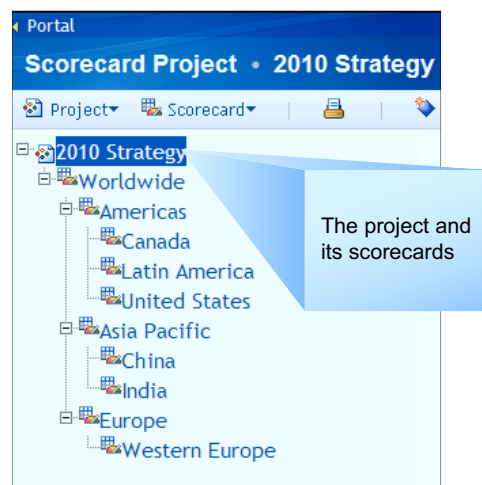
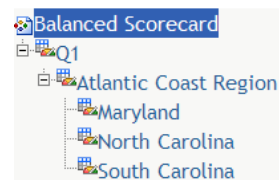


**Figure 2.2** A Parent Scorecard Selected in the Scorecard Hierarchy

A scorecard tracks internal business processes and external outcomes so that you can plan a strategy for your organization. You can use a scorecard to document strategic objectives, targets, initiatives, or any other measurement of your organization's progress.

**TIP** You can expand and contract the levels of the hierarchy by clicking the arrow that is next to the name of a parent scorecard.



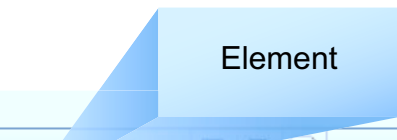

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## Elements and Attributes

After you define the type of information that you want the strategy to store (element types), you can specify detailed information by defining elements. An *element* is a unit of data that is represented by a row in a scorecard table. Each element belongs to an element type that is defined in the template that is associated with the project. Typically, there are multiple elements associated with an element type.

**Figure 2.3** The Element Type in a Scorecard


| Objective |  |                       |        |        |  |              |
|-----------|--|-----------------------|--------|--------|--|--------------|
|           |  | Name                  |        |        |  |              |
|           |  |                       | Actual | Status |  |              |
|           |  | Revenue               |        |        |  | \$15,090,000 |
|           |  | Expenses              |        |        |  | \$9,973,000  |
|           |  | Profitability         |        |        |  | \$5,117,000  |
|           |  | Customers             |        |        |  | 98           |
|           |  | Customer Satisfaction |        |        |  | 78%          |

**Figure 2.4** An Element Is a Row in a Scorecard Table


| Objective |  |                       |        |        |  |              |
|-----------|--|-----------------------|--------|--------|--|--------------|
|           |  | Name                  |        |        |  |              |
|           |  |                       | Actual | Status |  |              |
|           |  | Revenue               |        |        |  | \$15,090,000 |
|           |  | Expenses              |        |        |  | \$9,973,000  |
|           |  | Profitability         |        |        |  | \$5,117,000  |
|           |  | Customers             |        |        |  | 98           |
|           |  | Customer Satisfaction |        |        |  | 78%          |

The following table provides examples of element types and the elements that belong to each type.

| Element Type Example | Element Examples                                                                                                                                                                |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Goals                | <ul style="list-style-type: none"> <li>Reduce inspection costs</li> <li>Reduce overall cost per product</li> <li>Provide accurate, on-time, delivery service</li> </ul>         |
| Measures             | <ul style="list-style-type: none"> <li>Average number of failed inspections</li> <li>Average cost of each product</li> <li>Average number of packages tracked online</li> </ul> |

For example, an employee name might be an element that belongs to the Contacts project element type. “Create New Products” might be an element that belongs to the Objectives scorecard element type.

An element value can be either periodic or non-periodic:

- Periodic values are values that can vary depending on the period of time in which the measurement took place. For example, sales numbers can vary by month. In Strategy Management, periodic values are called *metric attributes*. A metric attribute is a value residing in a cell of the scorecard row.



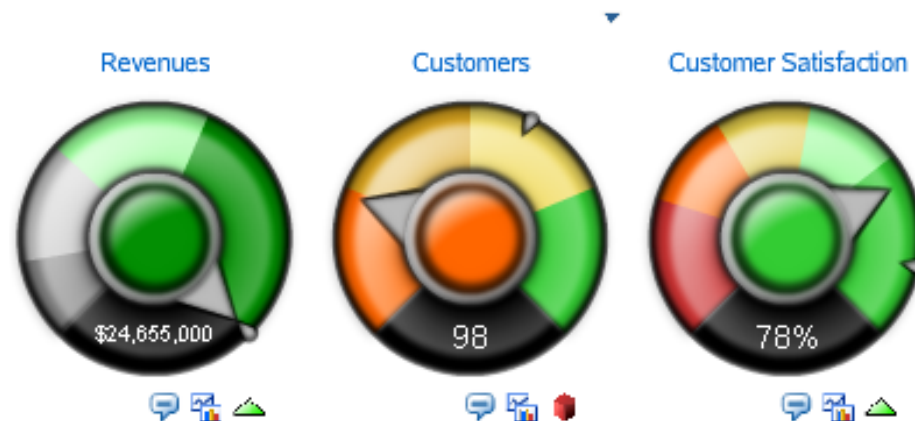
## Ranges

A *range* is a defined interval with distinct upper and lower boundaries. Using a range, you can control how data values are displayed. For example, you can plot results against a color-coded scale that indicates how close your actual results are to your desired results. Ranges can be composed of intervals, each of which can be associated with a normalized value, a grade, an icon, a label, and a color. When you define a range, you specify the lower bound, upper bound and one or more range intervals. SAS Strategy Management uses the lower bound and upper bound to draw the lowest and highest values in a graph. The range intervals are drawn as segments in the graph between the low and high bounds.

**Figure 2.8** Example of a Table Displaying Ranges

| Name             |  |  | Period  | Actual       | Status | Icon |
|------------------|--|--|---------|--------------|--------|------|
| Revenues         |  |  | AUG2010 | \$24,655,000 |        |      |
| Expenses         |  |  | AUG2010 | \$16,461,750 |        |      |
| Profitability    |  |  | AUG2010 | \$8,193,250  |        |      |
| Customers        |  |  | AUG2010 | 98           |        |      |
| Customer Satisf: |  |  | AUG2010 | 78%          |        |      |

**Figure 2.9** Example of a Gauge Displaying the Same Ranges



For more information, see [“Create a Range”](#) on page 124.

## Column Selections

When your strategy contains a lot of data, it can be difficult to understand. You can use column selections to group metric attributes, which appear in columns, to create specific views of your data. A column selection specifies the columns that are displayed with an element type in a table view, aggregate view, or association view.

You can apply column selections to element types within a project. When you create a project that is based on a template that defines metric attributes, column selections for the new project are automatically generated from the metric attributes. Column selections are also generated for the element types.

**Figure 2.10** Example of a Table Displaying All Metric Attributes

| Name             |  |  | Period  | Actual                                                                                         | Target       | Performance                                                                              | Trend                                                                               |
|------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Revenues         |  |  | AUG2010 | \$24,655,000                                                                                   | \$10,000,000 |  18%  |  |
| Expenses         |  |  | AUG2010 |  \$16,461,750 | \$5,000,000  |  137% |  |
| Profitability    |  |  | AUG2010 | \$8,193,250                                                                                    | \$3,000,000  |  50%  |  |
| Customers        |  |  | AUG2010 | 98                                                                                             | 170          |  58%  |  |
| Customer Satisf: |  |  | AUG2010 | 78%                                                                                            | 87%          |  90%  |  |

**Figure 2.11** Example of a Table Displaying Only Selected Columns

| Name             |   |   | Period  | Actual                                                                                         | Status                                                                               | Icon                                                                                 |
|------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Revenues         |   |   | AUG2010 | \$24,655,000                                                                                   |   |   |
| Expenses         |   |   | AUG2010 |  \$16,461,750 |   |   |
| Profitability    |   |   | AUG2010 | \$8,193,250                                                                                    |   |   |
| Customers        |   |   | AUG2010 | 98                                                                                             |   |   |
| Customer Satisf: |  |  | AUG2010 | 78%                                                                                            |  |  |

For more information, see [“Create a Column Selection”](#) on page 130.

## Forms

A *form* enables you to enter data or information into a strategy. Using SAS Strategy Management Builder, you can create a form to enter data into your Strategy Management project.

For more information, see [Chapter 33, “Creating and Managing Forms,”](#) on page 299.

## Chapter 3

# What Is a View?

---

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---

## Overview

SAS Strategy Management provides different ways to display and explore strategy content and data. These are called *views*. Depending on your strategy, data might be easier to understand in one type of view compared to another type. The following views are available:

- Table
- Aggregate
- Association
- Diagram
- Gauge (also called dashboard)
- Trend analysis

You can use these views in the following ways:

- You can navigate and explore your data using different views in SAS Strategy Management Builder. You can use only one view at a time. Some business users might access a view in the Builder to adjust the view, but the Builder is primarily used by scorecard modelers. For detailed information, see “Part 3. Navigating Data and Creating Views in SAS Strategy Management Builder.”
- You can create a portlet that is displayed on a portal page in the SAS Information Delivery Portal. Scorecard modelers create portlet views for their business users. Because you can have multiple portlets on a portal page, you can display and use multiple views at a time. Also, the new Strategy Management enhanced portlet can display one or more tiles. A *tile* is like a window, but it exists within the boundaries

of a portlet. In Strategy Management, a tile displays a view. For detailed information, see “Part 4. Creating Portlet Views for Business Users.”

*Note:* Strategy Management information can also be viewed in SAS BI Dashboard. For more information, see [Appendix 4, “View SAS Strategy Management Data in SAS BI Dashboard,”](#) on page 361.

The views are available in the following ways:

| View        | Builder          | Classic-style Portlet | Enhanced-portlet Tile |
|-------------|------------------|-----------------------|-----------------------|
| Table       | Yes              | Yes                   | Yes                   |
| Aggregate   | Yes              | Yes                   | Yes                   |
| Association | Yes              | Yes                   | Yes                   |
| Diagram     | Yes              | Yes                   | Yes                   |
| Gauge       | No               | Yes                   | Yes                   |
| Trend       | Yes <sup>1</sup> | Yes <sup>1</sup>      | Yes <sup>2</sup>      |

1. Links to the Trend Analysis page that provides the classic style dynamic analysis features.
2. Provides the trend analysis tile with enhanced dynamic features and a static trend chart option.

## Table

Tables display data in rows and columns.

**Figure 3.1** Table Example

| Name             |  |  | Period  | Actual                                                                                           | Status                                                                                | Icon                                                                                  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Revenues         |  |  | AUG2010 | \$24,655,000                                                                                     |  |  |
| Expenses         |  |  | AUG2010 |  \$16,461,750 |  |  |
| Profitability    |  |  | AUG2010 | \$8,193,250                                                                                      |  |  |
| Customers        |  |  | AUG2010 | 98                                                                                               |  |  |
| Customer Satisf: |  |  | AUG2010 | 78%                                                                                              |  |  |

The columns in the table are determined by the template with which the project is associated. The elements are displayed in rows. You can create elements in a table.

In a table, you can perform the following tasks:

- Display data that is organized by element type, attribute, and date.
- Create, copy, move, and delete elements.
- Customize the rows, columns, and types of links that are displayed in the table.



- Format columns and cells.
- Apply formulas and ranges to columns.
- Set global and personal threshold options.
- Display history.
- View and add comments.

## Aggregate

An aggregate table shows data from the selected scorecard and all of its children. You can choose to view the aggregated data by scorecard or by metric attribute.

*Note:* If a scorecard does not contain child scorecards, the aggregate table is not displayed.

**Figure 3.2** Aggregate Example

| Name              | Actual       |             |             | Status       |       |       |
|-------------------|--------------|-------------|-------------|--------------|-------|-------|
|                   | Asia Pacific | India       | China       | Asia Pacific | India | China |
| Revenues          | \$7,390,000  | \$4,500,000 | \$2,890,000 | ▲            | ▲     | ▲     |
| Expenses          | \$5,118,500  | \$3,240,000 | \$1,878,500 | ●            | ●     | ●     |
| Profitability     | \$2,271,500  | \$1,260,000 | \$1,011,500 | ▼            | ▼     | ▼     |
| Customers         | 98           | 98          | 98          | ●            | ●     | ●     |
| Customer Satisfac | 78%          | 78%         | 78%         | ▲            | ▲     | ▲     |

## Association

An association displays relationships between scorecard element types and their associated attributes in a project. The elements are displayed in a hierarchy to reflect their association.

**Figure 3.3** Association Example

| Name                       |  | Actual       | Target       | Performan... | Trend |
|----------------------------|--|--------------|--------------|--------------|-------|
| ▼ Quality management       |  |              |              |              |       |
| Profitability              |  | \$8,193,250  | \$3,000,000  | 50%          |       |
| ▼ Customer loyalty program |  |              |              |              |       |
| ▼ Revenues                 |  | \$24,655,000 | \$10,000,000 | 18%          |       |
| Market share               |  | \$45         | 75           | 59%          |       |
| ▼ Customers                |  | 98           | 170          | 58%          |       |
| New Customers              |  | \$89         | 150          | 59%          |       |
| ▼ Customer Satisfaction    |  | 78%          | 87%          | 90%          |       |
| Productivity               |  | \$75         | 95           | 79%          |       |
| Hours spent with cu        |  | 45           | 65           | 69%          |       |

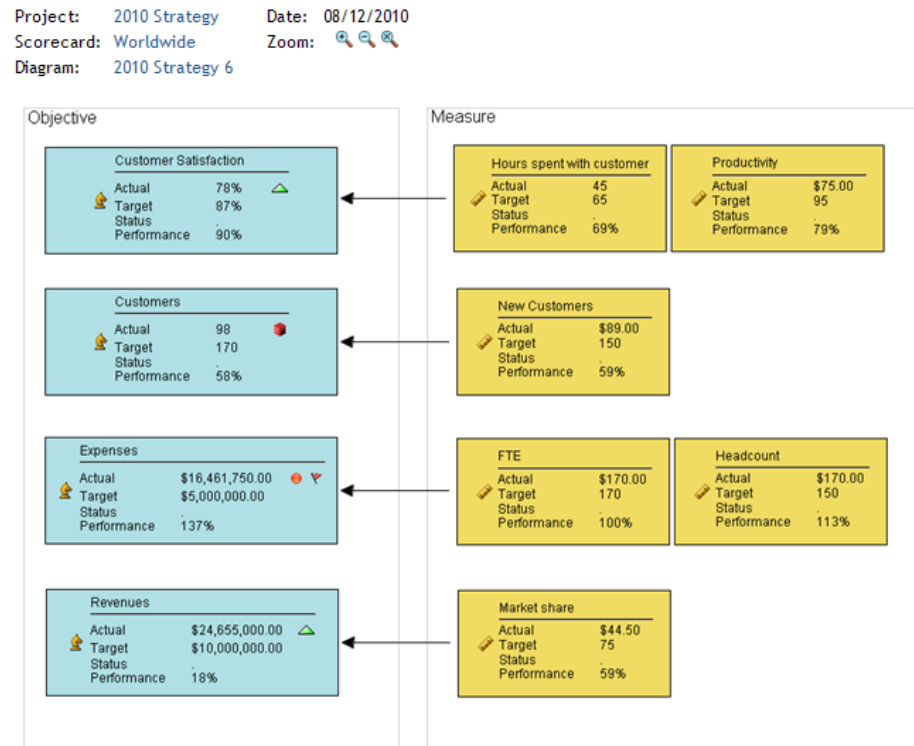
## Diagram

A diagram is a graphical way of representing elements, their relationships to one another, and their respective scores. A diagram is a way to present information found in tables, but in a more intuitive way. When you use a diagram, you can display results in the context of the strategy and provide answers about how well the organization is performing and why certain data or relationship is important.

A diagram enables users to see the relationship between strategy elements—relationships that are sometimes difficult to convey in a table. You can create diagrams that illustrate the relationships between scorecard elements or project element types.

*Note:* A diagram is often used to present the strategy map, a layered representation that conveys the drivers and relationships.

**Figure 3.4** Example of a Diagram View Displayed in a Classic-Style Portlet

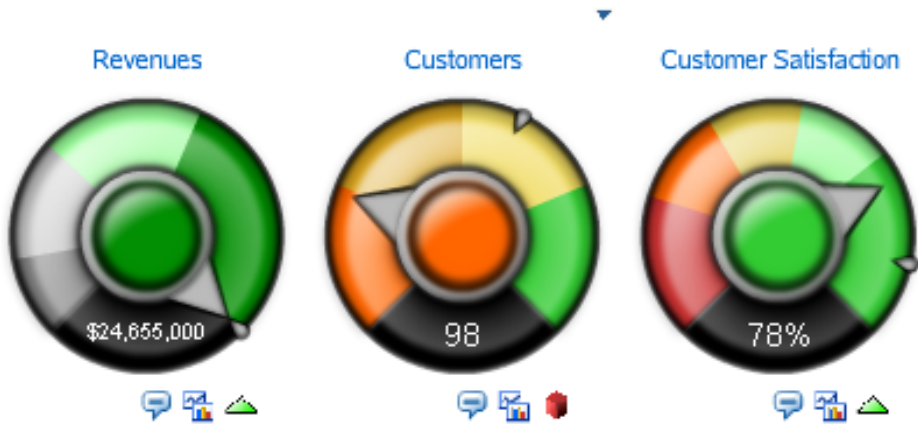


## Gauge (Also Called Dashboard)

A gauge (also called dashboard) displays ranges of data in a graphical format. You can display key performance indicators or any SAS Strategy Management elements by using the gauge view. Each element is represented by a gauge that displays the data ranges that are defined. In addition to displaying ranges, you can provide links to comments, trend data, and element properties.

Gauges can be displayed as a dial, a slider, a stoplight, a speedometer, or a bullet bar.

Figure 3.5 Example of a Gauge Dial



## Trend Analysis

An element's trend is its performance over time. You can view a trend analysis that displays the trend of an element's data. SAS Strategy Management provides different trend view implementations depending on the product feature.

| Product Feature         | Trend Implementation                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Builder                 | When you are working in the Builder using the table or association views, the Trend Analysis button is available. When you click this button, the Trend Analysis page appears.                                                                                                                                                                                                                                |
| Classic-style portlet   | When you are working in the table, association, or dashboard views in a classic-style portlet, the Trend Analysis button might be available, depending on how the portlet is customized. When you click this button, the Builder opens and the Trend Analysis page appears.                                                                                                                                   |
| Enhanced-portlet tile   | The Strategy Management enhanced portlet can be customized to include a trend analysis tile. You can drag a value or an element from one or more table, aggregate, association, or gauge tiles onto the trend analysis tile. You can manipulate the resulting graph to further explore the trend analysis. You can also add or remove more data from other tiles. See <a href="#">Figure 3.6 on page 24</a> . |
| Enhanced-portlet option | The enhanced-portlet tiles for the table, association, diagram, and gauge views provide an option to display a static trend chart. If the tile is customized to use this option, you can click an icon that opens a trend chart. The data is static although you can change the date range using the date slider. See <a href="#">Figure 3.7 on page 25</a> .                                                 |

With the Trend Analysis page, the initial analysis uses the element whose row you clicked to open the Trend Analysis page. However, you can dynamically add to or change the analysis after it opens. For more information, see [Chapter 22, “Creating and Editing Trend Analysis Views,” on page 211](#).

For more information about the enhanced-portlet implementations of trend analysis, see the following sections:

- “Edit the Trend Analysis Tile Properties” on page 253
- Chapter 30, “Navigating and Viewing the Strategy Management Enhanced Portlet and Its Tiles,” on page 277

**Figure 3.6** Example of a Dynamic Trend Analysis in an Enhanced Portlet Tile

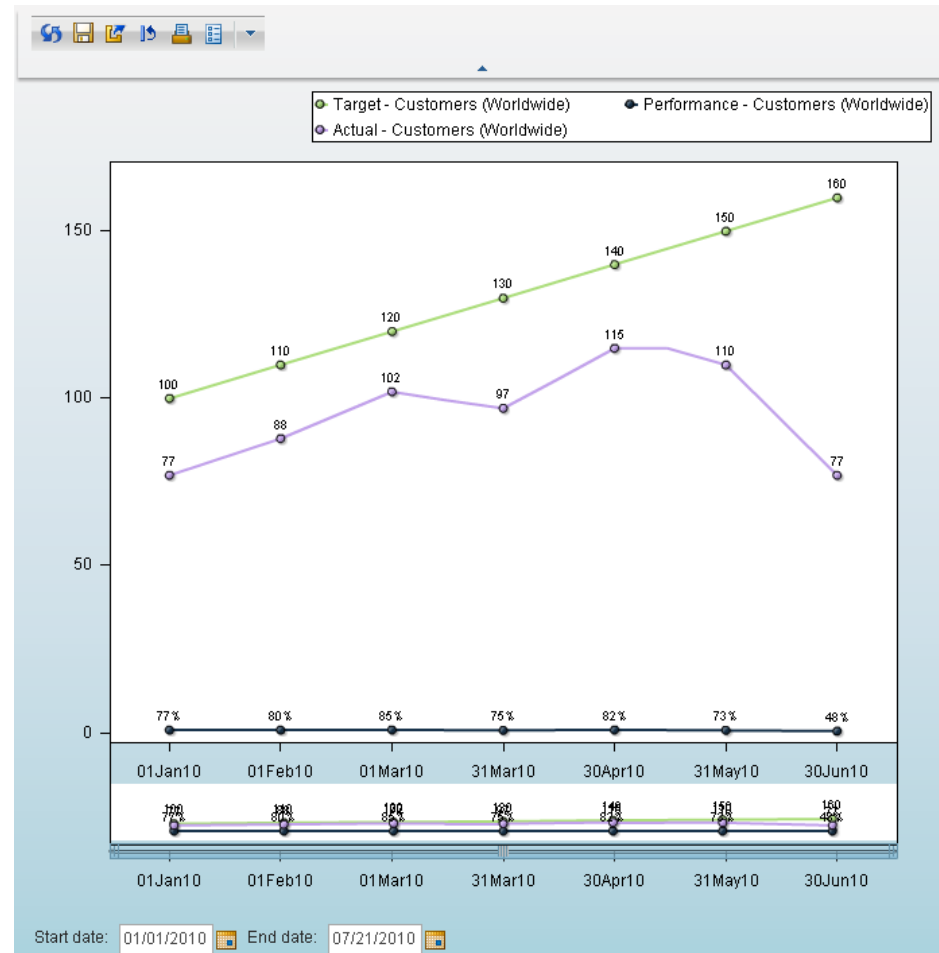
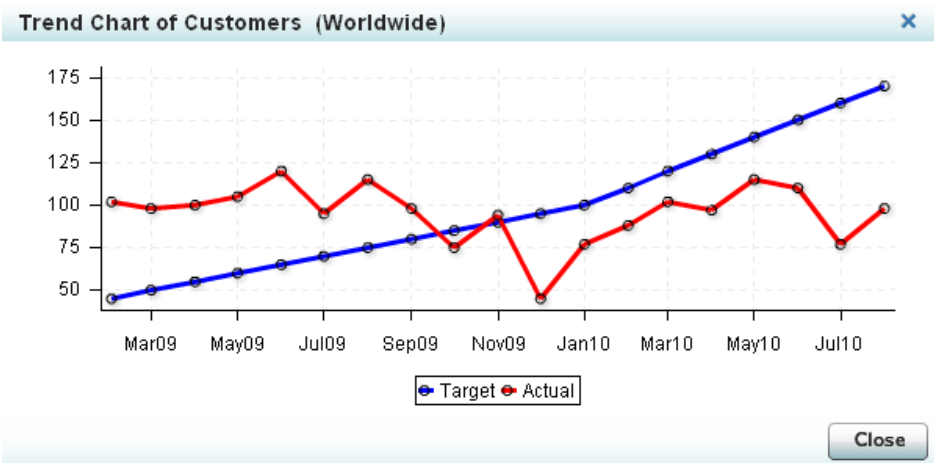


Figure 3.7 Example of a Static Trend Chart in the Enhanced Portlet





## Part 2

---

# Describing and Building Your Strategy

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## Chapter 4

# Starting SAS Strategy Management Builder

---

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---

## Starting SAS Strategy Management Builder Using a Link

### Overview

You can create a shortcut link that opens SAS Strategy Management Builder in your web browser by using the web address of the SAS Strategy Management web application (the Builder).

### Create the Shortcut Link

To create the shortcut link that opens SAS Strategy Management Builder, complete the following steps:

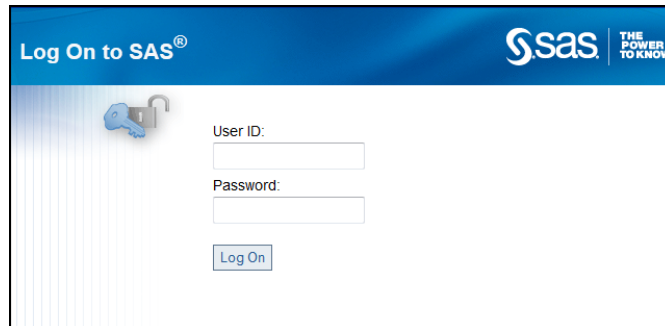
1. Right-click your Windows desktop and click **New** ⇒ **Shortcut**. The Create Shortcut wizard appears.
2. In the **Type the location of the item field**, enter the web address for the SAS Strategy Management web application.  
*Note:* To obtain the web address, contact your system administrator.
3. Click **Next**.
4. In the **Type a name for this shortcut**, enter a short, descriptive name for this shortcut.

5. Click **Finish**. The shortcut appears on your Windows desktop.

## Log On

To log on to the SAS Strategy Management web application (the Builder), complete the following steps:

1. Click the shortcut on your desktop. The Log On page appears.



2. Enter your user ID and password.
3. Click **Log On**. The SAS Strategy Management Builder appears and the Template and Project Manager page is displayed.

---

## Starting SAS Strategy Management Builder from a Portlet

### Overview

Before you access SAS Strategy Management Builder, you must log on to the SAS Information Delivery Portal and create a portal page. Then you can add a Collection portlet from which to start SAS Strategy Management Builder.

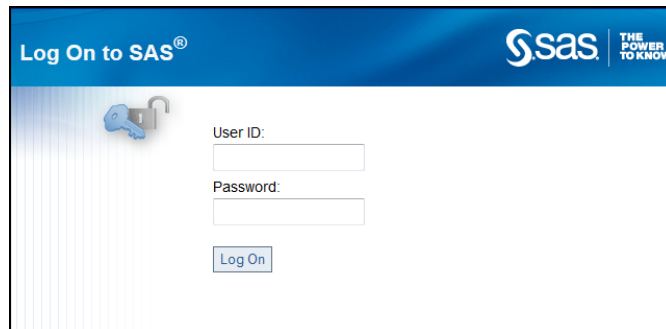
## Log On

To log on to the SAS Information Delivery Portal, complete the following steps:

1. Open your browser and enter the web address for the portal.

*Note:* To obtain the web address, contact your portal administrator.

The Log On page appears.



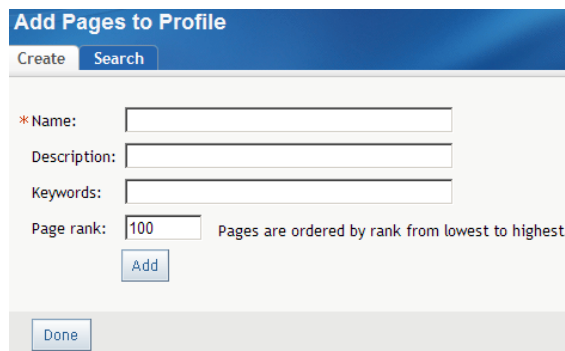
The image shows the SAS Log On interface. At the top is a blue header with the text "Log On to SAS®" and the SAS logo with the tagline "THE POWER TO KNOW.". Below the header is a light blue background with a large, faint "S" shape. On the left, there is a blue key icon. To the right of the key, there are two text input fields: "User ID:" and "Password:". Below these fields is a blue button labeled "Log On".

2. Enter your user ID and password.
3. Click **Log On**. Your personal portal opens. Initially, the portal contains no pages or portlets.

## Create a Page

To create a new portal page to contain the SAS Strategy Management Builder portlet, complete the following steps:

1. Click **Options** ⇒ **Add Page**. The Add Pages to Profile page appears.



The image shows the "Add Pages to Profile" form. It has a blue header with the text "Add Pages to Profile". Below the header are two tabs: "Create" (selected) and "Search". The form contains several input fields: "\*Name:", "Description:", "Keywords:", and "Page rank:". The "Page rank:" field has a value of "100" and a note: "Pages are ordered by rank from lowest to highest." Below the input fields is a blue button labeled "Add". At the bottom of the form is a blue button labeled "Done".

2. On the Create tab, type descriptive information about the page:

### Name

a short name that appears in the page tab in the navigation bar.

### Description

a short description that appears along with the page title in search results.

### Keywords

single words that you or other users can use to search for this page. Use spaces to separate keywords from one another.

*Note:* To ensure efficient searching, develop a list of standard keywords and use these keywords consistently.

### Page rank

a number that indicates the importance of this page as compared to other pages. The default value is 100.

This number determines the order in which pages are listed in the navigation bar. The pages are ordered by rank from lowest to highest. Pages that have equal rank are listed in the order in which they were created.

### Location (group)

*Note:* This list appears only if you are a group content administrator.

specifies the group with which to share the page. If you select a value in the **Location (group)** field, the **Share type** field appears.

**TIP**

- To share with everyone, select **Public** from the list.
- This selection supports sharing with only one group at a time. To share with more than one group, you must have authorization manager capability in the SAS Management Console. In SAS Management Console Permissions, expand **Authorization Manager** ⇒ **By Type** ⇒ **PSPortletPage**. Click your new portal page. In the View Properties list, on the Authorization tab, add any users and groups to share. Click **OK**.

**Share type**

*Note:* This list appears only if you are a group content administrator and have made a selection in the **Location (group)** list.

indicates how the page is shared with users. This list provides the following options:

| Option     | Description                                                                                                                                                         |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Available  | Users in the group can find the page using Search. They can add the page if needed.                                                                                 |
| Default    | Users in the group automatically see the page the next time they log on to the portal. Users can remove the page from the navigation bar if the page is not needed. |
| Persistent | Users in the group automatically see the page the next time they log on to the portal. However, users cannot remove the page from the navigation bar.               |

3. Click **Add**.
4. Click **Done**. The new, empty page appears in the portal.

## Add a Portlet to the Page

A Collection portlet can contain links to the content and applications that you frequently use. Your portal might contain several of these portlets, each containing its own set of links. For SAS Strategy Management, these portlets can contain a task link that starts SAS Strategy Management Builder.

To add a portlet to a page, complete the following steps:

1. Navigate to the Information Delivery Portal page to which you want to add a portlet.
2. Click **Options** ⇒ **Edit Page Content**. The Edit Page Content page appears.

3. Click **Add Portlets**. The Add Portlets to Page page appears.
4. From the **Portlet type** list, select **Collection**.
5. Enter the name, description, and keywords, if any.
6. Click **Add**.
7. Click **Done**.
8. On the Edit Page Content page, click **OK**. The new portlet appears on the page.

### Add Links to the Collection Portlet

You can add links to the Collection portlet that open a limited set of features in Strategy Management Builder. You can also add a link that opens a specific project or scorecard.

Complete the following steps in the My Collection portlet:

1. On the My Collection portlet toolbar, click **Edit Content**. The Edit Portlet Content page appears.
2. Click **Add Items**. The Add Items to Portlet page appears.
3. To add a predefined link to the portlet, complete the following steps:
  - a. Click the **Search** tab.
  - b. In the **Keywords** field, type **Strategy**.
  - c. In the list, click **Application**.
  - d. Click **Search**. In the right pane, the search results appear. Any application link that includes the word **strategy** is displayed.
  - e. Select one or both of the following results:
    - Manage Strategy Management Scorecard Projects and Templates
    - New Strategy Management Scorecard Project
  - f. Click **Add**.
4. To add a custom link to the portlet, complete the following steps:

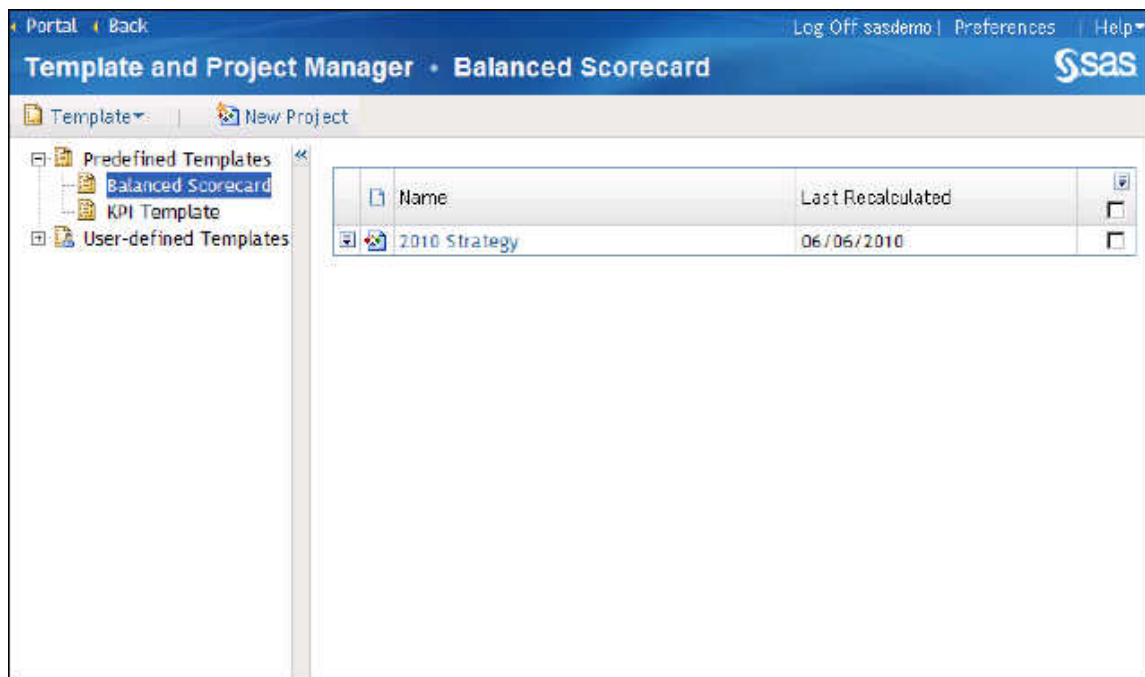
- a. Click **Application**. Doing so makes sure that you do not have to log on to the portal again.
- b. On the **Create** tab, in the **Name** field, enter the name that you want to use to label the link.
- c. In the **URL** field, type or paste the web address for the SAS Strategy Management project or scorecard that you want the link to open.

*Note:* To obtain the web address, navigate to the project, scorecard, or any other location within the Strategy Management Builder that you want to open. Then, copy that web address from your web browser address field.

- d. Click **Add**.
5. Click **Done** to exit the Add Items to Portlet page.
6. On the Edit Portlet Content page, click **OK**. The portlet now contains the links that you added. For information about starting the Builder, see [“Start the Strategy Management Builder” on page 34](#).

### Start the Strategy Management Builder

To start the Strategy Management Builder from a Collections portlet, click the link label that you specified for the Strategy Management Builder web address. The Builder appears.



For a detailed description of the Builder interface, see [Chapter 5, “The SAS Strategy Management Builder Interface,” on page 37](#).

---

## Log Off from SAS Strategy Management Builder

To log off from SAS Strategy Management Builder, click **Log Off** in the upper right corner of the user interface.

*Note:* If your session is inactive longer than the SAS Information Delivery Portal time-out value, you are automatically logged off.





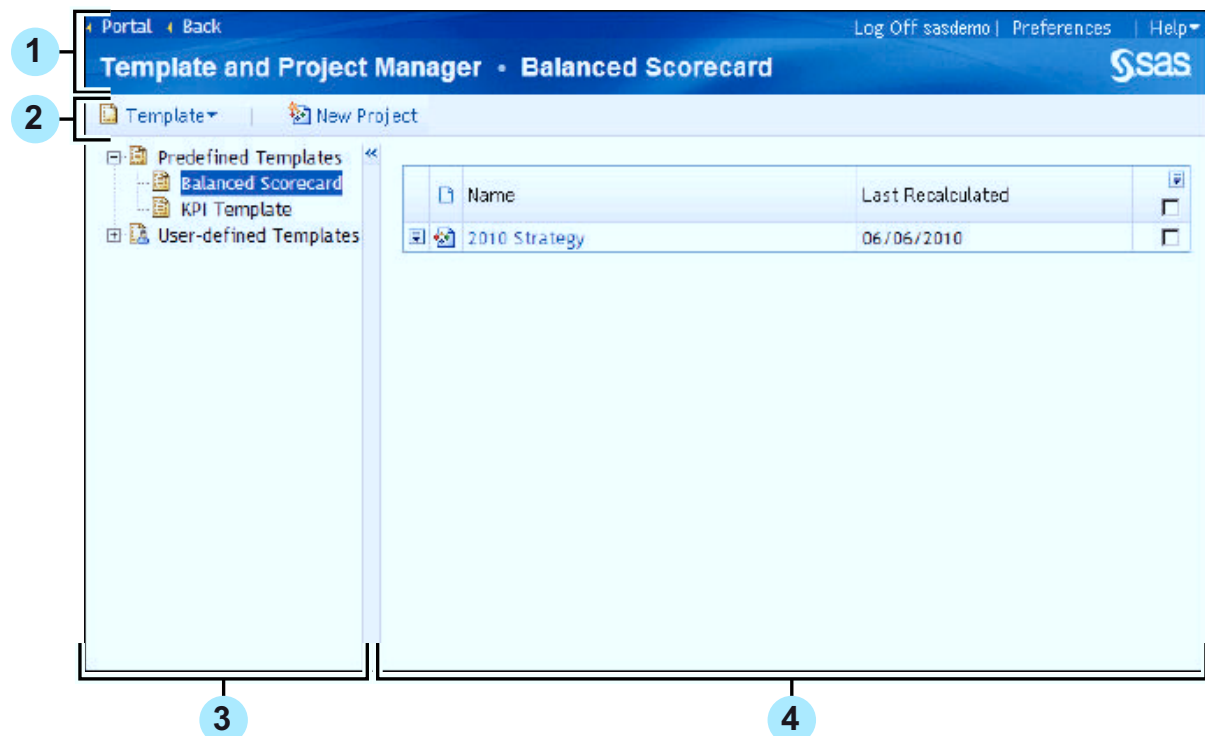
## Chapter 5

# The SAS Strategy Management Builder Interface

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## Your First Look at the Strategy Management Builder

The following display shows the SAS Strategy Management interface and its major parts:



- 1 banner
- 2 toolbar
- 3 navigation pane
- 4 content pane

---

## About the Banner

The following display shows the banner interface and its features:



- 1 Title  
Identifies the current page in SAS Strategy Management and the currently selected template, project, or scorecard. In this example, the selected template name is displayed.
- 2 Log Off  
Click to log off from SAS Strategy Management.
- 3 Preferences  
Click to view and set preferences for the SAS Information Delivery Portal, its pages, and its portlets.
- 4 Help  
Displays the **Help** menu that provides help for SAS Strategy Management, the SAS Information Delivery Portal, and any other products installed in the portal.

*Note:* Depending on where you are in SAS Strategy Management, the **Back** link appears next to the **Portal** link. Click **Back** to return to the previous page.

---

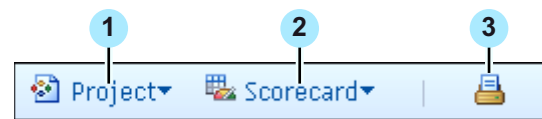
## About the Toolbar

The toolbar provides buttons for frequently used tasks in the Builder. The buttons that are displayed vary depending on selections that you made in the Builder. The following display shows the toolbar when you first open SAS Strategy Management Builder:

**Figure 5.1** Initial Toolbar in the Builder



When you open a project or scorecard, the toolbar displays one set of buttons above the navigation pane and another set of buttons above the content pane.

**Figure 5.2** Toolbar above Navigation Pane

- 1 Displays the **Project** menu. For more information, see [Chapter 7, “Working with Projects,”](#) on page 59.
- 2 Displays the **Scorecard** menu. For more information, see [Chapter 8, “Working with Scorecards,”](#) on page 77.
- 3 Prints the current view in the content pane. For more information, see [“Print a View”](#) on page 219.

The content pane buttons include buttons that are always available and other buttons that vary depending on the type of content that appears in the pane.

**Figure 5.3** Buttons That Are Always Available above the Content Pane

| Button                                                                              | Name                          | Description                                                                                                                                                                        |
|-------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Table view                    | Displays the table view. This is the default view. For more information, see <a href="#">Chapter 17, “Creating and Editing Table Views,”</a> on page 151.                          |
|  | Aggregate view                | Displays the aggregate view. For more information, see <a href="#">Chapter 18, “Creating and Editing Aggregate Views,”</a> on page 155.                                            |
|  | Association view              | Displays the association view. For more information, see <a href="#">Chapter 19, “Creating and Editing Association Views,”</a> on page 157.                                        |
|  | Diagram view                  | Displays the diagram view. For more information, see <a href="#">Chapter 20, “Creating and Editing Diagram Views,”</a> on page 161.                                                |
|  | Add to portlet                | Provides a way to save a view to a portlet. For more information, see <a href="#">“Save a View to a Portlet”</a> on page 218.                                                      |
|  | Save as a SAS Information Map | (Table view only) Provides a way to save the scorecard as a SAS Information Map. For more information, see <a href="#">“Save a Scorecard as a SAS Information Map”</a> on page 79. |
|  | Copy web address              | Provides a way to copy the web address of the view. For more information, see <a href="#">“Link to a View Using a Web Address”</a> on page 219.                                    |
|  | Refresh                       | Refreshes the current view.                                                                                                                                                        |

*Note:* The buttons that are displayed depending on the current content are described in the chapters related to that content.

---

## About the Navigation Pane

The navigation pane, located on the left side of the SAS Strategy Management Builder interface, enables you to navigate the following hierarchies:

- If you are working on the Templates and Project Manager page, it provides the available templates.
- If you are working in a project or scorecard, this pane provides the scorecards in the project.

---

## About the Content Pane

The content pane, located on the right side of the SAS Strategy Management Builder interface, enables you to view lists of available content or to view the currently selected content.

## Chapter 6

# Working with Templates

---

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---

## Overview

For a description of templates, projects, and scorecards, and how they relate to each other, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9.

---

## List Templates

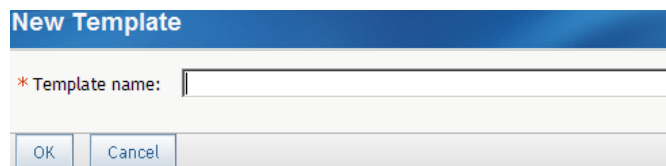
Templates are listed in the Template and Project Manager. For more information, see [“Display the Template and Project Manager Page”](#) on page 135.

---

## Create a Template

To create a template, complete the following steps:

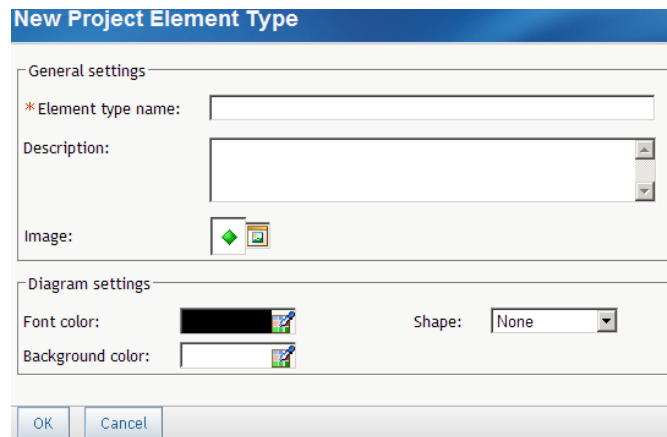
1. Display the Template and Project Manager page. For more information, see [“Display the Template and Project Manager Page”](#) on page 135.
2. Click **Template** ⇒ **New Template**. The New Template page appears.

A screenshot of the 'New Template' dialog box. It has a blue header bar with the text 'New Template'. Below the header is a text input field with a red asterisk and the label '\* Template name:'. At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

3. Type a name for the new template in the **Template name** field.  
*Note:* The name must be unique among the user-defined templates.
4. Click **OK**. The Template Editor page appears.

A screenshot of the 'Template Editor - Marketing Template' window. The title bar says 'Template Editor - Marketing Template' and the SAS logo is in the top right. Below the title bar is a tab labeled 'New Project Element Type'. On the left is a tree view with four items: 'Project Element Types' (selected), 'Scorecard Element Types', 'Metric Attributes', and 'User-defined Languages'. On the right is a table with two columns: 'Name' and 'Description'. The table is empty, and a message at the bottom says 'No values were returned for this table.'.

5. To define the project elements, select **Project Element Types** from the list on the left and complete the following steps:
  - a. Click **New Project Element Type**. The New Project Element Type page appears.



**New Project Element Type**

**General settings**

\* Element type name:

Description:

Image: 

**Diagram settings**

Font color:  Shape:

Background color: 

- b. In the **General settings** section, type a name for the element type. You can also type a description.

*Note:* The name must be unique among the project element types and the scorecard element types in the template.

- c. Click the icon that is next to **Image** and select an image to represent the element type.

*Note:* When you view a scorecard later, if the image that is specified here is missing, no image is displayed for that project element type. An image might be missing because the previously assigned image has been removed.

- d. In the **Diagram settings** section, click the icon that is next to **Font color** and select a font color to be displayed with the element type in a diagram.

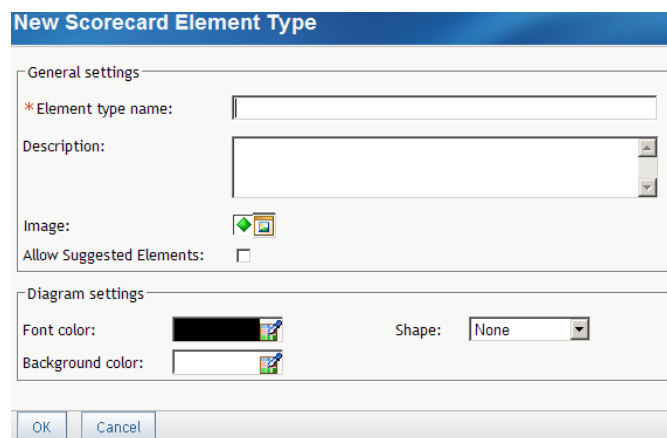
- e. Click the icon that is next to **Background color** and select a color to be displayed in the background of the element type in a diagram.

- f. From the **Shape** list, select a shape to be displayed with the element type in a diagram.

- g. Click **OK**.

6. To define a scorecard element type, select **Scorecard Element Types** from the list on the left and complete the following steps:

- a. Click **New Scorecard Element Type**. The New Scorecard Element Type page appears.



**New Scorecard Element Type**

**General settings**

\* Element type name:

Description:

Image: 

Allow Suggested Elements: ☐

**Diagram settings**

Font color:  Shape:

Background color: 

- b. In the General settings section, type a name for the element type. You can also type a description.

- c. Click the icon that is next to **Image** and select an image to represent the element type.

*Note:* When you view a scorecard later, if the image specified here is missing, no image is displayed for that scorecard element type. An image might be missing because the previously assigned image has been removed.

- d. To enable users to suggest elements, select **Allow Suggested Elements**.
- e. In the Diagram settings section, click the icon that is next to **Font color** and select a font color to be displayed with the element type in a diagram.

*Note:* The diagram settings are applied only when a diagram is created. The settings do not affect existing diagrams.

- f. Click the icon that is next to **Background color** and select a color to be displayed in the background of the element type in a diagram.
  - g. From the **Shape** list, select a shape to be displayed with the element type in a diagram.
  - h. Click **OK**.
7. To define a metric attribute, select **Metric Attributes** from the list on the left and complete the following steps:
    - a. Click **New Metric Attribute**. The New Metric Attribute page appears.
    - b. Type a name for the metric attribute.
    - c. Click **OK**.
  8. (Optional) To define a language, select **User-Defined Languages** from the list on the left and complete the following steps.
 

*Note:* For more information, see [“Working with Language Settings” on page 52](#).

    - a. Click **New Language**. The New Language page appears.
    - b. Type a name for the language.
    - c. Click **OK**.

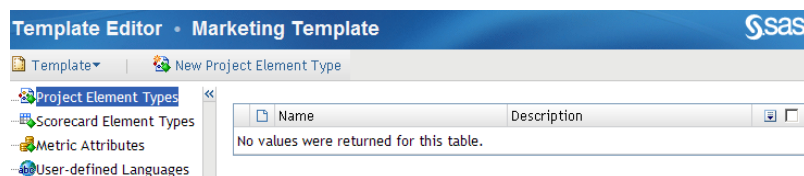
---

## Open a Template

You can open a template for editing and viewing. Element types, metric attributes, and languages that you add to a template after you have created a project are reflected in the project. If you delete element types, metric attributes, or languages from a template, those items are deleted from the project, whether or not they contain data.

To open a template, complete the following steps on the Template and Project Manager page:

1. Select a template name in the list of templates.
2. Click **Template** ⇒ **Edit Template**. The Template Editor page appears.





## Working with Project Elements

### Overview

You define a project element type when you create a template. For more information, see [“Create a Template” on page 42](#).

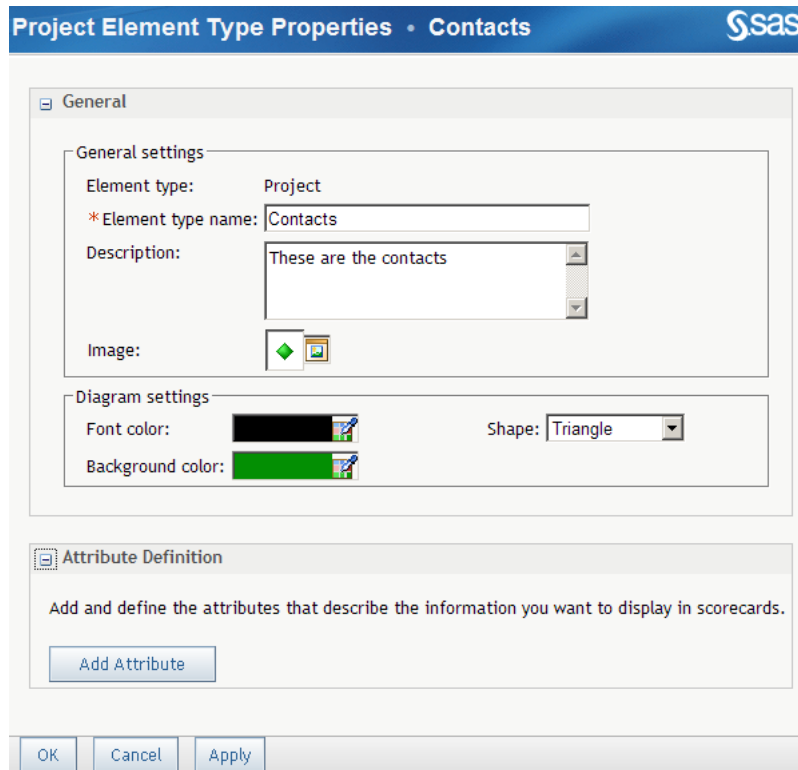
To list the project element types that are in a template, open a template and click **Project Element Types**.

The Project Element Types table displays the element types that you have created for the selected template. From this table, you can create new element types, edit the properties of element types, and copy and delete element types.

### Edit Project Element Type Properties

To edit project element type properties in a template, complete the following steps in an open template:

1. Select **Project Element Types** from the list on the left.
2. Next to an element type in the table, click  and click **Properties**. The Project Element Type Properties page appears.



**Project Element Type Properties • Contacts** 

**General**

General settings

Element type: Project

\* Element type name: Contacts

Description: These are the contacts

Image: 

Diagram settings

Font color:  Shape: Triangle

Background color: 

**Attribute Definition**

Add and define the attributes that describe the information you want to display in scorecards.

[Add Attribute](#)

OK Cancel Apply

3. To change the general properties of a project element type, complete the following steps:
  - a. In the **General** section, type a new name in the **Element type name** field.

**General**

General settings

Element type: Project

\*Element type name: Contacts

Description: These are the contacts

Image:

Diagram settings

Font color:

Background color:

Shape: Triangle

- b. (Optional) Change the description in the **Description** field.
- c. To change the image to be displayed with the element type, click the icon that is next to **Image** and select an image.

*Note:* If an image does not exist, no image is displayed for that element type. Images might be missing because a previously assigned image has been removed without updating the element type properties.

- d. In the **Diagram Settings** section, click the icon that is next to **Font color** to change the font color to be displayed with the element type in a diagram.
  - e. Click the icon that is next to **Background color** to change the color to be displayed in the background of the element type in a diagram.
  - f. From the **Shape** list, change the shape to be displayed with the element type in a diagram.
4. To define an attribute for a project element type, complete the following steps.

*Note:* An attribute definition describes the types of information that can be displayed with project element types. You can define more than one attribute for an element. An attribute can belong to one of the following categories:

- Text
- E-mail
- Date
- URL (web address)
- Element type.

- a. Expand the **Attribute Definition** section.

**Attribute Definition**

Add and define the attributes that describe the information you want to display in scorecards.

Add Attribute

- b. Click **Add Attribute**. A new attribute is added to the right-most column.

Attribute settings:

Attribute 1

Label:

Attribute 1

Description:

Attribute category:

Text

- c. In the **Label** field, type a new label such as User ID for the attribute.
- d. (Optional) In the **Description** field, type a description of the attribute.
- e. From the **Attribute category** list, select a category.
- f. If you select **Element Type** as the category, select an element type from the **Element type** list. Doing so associates the attribute to an element type.

**TIP** To associate the attribute with more than one element type, click **Allow multiple selections**.

- g. To edit an attribute definition, type a new label or a new description, or select a different category for the selected attribute in the Attribute Settings window.
  - h. To delete an attribute, click **X** that is next to the attribute name in the Attribute Settings window.
5. When you are finished editing the project element type properties, click **OK**.

### Copy Project Element Types or Scorecard Element Types

To save a project element type or a scorecard element type under a different name in the same user-defined template, complete the following steps in an open user-defined template:

1. Select **Project Element Types** or **Scorecard Element Types** from the list on the left.
2. Next to an element type in the table, click  and click **Copy**. The Copy page appears.
3. Type a name for the copy of the element type.  
*Note:* By default, the name is *element-type-namecopy*.
4. Click **Copy**.

### Delete Project Element Types

To delete a project element type, complete the following steps in an open template:

1. Select **Project Element Types** from the list on the left.
2. Next to an element type in the table, click  and click **Delete**.
3. To delete more than one element type, perform one of the following steps:

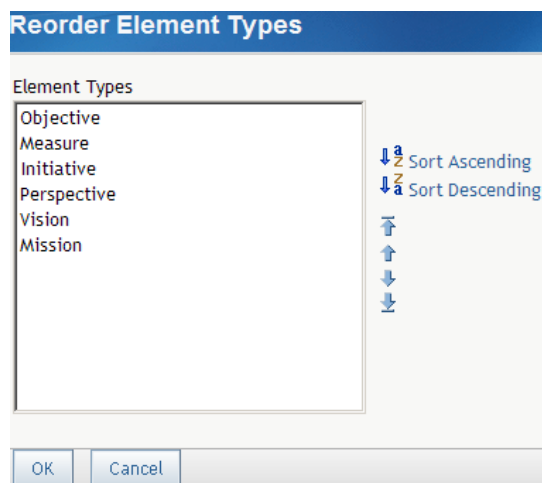
- Click the check box to the right of each element type that you want to delete. Then, click  for the column and click **Delete**.
- To delete all element types, click the check box at the top of the right-most column, click  for the column and click **Delete**.

## Change the Order of Element Types

You can change the order in which element types are displayed within SAS Strategy Management.

To change the order of element types, complete the following steps in an open template:

1. On the left, select **Project Element Types** or **Scorecard Element Types**.
2. To the left of an element type, click  and click **Reorder**. The Reorder Element Types page appears.



3. To sort in ascending or descending alphabetic order, click **Sort Ascending** or **Sort Descending**.
4. To move scorecards, select one or more scorecards and use the following icons:

| Icon                                                                                | Action                                                     |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|
|  | Moves the selected scorecard to the beginning of the list. |
|  | Moves the selected scorecard up.                           |
|  | Moves the selected scorecard down.                         |
|  | Moves the selected scorecard to the end of the list.       |

## Working with Scorecard Element Types

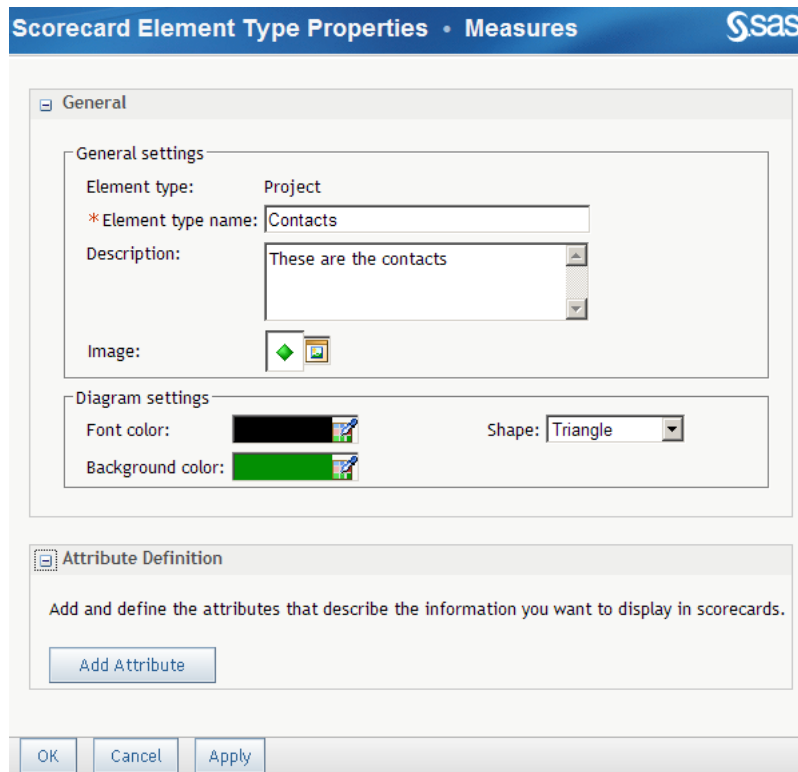
### List Scorecard Element Types

To list the scorecard element types in a template, open a template, and select **Scorecard Element Types** from the list on the left. The table displays the scorecard element types that have been created for the selected template. From this table, you can create new scorecard element types, edit the properties of scorecard element types, and copy and delete scorecard element types.

### Edit Scorecard Element Type Properties

To edit scorecard element type properties, complete the following steps in an open template:

1. Select **Scorecard Element Types** from the list on the left.
2. Next to an element type in the table, click  and click **Properties**. The Scorecard Element Type Properties page appears.



**Scorecard Element Type Properties • Measures** 

**General**

General settings

Element type: Project

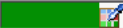
\* Element type name: Contacts

Description: These are the contacts

Image: 

Diagram settings

Font color:  Shape: Triangle

Background color: 

**Attribute Definition**

Add and define the attributes that describe the information you want to display in scorecards.

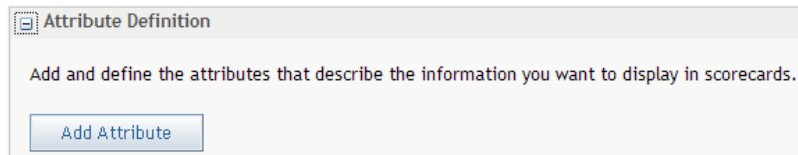
[Add Attribute](#)

OK Cancel Apply

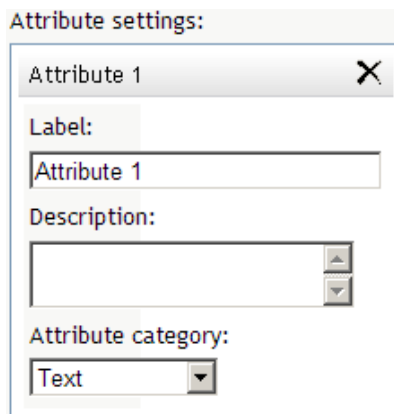
3. To change the general properties of a scorecard element type, complete the following steps:
  - a. In the **General** section, type a new name in the **Element type name** field.
  - b. Change the description in the **Description** field.
  - c. To change the image to be displayed with the element type, click the icon that is next to **Image** and select an image.

*Note:* If an image does not exist, no image is displayed for that element type. Images might be missing because a previously assigned image has been removed without updating the element type properties.

- d. In the **Diagram Settings** section, click the icon that is next to **Font color** to change the font color to be displayed with the element type in a diagram.
  - e. Click the icon that is next to **Background color** to change the color to be displayed in the background of the element type in a diagram.
  - f. From the **Shape** list, change the shape to be displayed with the element type in a diagram.
4. To define an attribute for a scorecard element type, complete the following steps:
    - a. Expand the **Attribute Definition** section.



- b. Click **Add Attribute**. A new attribute is added to the right-most column.



- c. In the **Label** field, type a new label for the attribute, such as “Vision.”
  - d. In the **Description** field, type a description of the attribute.
  - e. From the **Attribute category** list, select a category.
  - f. If you select **Element Type** as the category, select an element type from the **Element type** list.

This action associates the attribute to an element type. Associated elements are affected by formula functions that calculate the mean, max, min, or sum of all elements that are associated. Associations show relationships between elements that have been defined. For more information, see [“Association” on page 21](#).

To associate the attribute to more than one element type, click **Allow multiple selections**.

To edit an attribute definition, type a new label or a new description, or select a different category for the selected attribute.

To delete an attribute, click  that is next to the attribute name.

## Copy Scorecard Element Types

To copy a scorecard element type in the same template, complete the following steps in an open template:

1. Select **Scorecard Element Types** from the list on the left.
2. Next to an element type in the table, click  and click **Copy**. The Copy page appears.
3. Type a new name for the copy of element type.

*Note:* By default, the name is *element-type-namecopy*.

## Delete Scorecard Element Types

To delete a scorecard element type, complete the following steps in an open template:

1. Select **Scorecard Element Types** from the list on the left.
2. To delete a single element type, next to an element type in the table, click  and click **Delete**.
3. To delete more than one element type in a user-defined template only, perform one of the following steps:
  - Select the check box to the right of each element type, click  for the column and click **Delete**.
  - To delete all element types, click the check box at the top of the right-most column, click  for the column and click **Delete**.

---

# Working with Metric Attributes

## List Metric Attributes

To list metric attributes, in an open template, select **Metric Attributes** from the list on the left. The Metric Attributes table displays the metric attributes that you have created for the selected template.

|                                                                                     |                                                                                     |             |                                                                                     |                          |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|--------------------------|
|  |  | Name        |  | <input type="checkbox"/> |
|  |  | Status      |                                                                                     | <input type="checkbox"/> |
|  |  | Actual      |                                                                                     | <input type="checkbox"/> |
|  |  | Target      |                                                                                     | <input type="checkbox"/> |
|  |  | Performance |                                                                                     | <input type="checkbox"/> |

## Rename a Metric Attribute

To rename a metric attribute, complete the following steps in an open template:

1. Select **Metric Attributes** from the list on the left.

2. Next to a metric attribute in the table, click  and click **Rename**. The Rename Metric Attribute page appears.
3. Type a new name in the **New name** field.
4. Click **OK**.

### Delete Metric Attributes

To delete a metric attribute from a template, complete the following steps in an open template:

1. Select **Metric Attributes** from the list on the left.
2. Next to a metric attribute in the table, click  and click **Delete**.

---

## Working with Language Settings

### Overview

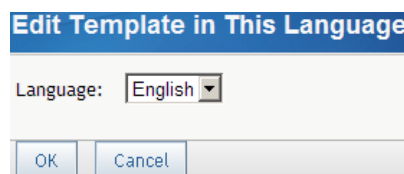
You can define a language when you create a template. This language is an alternative to the default language and is available to any user of the affected template and its projects. For more information, see [“Create a Template” on page 42](#).

### Create and Edit a User-Defined Language

*Note:* The following procedure presumes that the template content has already been created in the default language.

To create a user-defined language to use when working in a template and its projects, complete the following steps in an open template:

1. In the left pane, click **User-defined Languages**. The list of available languages appears in the right pane.
2. Click **New Language**. The New Language page appears.
3. In the **Language name** field, type the name of the language and click **OK**. The new language appears in the language list.
4. Click **Template** ⇒ **Select Template Edit Language**. The Edit Template in This Language page appears.



5. Select the new language that you created from the **Language** list and click **OK**.
6. In the left pane, click **Project Element Types**. For each element type in the right pane, complete the following steps:
  - a. Next to the element in the table, click  and click **Properties**. The Properties page appears.



- b. In the **Element type name** field, type the name in the new language and click **OK**. The translated element name appears in the list.
- c. Repeat step 3 for the **Scorecard Element Types** and the **Metric Attributes** lists.

*Note:* If a name is not translated and you set the user-defined language to be the default language, whenever the untranslated name is supposed to appear in the interface, the following label appears instead: Not defined in current or default language.

## Set a User-Defined Language as the Default Language

*Note:* The following procedure require that the user-defined language is already created. For more information, see [“Create and Edit a User-Defined Language” on page 52](#).

To set a user-defined language as the default language for a template, complete the following steps:

1. In the Template and Project Manager page, select the template in the left pane.
2. Click **Template** ⇒ **Properties**. The Template Properties page appears.
3. From the **Default language** list, select the user-defined language that you want to use and click **OK**.

*Note:* If a name is not translated and you set the user-defined language to be the default language, whenever the untranslated name is supposed to appear in the interface, the following label appears instead: Not defined in current or default language.

## List Defined Languages

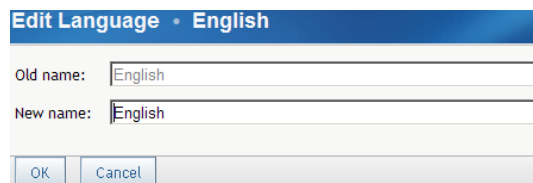
To list languages, open a template and select **User-Defined Languages** from the list on the left. The Languages table displays the languages that are defined for the selected template.

## Rename a Language

You can change the name of a language.

To rename a language, complete the following steps in an open template:

1. Select **User-Defined Languages** from the list on the left.
2. Next to a language name in the Languages table, click  and click **Rename**. The Edit Language page appears.



3. Type a new name in the **New name** field.

*Note:* The name must be unique in the template.

4. Click **OK**.

## Delete a Language

To delete a language from a template, complete the following steps in an open template:

1. Select **User-Defined Languages** from the list on the left.
2. Next to a language in the table, click  and click **Delete**.
3. To delete multiple languages, click the check mark that is next to each language, Then, click  that is at the top of the right-most column and click **Delete**.

*Note:* You cannot delete the default language.

---

## List Associated Projects

You can view the projects that are associated with a template.

To view associated projects from the Template and Project Manager page, complete the following steps:

1. Display the Template and Project Manager page. For more information, see [“Display the Template and Project Manager Page” on page 135](#).
2. Select the template. The projects that are associated with the selected template are displayed on the right.

|  Name                                                                                                    | Last Recalculated |  <input type="checkbox"/> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------|
|   Balanced Scorecard  | -                 | <input type="checkbox"/>                                                                                       |
|   Marketing Scorecard | -                 | <input type="checkbox"/>                                                                                       |

3. To open a project, click the project name.

---

## Edit User-Defined Template Properties

You can edit some properties in a user-defined template such as the name, default language, and the users and groups who have access to the template.

To edit template properties, complete the following steps on the Template and Project Manager page:

1. Select a user-defined template.
2. Click **Template** ⇒ **Properties**. The Template Properties page appears.

**Template Properties - Marketing Template**

**General Settings**

General properties of a template.

\* Template name:

Description:

Internal template ID: dd737583-0a0c-0a3a-00d8-a522c0d5fb05

Owner:  [Select Owner...](#)

Owner email:

Default language:

**Permissions**

3. To change the name of the template, type a new name in the **Template name** field.
4. (Optional) Type a description.
5. To specify the owner of the template, click **Select Owner**. For more information about selecting an owner, see [“Select the Owner of a Template, Project, Scorecard, or Element” on page 135](#).
6. To change the default language, select a language from the **Default language** list. For more information, see [“Create a Template” on page 42](#).

*Note:* After you change the language, the SAS Strategy Management labels for the template, and all of the scorecards based on the template, change to the specified language, if labels exist in that language.

7. Expand the **Permissions** section.

**Permissions**

Permissions define the type of access granted to a user or group for an object.

| Name    | Read                                | Write                               | Delete                              | Administer                          |
|---------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| sasdemo | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

[Add Users & Groups...](#)

8. Click **Add Users & Groups**. For more information, see [“Add Users and User Groups” on page 136](#).
9. In the Permissions table, select the appropriate **Read**, **Write**, **Delete**, or **Administer** access permissions for each user or group. For more information, see [“Working with Access Permissions” on page 138](#).
10. To remove the user or group name from the list, click to the right of the check boxes.
11. When you are finished editing the template properties, click **OK**.

## Edit Predefined Template Properties

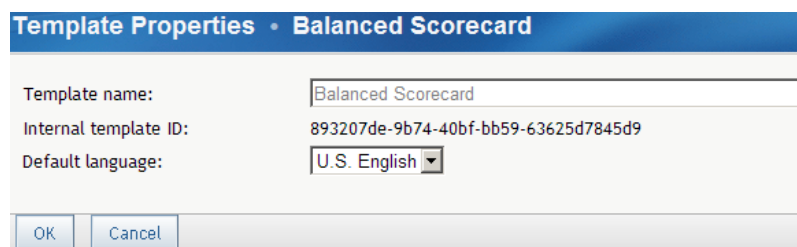
You can edit the default language of a predefined template such as the Balanced Scorecard template or KPI template.

*Note:* For projects and data created using the KPI template, you can display KPI data only in the following ways:

- the table view in SAS Strategy Management Builder
- the table portlet (classic style)
- the dashboard portlet (classic style)
- the table tile in the Strategy Management enhanced portlet
- the aggregate tile in the Strategy Management enhanced portlet
- the gauge tile in the Strategy Management enhanced portlet
- the trend analysis tile in the Strategy Management enhanced portlet

To edit predefined template properties, complete the following steps on the Template and Project Manager page:

1. Select a predefined template.
2. Click **Template** ⇒ **Properties**. The Template Properties page appears.



| Template Properties • Balanced Scorecard                                |                                      |
|-------------------------------------------------------------------------|--------------------------------------|
| Template name:                                                          | Balanced Scorecard                   |
| Internal template ID:                                                   | 893207de-9b74-40bf-bb59-63625d7845d9 |
| Default language:                                                       | U.S. English ▼                       |
| <input type="button" value="OK"/> <input type="button" value="Cancel"/> |                                      |

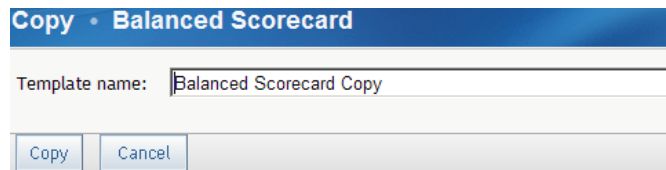
3. To change the default language, select a language from the **Default language** list. For more information, see [“Create a Template” on page 42](#).

*Note:* After you change the language, the SAS Strategy Management labels for the template, and all of the scorecards based on the template, change to the specified language, if labels exist in that language.

## Copy a Template

When you copy a template, even a predefined template, the copy appears in the User-defined Templates list. To save a copy of a template under a different name, complete the following steps on the Template and Project Manager page:

1. Select the template.
2. Click **Template** ⇒ **Copy**. The Copy page appears.



Copy • Balanced Scorecard

Template name:

3. Type a name for the copy of the template in the **Template name** field.

*Note:* By default, the name is *template-nameCopy*.

4. Click **Copy**.

---

## Delete a Template

You cannot delete a predefined template; you can delete only a user-defined template. To delete a user-defined template, on the Template and Project Manager page, select a template and click **Template** ⇒ **Delete**.

---

## Manage Time Periods

For information about managing time periods for a template, see the *SAS Strategy Management: System Administration Guide*.

---

## View Audit Records

For information about viewing audit records, see the *SAS Strategy Management: System Administration Guide*.

---

## Manage Mobile Applications

SAS Strategy Management 5.4 provides a feature that saves the content of a Strategy Management enhanced portlet as a SAS Mobile BI report. Because SAS Strategy Management users can now use mobile devices, the ability to enable and disable access to the mobile reports server is provided by the **Manage Mobile Applications** option. For information about managing mobile applications, see the *SAS Strategy Management: System Administration Guide*. For information about SAS Mobile BI reports, see [“Save the Portlet as a SAS Mobile BI Report”](#) on page 290.



## Chapter 7

# Working with Projects

---

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---

## Overview

For a description of templates, projects, and scorecards, and how they relate to each other, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9.

---

## Create a Project

The New Project Wizard specifies the location, template, and other aspects of the project. You can start the New Project Wizard from the portal or from the Template and

Project Manager, or from within another project. To create a project, you must be a scorecard modeler, and you must have the appropriate access permissions.

1. Start the New Project Wizard using one of the following ways:
  - From an open project or scorecard, click **Project** ⇨ **New Project**. The New Project Wizard appears.
  - From the Template and Project Manager page, click **New Project**. The New Project Wizard appears.

For more information, see [“Display the Template and Project Manager Page” on page 135](#).

  - From the portal. In the Collections portlet, click **New Strategy Management Scorecard Project**. Then click **New Project**. The New Project Wizard appears. For more information, see [“Add Links to the Collection Portlet” on page 33](#).
2. To specify the storage location for the project, complete the following steps:
  - a. Click on the folders to expand the **Save in** tree, and select a folder as the location for the project.
  - b. Click **Next**.
3. To specify the project properties, complete the following steps:
  - a. Type the name of the project in the **Project name** field.
 

*Note:* The project name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).
  - b. If more than one time hierarchy has been defined, expand the **Time hierarchy** tree and select a hierarchy for the project.
  - c. Click **Next**.
4. To specify the template on which the new project is based, select a template from the list of predefined or user-defined templates and click **Next**.
 

For more information, see [Chapter 2, “How Do You Describe a Strategy?,” on page 9](#).
5. Review all of the options that you have selected for the project. To make changes, click **Previous** to return to the page that you want to change. If you do not want to make any more changes, click **Finish** to complete the creation of the new project.

---

## Open a Project

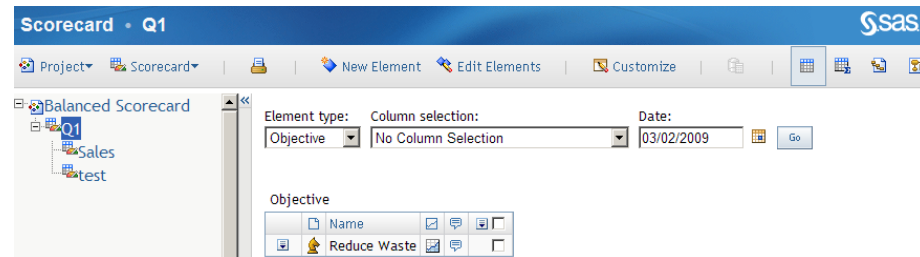
You can open a project in the following ways:

- If you have added a project name to a portlet in the portal, click the project name in the portlet.
- To open a project from Document Manager, open the folder that contains the project and click the project name.
- To open a project, complete the following steps on the Template and Project Manager page:
  1. Select the template with which the project is associated.



2. Click the project name in the list of projects that are associated with the template.

By default, the project opens with the table view on the right and the scorecard hierarchy on the left.



*Note:* If a project no longer exists in the database or if you do not have the appropriate access permissions, you cannot open the project.

---

## Register a Project

To work with a project that was imported (such as a migrated project) or created with the %SPMBMF macro, you must register the project. A project that is created with the New Project wizard is automatically registered. For information about the %SPMBMF macro, see the *SAS Strategy Management: System Administration Guide*.

When a project is registered, it is available to other applications. One such application, the SAS Add-In for Microsoft Office, enables you to add reports from SAS Strategy Management into a Microsoft Office document.

To register a project, complete the following steps in an open project:

1. Click **Project** ⇒ **Register**. The Register Project page appears.
2. Select the location of the project that you want to register.

---

## Edit Project Properties

Project properties define the name, project and scorecard hierarchy, time and dimension, image location, and access permissions for the project.

*Note:* Depending on your access privileges for the project, you might be able to change the project name, owner, and access permissions. Access permissions that you cannot change are unavailable.

To view or edit a project's properties, complete the following steps in an open project:

1. Click **Project** ⇒ **Properties**. The Project Properties page appears.

**Project Properties • MT09Nov12**

**General Settings**

General properties of a project.

\*Project name: MT09Nov12

Description:

Location: User Folders/sasdemo/My Folder

Associated template: MT09Nov12

Internal project ID: e67a61d2-0a10-0ec6-636a-87db913fd65b

Owner: SAS Demo User [Select Owner...](#)

Owner email: lillian.ekker@sas.com

**Time**

**Image Location**

**Permissions**

OK Cancel Apply

If the project is not registered, a message appears. For more information, see [“Register a Project” on page 61](#).

2. In the General Settings section, you can edit the following settings:
  - a. To change the project name, type a new name in the **Project name** field.
 

*Note:* The project name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).
  - b. Type text in the **Description** field.
  - c. To change the project owner, click **Select Owner**. The Owner page appears. For more information about selecting an owner, see [“Select the Owner of a Template, Project, Scorecard, or Element” on page 135](#).
3. To review the time properties, expand the **Time** section.
4. To review where images are located, expand the **Image Location** section.
5. To set access permissions, expand the **Permissions** section. This section displays user names and their access permissions for the project.

**Permissions**

Permissions define the type of access granted to a user or group for an object.

| Name    | Read                                | Write                               | Delete                              | Administer                          |
|---------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| sasdemo | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Lillian | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |

[Add Users & Groups...](#)

6. Click **Add Users & User Groups**. For more information, see [“Add Users and User Groups” on page 136](#).
7. Click the check boxes below **Read**, **Write**, **Delete**, and **Administer** to add or remove that access permission for the listed user or user group.

*Note:* To delete a user or user group, click  to the right of the check boxes.

8. When you have finished editing properties, click **OK**.

## Suggest a New Element to Be Added to a Project

You can suggest a new element to be added to a project. You might suggest a new element that supports achieving a goal or objective, or that improves performance.

As business users suggest new elements, your organization's scorecard modeler then reviews and approves all suggested elements.

*Note:* The scorecard modeler might customize a portlet to not accept element suggestions.

To suggest a new element, complete the following steps:

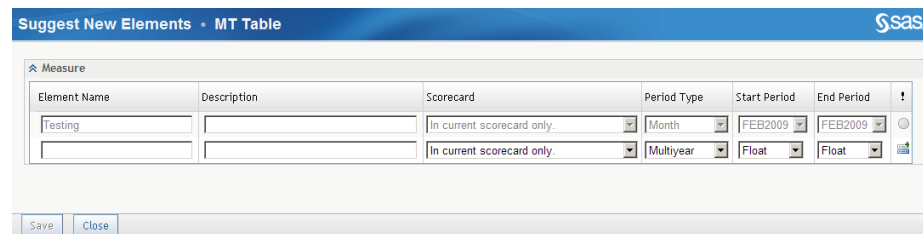
1. At the bottom of a SAS Strategy Management portlet (classic style), click **Suggest New Elements**.

*Note:*

- In a SAS Strategy Management enhanced portlet, click  in the toolbar to suggest a new element. However, a scorecard modeler might customize the portlet to not display the toolbar. If the toolbar is not available, neither is the Suggest New Elements icon. Also, if the scorecard modeler has customized an enhanced portlet to not accept element suggestions, the icon does not appear in the toolbar.
- If the scorecard modeler has customized a classic style portlet to not accept element suggestions, a message is displayed that suggestions are not accepted. Click **Close** to return to the portlet.

If a portlet is customized to accept element suggestions, the Suggest New Elements page appears.

*Note:* If a portlet does accept element suggestions, the affected scorecard element types might not. If so, a message is displayed. Click **Close** to return to the portlet.



| Element Name | Description | Scorecard                  | Period Type | Start Period | End Period |
|--------------|-------------|----------------------------|-------------|--------------|------------|
| Testing      |             | In current scorecard only. | Month       | FEB2009      | FEB2009    |
|              |             | In current scorecard only. | Multiyear   | Float        | Float      |

2. Type a name and, if needed, a description.
3. Select the scorecards in which you want to include the element.
4. Select the type of period, the start period, and the end period.
5. Click . A new row is added to the table.
6. To suggest more elements, repeat steps 2 through 5.
7. When you are finished suggesting elements, click **Save**.

## Manage Suggested New Elements for a Project

After business users have suggested new elements to be added to a project, a scorecard modeler then reviews, and approves all suggested elements.

To manage suggested new elements, complete the following steps in an open project:

1. Click **Project** ⇒ **Manage Suggestion Elements**. The Manage Suggestion Elements page appears.

| Name          | Element Name       | Description | Scorecard     | Period Type | Start Period | End Period |
|---------------|--------------------|-------------|---------------|-------------|--------------|------------|
| SAS Demo User | Recycle Rain Water |             | Scorecard - 1 | Multiyear   | Float        | Float      |

2. For each suggested element, click  to the left of the element and click an action. Clicking **Send Notification** invokes your default e-mail application so that you can alert the business user who submitted the suggestion.

To view properties associated with a suggestion element, click  next to the suggestion that you want to view and then click **Properties**. The Properties window appears. You can only view this window. You cannot edit the properties.

*Note:* If **Properties** is the only selection available on the menu, the role and capability settings associated with your user name are limited to viewing only. If you require expanded access to SAS Strategy Management, contact your SAS Strategy Management administrator.

## Specify Project Options

To specify project options, complete the following steps in an open project:

1. Click **Project** ⇒ **Options**. The Project Options page appears.

**Project Options • Balanced Scorecard** 

**General Settings**

**Default view and scorecard**  
Select the view and scorecard to open when you first open the project.

View:

Scorecard:

- Balanced Scorecard
  - Q1
    - Sales

**Default content language**

☒ Use the default language: U.S. English

☐ Use the following language:

**Default date for views**  
Set the default period for all views - scorecard table, aggregate table, association, and diagram.

☒ Current date

☐ Specific date:  

☒ Table Options

☒ Aggregate Table Options

☒ Association Table Options

☒ Diagram Options

☒ Trend Analysis Options

☒ Web Data Entry Options

OK Cancel Apply

2. To specify the general settings, complete the following steps:
  - a. If necessary, expand the **General Settings** section.

**General Settings**

**Default view and scorecard**  
Select the view and scorecard to open when you first open the project.

View:

Scorecard: Please use a browser that supports IFRAME to see the tree of projects and scorecards.

- Balanced Scorecard
  - Q1
    - Sales

**Default content language**

☒ Use the default language: U.S. English

☐ Use the following language:

**Default date for views**  
Set the default period for all views - scorecard table, aggregate table, association, and diagram.

☒ Current date

☐ Specific date:  

- b. From the **View** list, select the default view to display.
- c. In the **Scorecard** tree, select the default scorecard.

*Note:* You cannot select a scorecard for which you do not have access permissions.

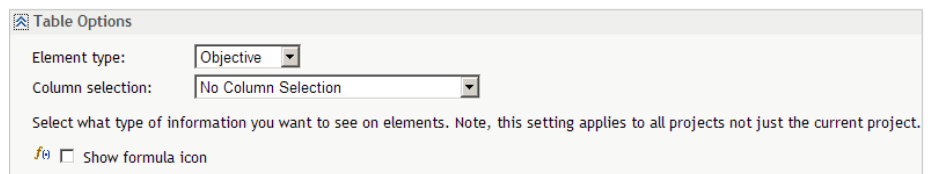
- d. In the **Default content language** section, perform one of the following steps:
  - To display the scorecard in the default language, click **Use the default language**.
  - To display the scorecard in another defined language, click **Use the following language** and then select a language from the list.

*Note:* Selecting another language does not affect the display of dates or numbers.

- e. In the **Default date for views** section, perform one of the following steps:
  - To use the current date, click **Current date**.
  - To use a specific date, click **Specific date** and click  to select a date.

3. To specify the table options, complete the following steps:

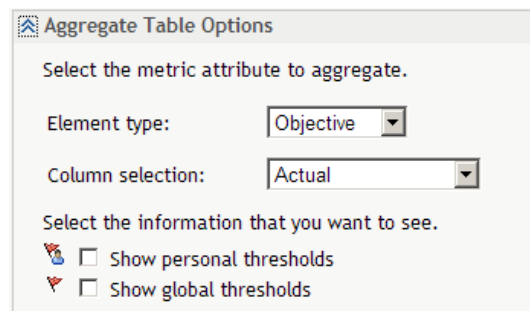
- a. Expand the **Table Options** section.



- b. From the **Element type** list, select the default element type to display in the scorecard.
  - c. From the **Column selection** list, select the default column selection to display in the scorecard.
  - d. To display the formula icon for an element, click **Show formula icon**.
4. To specify the aggregate table options, complete the following steps.

*Note:* You can display several metric attributes in an aggregate table, based on the column selection that you created. For more information, see [“Create a Column Selection” on page 130](#).

- a. Expand the **Aggregate Table Options** section.

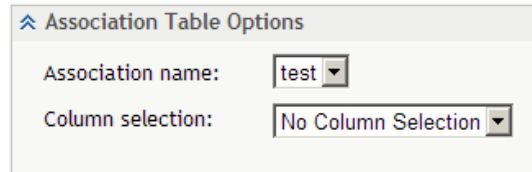


- b. Select an element type from the **Element type** list.
- c. Select a column selection from the **Column selection** list.
- d. To display only personal thresholds, click **Show personal thresholds**.

- e. To display only global thresholds, click **Show global thresholds**.
- 5. To specify the association table options, complete the following steps:

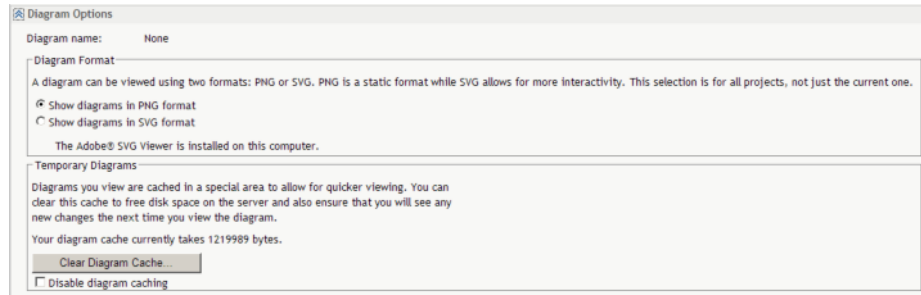
*Note:* You can display associations in an association table, based on the column selection that you created. For more information, see [“Create a Column Selection” on page 130](#).

- a. Expand the **Association Table Options** section.



The screenshot shows a dialog box titled "Association Table Options". It contains two dropdown menus. The first is labeled "Association name:" and has "test" selected. The second is labeled "Column selection:" and has "No Column Selection" selected.

- b. Select a name from the **Association name** list.
- c. Select a column selection from the **Column selection** list.
- 6. To specify the diagram options, complete the following steps:
- a. Expand the **Diagram Options** section.



The screenshot shows a dialog box titled "Diagram Options". It has a "Diagram name:" field with "None" selected. Below it is a "Diagram Format" section with a text box explaining that diagrams can be viewed in PNG or SVG format, with PNG being static and SVG being interactive. There are two radio buttons: "Show diagrams in PNG format" (selected) and "Show diagrams in SVG format". Below the radio buttons is a note: "The Adobe® SVG Viewer is installed on this computer." At the bottom, there is a "Temporary Diagrams" section with a text box explaining that diagrams are cached and a "Clear Diagram Cache..." button. There is also a checkbox for "Disable diagram caching" which is currently unchecked.

- b. Select a diagram from the **Diagram name** list.
- Note:* When there are no diagrams, the list is replaced with the word **None**.
- c. Select a diagram format. To view diagrams that use the SVG format, the Adobe SVG Viewer must be installed. If a message that indicates that the viewer is installed is not displayed, click the installation link. For more information, see [Appendix 3, “Install the Adobe SVG Viewer Plug-in,” on page 359](#).
- Note:* The format that you select applies to all projects, not to the current project only.
- d. To clear the cache of temporary diagrams, click **Clear Diagram Cache**.
- e. (Optional) Disable diagram caching.
- 7. To specify the trend analysis options, complete the following steps:
- a. Expand the **Trend Chart and Trend Analysis Options** section.

**Trend Chart and Trend Analysis Options**

**Metric attribute defaults**  
Select the metric attributes to chart.

| <input type="checkbox"/>            | Metric Attribute |
|-------------------------------------|------------------|
| <input checked="" type="checkbox"/> | Actual           |
| <input checked="" type="checkbox"/> | Target           |
| <input type="checkbox"/>            | Perf             |

**Start and end date defaults**  
Set the previous and future periods to chart. The selected date is the starting point.

Start date:

End date:

- b. In the **Metric attribute defaults** section, select one or more metric attributes to include in the chart, by doing either of the following:
    - To include specific metric attributes, select the check box that is next to each attribute.
    - To include all metric attributes, select the check box that is at the top of the table.
  - c. In the **Start and end date defaults** section, specify a start date and an end date.
8. When you are finished specifying options, click **OK**.

---

## Copy a Project

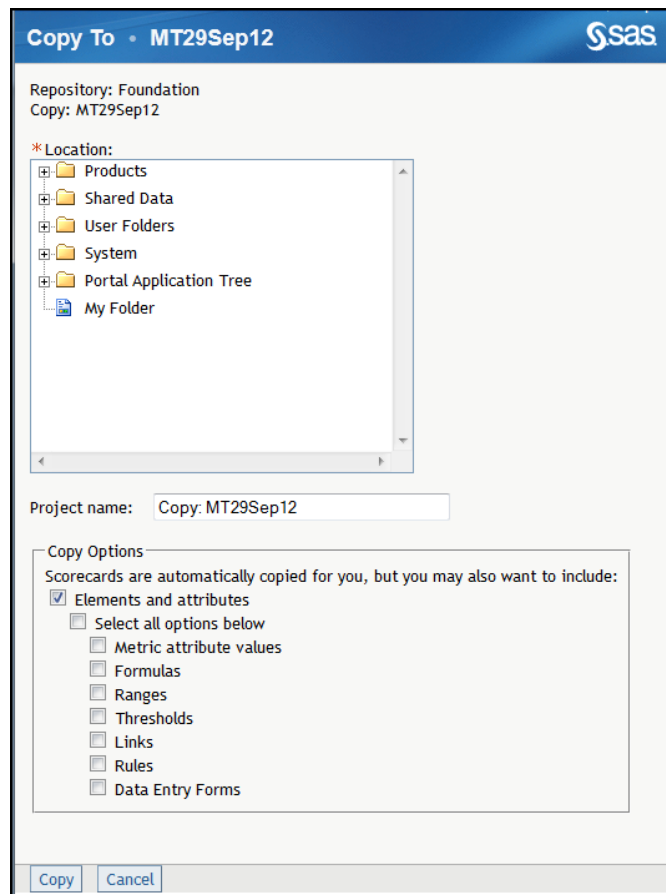
To copy a project to another location, complete the following steps on the Template and Project Manager page:

1. Select a template name in the list of templates.
2. Next to the project that you want to copy, click and click **Copy To**.

*Note:* If the project is not registered, a message appears stating that you must register the project before it can be copied. For more information, see [“Register a Project” on page 61](#).

The Copy To page appears.





3. In the **Location** tree, select the location in the project hierarchy to which you want to copy the project.
4. Type a name for the project in the **Project name** field. By default, the copied project is named **Copy:project-name**.

*Note:* The project name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).

5. To copy elements and attributes that are associated with the current project, click **Elements and attributes**.
6. To copy all other information, click **Select all options below**. If you want to copy only some of the information, click one or more the applicable options: **Metric attribute values**, **Formulas**, **Ranges**, **Thresholds**, **Links**, **Rules**, **Data Entry Forms**.

---

## Add a Project to a Classic-Style Portlet

To add a project to a classic-style portlet, complete the following steps in an open project:

1. Click . The Add to Portlet page appears.

2. To add to an existing portlet, select the portlet from the **Portlet** list.  
*Note:* The list includes only those portlets that are of the same type of view as the current view. For example, when you add a portlet from the table view, the **Portlet** list includes only Performance Table portlets.
3. To create a new portlet and add to that portlet, complete the following steps:
  - a. Click **<Create a New Portlet>** from the **Portlet** list.
  - b. Specify the portlet name, description, and keywords.
  - c. To specify the page on which the portlet appears, click **Add to page** and select a page from the list.  
*Note:* If you do not click **Add to page**, the portlet is created but is not added to a page. You can search for the portlet later and add it to a page.
4. Click **OK**.

---

## Delete a Project

To delete a project from the Template and Project Manager page, complete the following steps on that page:

1. Click **Manage Scorecard Projects** in the portal, or open a project and click **Project** ⇒ **Manage Templates and Projects**. The Template and Project Manager page appears.
2. Click the template that is associated with the project that you want to delete.
3. Click the check box that is next to one or more project names.
4. Click  that is at the top of the right-most column and click **Delete**.

*Note:* Alternately, to delete a single project, click  for the row and click **Delete**.

# Managing Link Definitions

## Overview

### Ways to Use Links

You can define a link once on the New Link page and then use that link in multiple places in a project and in its scorecards. You select which link definitions to use when you specify properties for elements and metric attributes. You can also use these links in forms, the Batch Maintenance Facility (BMF), and the Import wizard.

For more information, see the following documentation:

- [“Edit Metric Attributes” on page 89](#)
- [“Edit Multiple Elements” on page 94](#)
- [Chapter 33, “Creating and Managing Forms,” on page 299](#)
- [Chapter 35, “Importing Data into a Strategy Management Project,” on page 311](#)
- information about the Batch Maintenance Facility (BMF) in the *SAS Strategy Management: System Administration Guide*.

### Types of Links That You Can Define

You can define links of the following types:

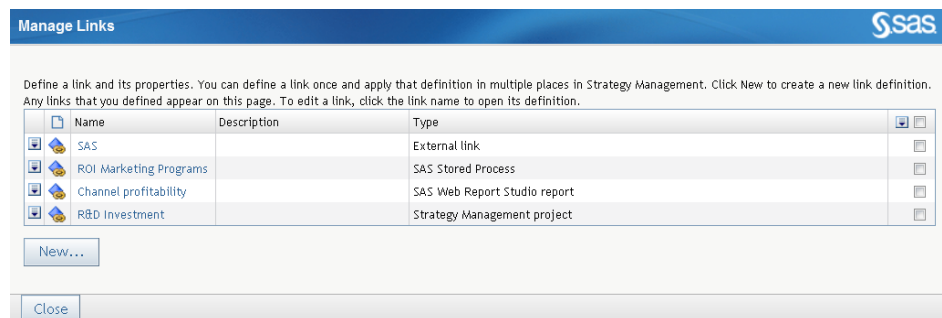
| Link type                       | Description                                                                                                                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| External link                   | Opens a web page or an external document.<br><i>Note:</i> You can use this link type to open Portable Document Format (PDF) files and Microsoft Office documents.                                               |
| File                            | Opens any type of file that is registered as DAV content in the SAS Content Server. For information about importing a file into the SAS Content Server, see <a href="#">“Importing a Document” on page 76</a> . |
| SAS Financial Management report | Opens an associated form if SAS Financial Management is installed in your environment.                                                                                                                          |
| SAS Information Map             | Opens a SAS Information Map.                                                                                                                                                                                    |
| SAS Portal page                 | Opens a SAS Portal page. By using this link type, you can open a pre-existing portal page that can contain dashboards, reports, and other information.                                                          |
| SAS Stored Process              | Runs a SAS Stored Process.                                                                                                                                                                                      |
| SAS Web Report Studio report    | Opens a report that was created by using SAS Web Report Studio.                                                                                                                                                 |
| SAS Strategy Management project | Opens a SAS Strategy Management project.                                                                                                                                                                        |

| Link type | Description                                                                                                                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Directive | Processes instructions for other SAS software.<br><i>Note:</i> This option is provided for migrating from SAS Strategy Management 5.2 and earlier. For version 5.3 and later, use the other link options. |

## Define a Link

To define a link, complete the following steps in an open project:

1. Select **Project** ⇒ **Manage Links**. The Manage Links page appears.



2. Click **New** to open the New Link page.

3. In the **General Settings** section, complete the following steps:
  - a. Type a name in the **Link name** field. A description is optional.
  - b. From the **Link type** list, select the type of link that you want to define. For more information, see [“Types of Links That You Can Define”](#) on page 71.
  - c. If you want the link to open in a new window, select **New window**. Otherwise, if you want the link to open in the same window that contains the SAS Strategy Management scorecard, select **This window**.

*Note:* If you are opening a Microsoft Office document, you must select **New window**.

*Note:* If you subsequently select a link definition for use in a data-entry form, the link will open only in a new window. Data-entry forms do not support opening a link in the same window as the form.

- d. Specify the link location.
  - **External links:** In the **Link location** field, type the location that you want to use for the external link.
  - **Other link types:** Navigate to the link type location by clicking **Select Location**.

4. Expand the **Parameter Definitions** section.

In this section, define one or more parameters that are passed as part of the link. When you open a link in SAS Strategy Management, the parameter can pass information that controls how data appears at the link destination. For example, if you define the parameter to pass *Scorecard name*, the information located at the link destination is filtered by the name of the scorecard from which the link originated.

- a. From the **Parameter** list, select the type of SAS Strategy Management information that you want the parameter to pass. Then, in the field next to the list, enter the source parameter (target).
- b. Click **Add Parameter** to add the parameter definition to the table that is below the list.

**TIP** A default parameter name is selected for you. However, you can change the name to match the name that is expected by the link target.

*Note:* For more information, see “[Examples of Link Definitions](#)” on page 73.

5. Expand the **Advanced Parameters** section.

In this section, specify one or more parameters that can control how information appears at the link destination. These parameters pass static information that you set in this section. The target link location takes the static value from the parameter to affect the information displayed.

*Note:* Refer to the documentation for the link target software in order to determine which parameters it supports. SAS Strategy Management passes the specified parameters without verifying that the link target can use the parameters.

In the **Parameter** field, enter a description of the parameter.

Suppose, for example, that you specify an external link called *finance.yahoo.com/q*. In the **Parameter** field, you specify **s=AAPL, GOOG**. This parameter causes the website to display stock quotes for Apple Inc. and Google Inc.

6. Click **OK** to save the link definition.

## Examples of Link Definitions

### Example: Define a Link That Opens a Web Page

In this example, a link is defined that opens the Google web page.

In the New Link page, complete the following steps:

1. In the **General Settings** section, complete the following steps:

- a. Type a name in the **Link name** field. A description is optional.
- b. From the **Link type** list, select **External link**.
- c. Select **New window** for the link target.
- d. In the **Link location** field, type **www.google.com/search** after the provided **http://**.

*Note:* The link location must include **http://** at the beginning of the web address.

2. Expand the **Parameter Definitions** section and complete the following steps:

- a. From the **Parameter** list, select **Element name**.
  - b. In the field next to the list, change **ELEMENT** to **q**.
- Note:* The Google website requires a lowercase parameter.
- c. Click **Add Parameter** to add the parameter definition to the table that is below the list.

The value passed by this parameter is derived from the element name in the Strategy Management project. The Google website uses the parameter value as a search value.

3. Expand the **Advanced Parameters** section. In the **Parameter** field, enter the following parameters:

```
&start=0&num=10&cr=countryCA&lr=lang_fr
```

*Note:* You cannot include blanks when you enter the parameter.

These parameters limit the search output to the first ten results that are located in Canada and that are in French.

4. Click **OK** to save the link definition.

### **Example: Define a Link That Runs a SAS Stored Process**

In this example, a link is defined that runs a SAS Stored Process and displays its output.

In the New Link page, complete the following steps:

1. In the **General Settings** section, complete the following steps:
  - a. Type a name in the **Link name** field. A description is optional.
  - b. From the **Link type** list, select **SAS Stored Process**.
  - c. Select **New window** for the link target.
  - d. For the **Link location** field, click **Select Location** and navigate to the file location of the stored process.
2. Expand the **Advanced Parameters** section. In the **Parameter** field, type the following parameters:

```
&GENDER=M&AGELIMIT=14
```

These parameters, which are already defined in the stored process, cause the stored process to filter its data by male gender and individuals no older than 14.

3. Click **OK** to save the link definition.

## Edit a Link

To edit a link, complete the following steps in an open project:

1. Select **Project** ⇒ **Manage Links**. The Manage Links page appears.
2. Click the name of the link that you want to edit. The New Link page appears.
3. Change the applicable settings in the link definition as described in [“Define a Link” on page 72](#).

## View Link Properties

To view properties and settings associated with an item, click  next to the item that you want to view, and then click **Properties**. The Properties window appears. You can only view this window. You cannot edit the properties and settings.

*Note:* If **Properties** is the only selection available on the menu, the role and capability settings associated with your user name are limited to viewing only. If you require expanded access to SAS Strategy Management, contact your SAS Strategy Management administrator.

## Copy a Link

To copy a link, complete the following steps in an open project:

1. Select **Project** ⇒ **Manage Links**. The Manage Links page appears.
2. Click  next to the link definition that you want to copy and then click **Copy**.
3. The wizard appends **Copy** to the link name. In the **New link name** field, edit the name to describe the new link definition that you are creating.
4. Click **Copy**. The copied link definition appears in the **Manage Links** selection list.
5. To edit the copied link definition, click its name. The New Link page appears.
6. Change the applicable settings in the link definition as described in [“Define a Link” on page 72](#).

## Delete a Link

To delete a link, complete the following steps in an open project:

1. Select **Project** ⇒ **Manage Links**. The Manage Links page appears.
2. Click  next to the link definition that you want to delete and then click **Delete**.
3. A confirmation message appears. Click **Yes** to delete the link.

## Importing a Document

### Document Types That You Can Import

You can import a document for use in SAS Strategy Management. Importing a document registers the document as DAV content in the SAS Content Server. After you import a document, you can use it as a target when you define a link using the link type **File**.

This feature supports importing the following types of files.

|                      |                                                                                                                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Microsoft Office     | <ul style="list-style-type: none"> <li>• Excel (XLS, XLT, WKS, CSV, XLSX, XLTX)</li> <li>• PowerPoint (PPT, PPS, PPTX, PPSX)</li> <li>• Word (DOC, DOCX)</li> </ul>                                                    |
| Graphics             | <ul style="list-style-type: none"> <li>• BMP</li> <li>• GIF</li> <li>• JPEG, JPG, JPE</li> <li>• PNG</li> <li>• TIFF, TIF</li> </ul>                                                                                   |
| Video                | <ul style="list-style-type: none"> <li>• AVI</li> <li>• MPEG, MPG, MPE</li> </ul>                                                                                                                                      |
| Other document types | <ul style="list-style-type: none"> <li>• ASCII text (TXT, TEXT, ASC)</li> <li>• HTML, HTM</li> <li>• PDF</li> <li>• Postscript (PS, AI, EPS)</li> <li>• RTF</li> <li>• WordPerfect (WPD, WP)</li> <li>• XML</li> </ul> |

### Import a Document

To import a document, complete the following steps in the SAS Strategy Management Builder:

1. On the Template and Project Manager page, select the template that contains the project in which you want to import a document.
2. Click the project name.
3. On the Project page, select **Project** ⇒ **Import a Document**.
4. On the Import a Document page, click **Browse** and navigate to the file that you want to import.
5. In the **Save in** tree, navigate to the folder in which you want to save the file that you are importing.
6. If the file already exists and you want to replace it, select **Overwrite existing document**.
7. Click **OK**. The document is imported and saved.



## Chapter 8

# Working with Scorecards

---

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---

## Overview

For a description of templates, projects, and scorecards, and how they relate to each other, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9.

## Create a Scorecard

Before you can create a scorecard, you must create a project to contain the scorecard. For more information, see [“Create a Project”](#) on page 59.

To create a scorecard, open a project and complete the following steps:

1. Click **Scorecard** ⇒ **New Scorecard**.
2. On the Properties page, complete the following steps:
  - a. Type the name of the scorecard in the **Scorecard name** field.

*Note:* The scorecard name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).

- b. Click **Next**.
3. Each scorecard that you create is in a scorecard hierarchy. A parent can be either another scorecard or the project that contains the new scorecard. A parent is above other scorecards in the hierarchy. Child scorecards are below a parent.

On the Location page, complete the following steps:

- a. Click the project or scorecard name in the hierarchy that you want to designate as the scorecard's parent.
- b. To cause the new scorecard to inherit elements that exist in a parent scorecard, click **Inherit existing elements from parent scorecard**.

*Note:* If the parent of the scorecard is a project, the scorecard cannot inherit elements.

- c. Click **Next**.
4. On the Summary page, review the scorecard options that you have selected. To change an option, click **Previous** to return to a preceding page.
5. When you are satisfied with your selections, click **Finish**.

---

## Open a Scorecard

You can open a scorecard in the following ways:

- To open a scorecard from within a project, open a project and click on the name of the scorecard.
- To open a scorecard from the portal, create a link to the scorecard from a portlet and click on the link.

---

## Calculate a Scorecard

*Note:* The following task calculates only one scorecard in a project. To calculate all scorecards, see [“Calculate a Project” on page 121](#).

To calculate a scorecard, complete the following steps:

1. Click **Scorecard** ⇨ **Calculate**. The Calculate page appears.

**Calculate - Scorecard - 1**

Calculate a single scorecard.  
[» Read more...](#)

☒ Select by date range:

Start date:

End date:

☐ Select by period:

Period type:

Period:

☐ Include child scorecards

2. Specify either the date range or the period.
3. (Optional) Click **Include child scorecards**.
4. Click **Calculate**.

---

## Save a Scorecard as a SAS Information Map

To save a scorecard as a SAS Information Map:

1. Select **Scorecard** ⇒ **Save As Information Map**. The Save As SAS Information Map page appears.

2. Click **Add** to select a storage location for a new information map or to select an existing information map. The SAS Information Map window appears.
3. Navigate the hierarchy and select a folder or an information map. Then click **OK**.
4. (Optional) Enter the name and description of the information map.

*Note:* If you select an existing information map and do not change the name, the existing information map is overwritten.

5. In the **Data Options** section, set the options for the scorecards, time periods, and the element types that you want to include in the information map.

**TIP** To create an information map that includes all scorecards in the project, select **All scorecards**.

6. Click **OK**.

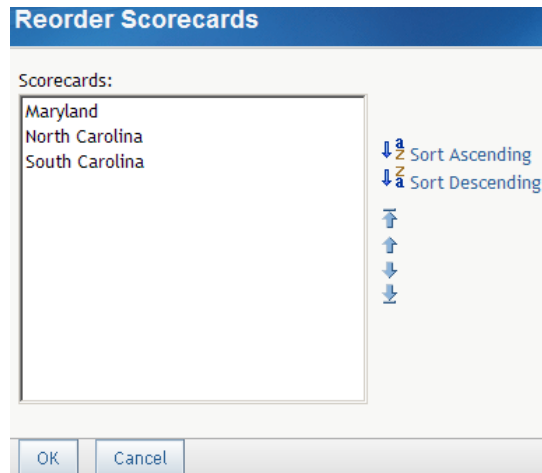
*Note:* If the information map either fails to display or fails to display correctly, contact your system administrator. For more information, see the *SAS Strategy Management: System Administration Guide*.

## Change the Order of Scorecards

You can change the order in which scorecards are displayed within a scorecard hierarchy. However, you cannot change the order of scorecards that are based on a dimension hierarchy.

To change scorecard order, complete the following steps in an open scorecard:

1. Click **Scorecard** ⇒ **Reorder**. The Reorder Scorecards page appears.



2. In the **Scorecards** list, click a scorecard.
3. To sort in ascending or descending alphabetic order, click **Sort Ascending** or **Sort Descending**.
4. To move scorecards, select one or more scorecards and use the following icons:

| Icon | Action                                                     |
|------|------------------------------------------------------------|
|      | Moves the selected scorecard to the beginning of the list. |
|      | Moves the selected scorecard up.                           |
|      | Moves the selected scorecard down.                         |
|      | Moves the selected scorecard to the end of the list.       |

## Edit Scorecard Properties

### Open the Scorecard Properties Page

To edit the scorecard properties, complete the following steps in an open scorecard:

1. Click **Scorecard** ⇒ **Properties**. The Scorecard Properties page appears.

**Scorecard Properties - Q1**

General Settings

General properties of a scorecard.

\* Scorecard name: Q1

Description: Not defined in current or default language

Internal scorecard ID: cd65033b-0a0c-0a3a-0057-968b8573ee24

Associated project: Balanced Scorecard

Parent scorecard: None

Owner:  [Select Owner...](#)

Owner email:

Permissions

OK Cancel Apply

2. In the **General Settings** section, complete the following steps:
  - a. Change the scorecard name by typing a new name in the **Scorecard name** field.

*Note:*

  - The name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).
  - You cannot change the name of a scorecard in a project that is based on an existing hierarchy.
  - b. (Optional) Type a description.
  - c. To specify the owner of the scorecard, click **Select Owner**. The Owner page appears. For more information about selecting an owner, see [“Select the Owner of a Template, Project, Scorecard, or Element” on page 135](#).
3. To assign access permissions, complete the following steps:
  - a. Expand the **Permissions** section.

Permissions

| Name          | Read                                | Write                               | Delete                              | Administer                          |
|---------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| SAS Demo User | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

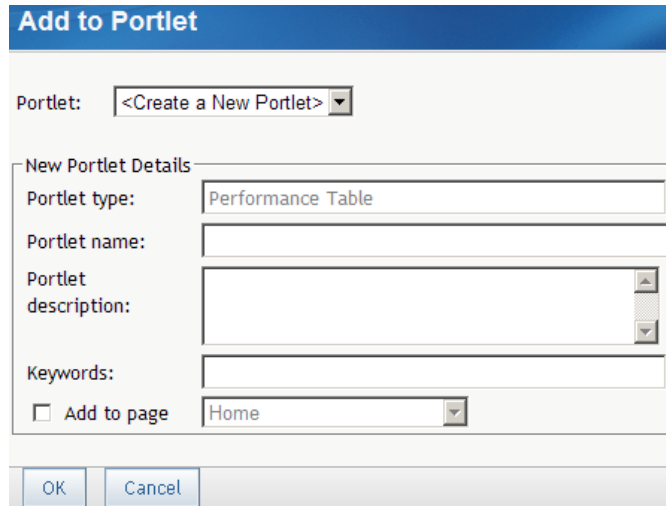
[Add Users & Groups](#)

- b. Click **Add Users & Groups**. For more information, see [“Add Users and User Groups” on page 136](#).
    - c. In the Permissions table, click **Read**, **Write**, **Delete**, or **Administer** access permissions for each user or group. For more information about access permissions, see [“Working with Access Permissions” on page 138](#).
    - d. To remove a user's name from the list of users who have access to the scorecard, click  to the right of the check boxes.
4. When you are finished editing the properties, click **OK**.

## Add a Scorecard to a Classic-Style Portlet

To add a scorecard to a classic-style portlet, complete the following steps in an open scorecard:

1. Click . The Add to Portlet page appears.



2. To add to an existing portlet, select the portlet from the **Portlet** list.

*Note:* The list includes only those portlets that are of the same type of view as the current view. For example, when you add a portlet from the table view, the **Portlet** list includes only Performance Table portlets.

3. To create a new portlet and add to that portlet, complete the following steps:
  - a. Click **<Create a New Portlet>** from the **Portlet** list.
  - b. Specify the portlet name, description, and keywords.
  - c. To specify the page on which the portlet appears, click **Add to page** and select a page from the list.

*Note:* If you do not click **Add to page**, the portlet is created but is not added to a page. You can search for the portlet later and add it to a page.

4. Click **OK**.

## Move a Scorecard

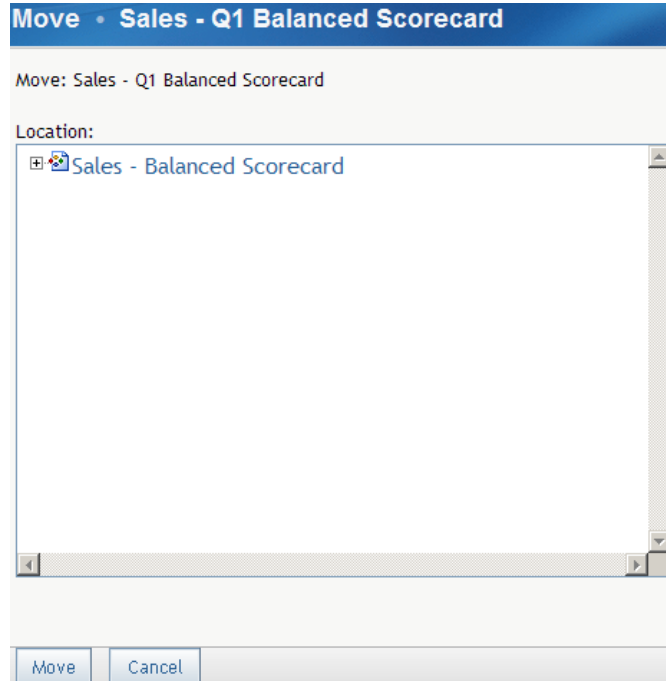
You can move a scorecard to a different location in the scorecard hierarchy within the same project or to another project that is associated with the same template.

*Note:*

- You cannot move a scorecard that is in a hierarchy that is based on a dimension.
- If a back-end data feed is set up for extracting, translating, and loading (ETL), moving a scorecard can disrupt the ETL. Be sure to adjust the ETL.

To move a scorecard, complete the following steps in an open scorecard:

1. Click **Scorecard** ⇒ **Move To**. The Move page appears.



2. In the **Location** tree, select the location that you want to designate as the parent of the selected scorecard.
3. Click **Move**.

---

## Copy a Scorecard

You can copy a scorecard to a different location within the same project.

To copy a scorecard, complete the following steps in an open scorecard:

1. Click **Scorecard** ⇒ **Copy To**. The Copy To page appears.



**Copy To - Links** sas

Copy: Links

\* Location:

- MT24Jan12
- test

Scorecard name:

☐ Include all scorecards under the current scorecard

**Copy Options**

Elements are automatically copied for you, but you may also want to include:

- ☐ Attribute selections
- ☐ Select all options below
  - ☐ Metric attribute values
  - ☐ Formulas
  - ☐ Ranges (Only applicable if copying within the same project)
  - ☐ Thresholds
  - ☐ Links
- ☐ Automatic creation of links between elements

2. In the **Location** tree, select the location in the project hierarchy to which you want to copy the scorecard.
3. Type a name for the scorecard in the **Scorecard name** field. By default, the copied scorecard is named *scorecard-name copy*.

*Note:* The scorecard name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).

4. If you want to copy all of the child scorecards under the current scorecard to the same location, click **Include all scorecards under the current scorecard**.
5. If you want to copy attribute selections that are associated with the current scorecard, click **Attribute selections**.
6. If you want to include one or more types of other information with the copied scorecard, click **Metric attribute values**, **Formulas**, **Ranges**, **Thresholds**, or **Links**.
7. If you want to copy all values, click **Select all options below**.
8. If you want to retain existing links between elements (if this option is available for this element), click **Automatic creation of links between elements**. For more information about linking elements, see [“Link Elements” on page 97](#).

## Delete a Scorecard

*Note:* When a scorecard is in a hierarchy, and that hierarchy is based on a dimension, you cannot delete that scorecard.

To delete a scorecard, open the scorecard and click **Scorecard** ⇒ **Delete**.

*Note:* If the scorecard contains child scorecards, the child scorecards are also deleted.

## Set Default Scorecard Preferences

You can set the default display preferences for all the scorecards that you open. You can override these preferences by customizing an individual scorecard. For information about customizing the display of an individual scorecard, see [“Customize a Scorecard Table” on page 153](#).

To set default display preferences for all scorecards, complete the following steps:

1. Click **Preferences** in the upper right of the SAS Strategy Management window. The Preferences page appears.
2. Click **Scorecards** in the list on the left. The scorecard preferences appear.

| Table Display Options                                                                |                          |
|--------------------------------------------------------------------------------------|--------------------------|
| Number of rows to display:                                                           | 10 Default: 10           |
| Thresholds                                                                           |                          |
| Show thresholds:                                                                     | Both Default: None       |
| Additional Display Options                                                           |                          |
| Show Historical Trend Chart:                                                         | Tables Default: No views |
| Show comments:                                                                       | Tables Default: No views |
| <input type="button" value="Apply"/> <input type="button" value="Restore Defaults"/> |                          |

3. Specify the options in the **Table Display Options** section, the **Thresholds** section, and the **Additional Display Options** section.
4. When you have finished setting your preferences, click **Apply**. Otherwise, to return the scorecard preferences to their default settings, click **Restore Defaults**.

## Chapter 9

# Working with Elements and Element Attributes

---

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---

## Overview

For a description of elements, element attributes, and how they relate to each other, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9.

---

## Create an Element

To create an element, you must be a scorecard modeler and have the appropriate access permissions.

To create an element, complete the following steps in an open project:

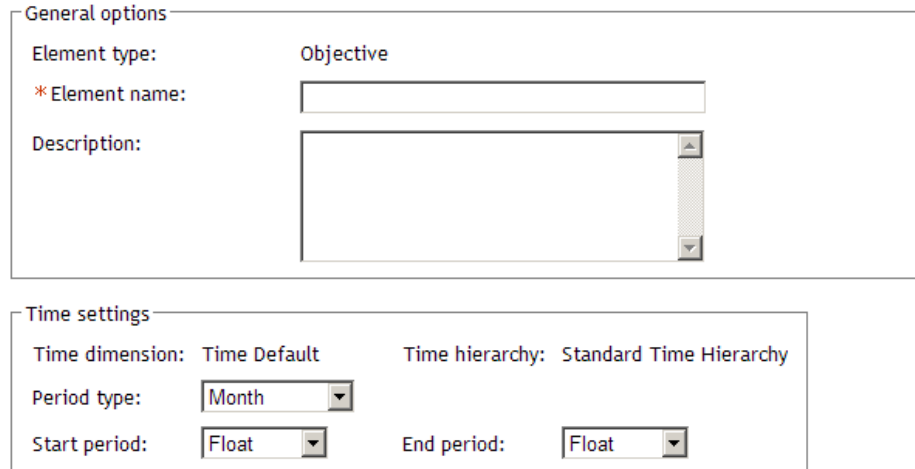
1. Click .
2. From the **Element type** list, select a type and click **Go**.

*Note:* After you start the New Element wizard, you cannot change the type of element created. To create a different type of element, you must cancel the wizard, select another element type, and restart the wizard.

3. Select **New Element**. The New Element wizard appears.

### Properties

Specify the name, description, and time settings of this element.



**General options**

Element type: Objective

\* Element name:

Description:

**Time settings**

Time dimension: Time Default      Time hierarchy: Standard Time Hierarchy

Period type:

Start period:       End period:

4. On the Properties page, complete the following steps to select general options and time settings for the element:
  - a. In the **Element name** field, type a name for the element.
 

*Note:* The name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).
  - b. (Optional) Type a description of the element.
  - c. From the **Period type** list, select the type of period.
 

The period type defines the intervals at which data is collected for the element.
  - d. From the **Start period** list, select the beginning date of data collection.
 

The start period defines the first interval at which data is collected. For example, if the period type is **YEAR**, the start period might be 1999. If you have selected **Multiyear** as the period type, the only available start period is **MULTYR**. **FLOAT** means that the start point of the period is not set.
  - e. From the **End period** list, select the end date of data collection.
 

The end period defines the last interval at which data is collected. **FLOAT** means that the end point of the period is not set.
  - f. Click **Next**.
5. On the Add Element to Project/Scorecards page, specify how you want the new element added to a project or scorecard.

*Note:* If you are adding the element to a project, the current project is displayed.

If you want to add the element to a scorecard, you must specify which scorecard by clicking one of the following options:

|                                                  |                                                                                      |
|--------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>In current scorecard only</b>                 | Adds the element to the scorecard that is currently open.                            |
| <b>In current scorecard and all its children</b> | Adds the element to the scorecard that is currently open and to all of its children. |
| <b>In all scorecards of this project</b>         | Adds the element to all of the scorecards in the project that is currently open.     |

6. To change a setting, click **Previous** to return to a previous page. When you are satisfied with the settings, click **Finish**.

---

## Edit Metric Attributes

Metric attributes are defined in the template that is associated with the project. You can change the values and ranges that are associated with metric attributes, and you can specify the time periods to which the changes apply.

To edit metric attributes for an element, complete the following steps in an open project or scorecard:

1. Next to an element, click , and then click **Edit Metric Attributes**. The Metric Values, Ranges, and Links page appears.

Metric Values, Ranges, and Links • Obj Month 1
sas

Select a metric attribute and then set its options. If you want to change a metric attribute's information for any given period, select a period, click Go, and then change its options.  
[» Read more...](#)

Metric attribute: Actual ▾

Display period: Oct2012 ▾ Go

☐ Actual Value

Computed value: Formula-based ▾

Formula definition:

SUM(CHILDREN([ELE=current("ELE")][COL=current("COL")][PER=current("PER")]))

Predefined formulas

Formula: Children of the current element ▾

Function: Sum ▾

Insert Formula
Advanced Formula...

☐ Override formula result:

Value Rule: No Rule ▾

☐ Actual Text

Enter a text and then select a period.

Metric text:

Text Rule: No Rule ▾

☐ Actual Link

Select the link to apply to the metric attribute.

Link: None ▾

☐ Actual Range

Select the range to apply to the metric attribute.

Range: None ▾

Apply changes to the following period or select a range of periods:

☒ Display period: Oct2012 ▾

☐ Start period: Jan1995 ▾

End period: Jan1995 ▾

OK
Cancel
Apply

- From the **Metric attribute** list, select a metric attribute.
- From the **Display period** list, select a period and click **Go**.
- To set the value, click **<metric attribute> Value**, where **<metric attribute>** is the selection that you made in the **Metric attribute** list. Then select one of the following options from the **Computed value** list.

| Way to Set the Value                                                             | Computed Value Option                |
|----------------------------------------------------------------------------------|--------------------------------------|
| Provide a value                                                                  | Select <b>Manually entered</b> .     |
| Specify a predefined formula to apply to the metric value                        | Select <b>Formula-based method</b> . |
| Define a new formula or modify a predefined formula to apply to the metric value | Select <b>Formula-based method</b> . |

5. (For manually entered method) The **Entered value** field appears into which you can type a value.
6. (For formula-based method specifying a predefined formula) Complete the following steps:
  - a. Select a formula from the **Formula** list.
  - b. Select a function from the **Function** list.
  - c. If the function that you selected supports an attribute and metric attribute, select values for these from the lists.
  - d. Click **Insert Formula**. The formula is displayed in the **Formula definition** field.

If you want to override the formula result with another value, click **Override formula result** and type a value.

7. (For formula-based method defining a new formula or modifying a predefined formula) Click **Advanced Formula** to start the Formula Editor. For more information, see [“Creating a Formula” on page 117](#). If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see [Appendix 2, “Configuring Java,” on page 355](#).
8. To set a predefined rule for use on the value, select the rule from **Value Rule** list. For more information, see [Chapter 10, “Defining Rules,” on page 111](#).
9. To set a text, click **<metric attribute> Text**. Then type text in the **Metric text** field.
10. To set a predefined rule for use on the text, select the rule from **Text Rule** list.
11. To set a link that opens another source of information, click **<metric attribute> Link**. Then select a predefined link from the **Link** list. For more information, see [“Managing Link Definitions” on page 71](#).
12. To set a range, click **<metric attribute> Range**. Then select a range from the **Range** list. For more information, see [“Create a Range” on page 124](#).
13. To set the time period to the selected period in the table view, click **Display period**.
14. To set the time period to a specific date range, complete the following steps:
  - a. Select **Start period**.
 

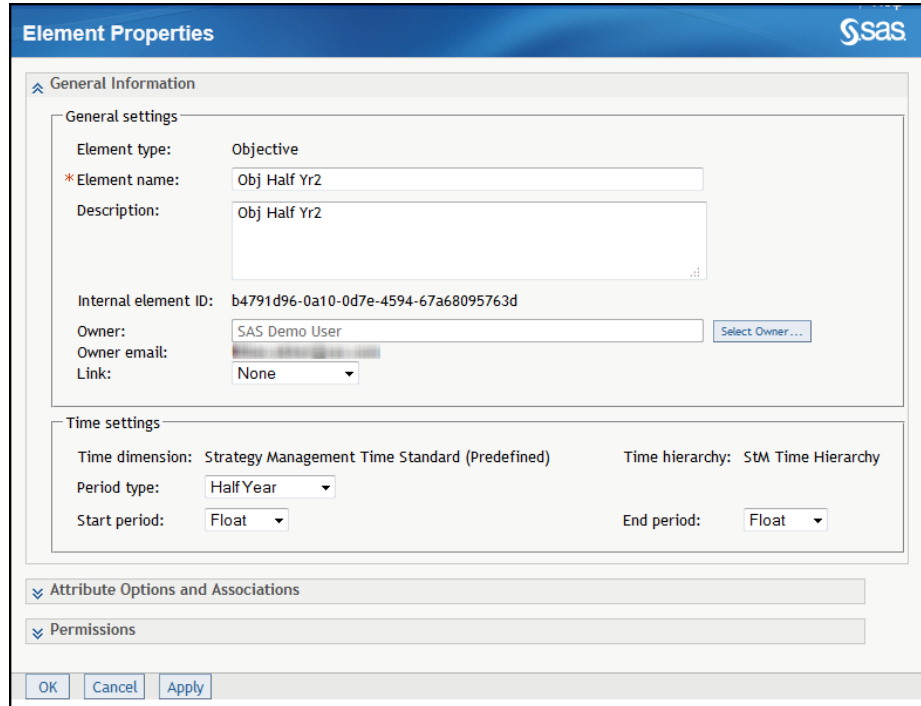
*Note:* The default value of the start period is the selected period in the table view. The default value of the end period is the last period in the element's lifetime.
  - b. Select a start period or end period from the lists.
15. Click **OK**.

## Edit Element Properties

You can edit element properties such as name, attributes, and access permissions.

To edit the properties of an element, complete the following steps in an open project:

1. Open a scorecard table.
2. Next to an element, click  and click **Properties**. The Element Properties page appears and the **General Information** section is expanded.



3. To edit the general settings, complete the following steps.

*Note:* The element type setting is the element type that you have selected to display in the scorecard.

- a. Edit the name.

*Note:* The name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).

- b. Edit the description, if required.
- c. To designate the owner of the element, click **Select Owner**. For more information about selecting an owner, see [“Select the Owner of a Template, Project, Scorecard, or Element” on page 135](#).
- d. To specify a link that you want associated with the element, select a link definition from the **Link** list. For more information, see [“Managing Link Definitions” on page 71](#).

4. To edit the time settings, complete the following steps.



*Note:* If an element has a value, action, range, threshold, or formula that is associated with it, you cannot edit its periodicity. If an element contains values that are not included in the changed time settings, the values are retained in the database and can be displayed if the time settings are readjusted to include those values.

- a. From the **Period type** list, select the type of period.

The period type defines the intervals at which data is collected for the element.

- b. From the **Start period** list, select the beginning date of data collection.

The start period defines the first interval at which data is collected. For example, if the period type is **YEAR**, the start period might be 1999. If you have selected **Multiyear** as the period type, the only available start period is **MULTYR**. **FLOAT** means that the start point of the period is not set.

- c. From the **End period** list, select the end date of data collection.

The end period defines the last interval at which data is collected. **FLOAT** means that the end point of the period is not set.

5. To select associations for an element, complete the following steps.

*Note:*

- Attributes and their associations are defined in the template on which the project is based. For more information, see [“Create a Template” on page 42](#).
- Attribute information is not available for the elements in a KPI project.

- a. Expand the **Attribute Options and Associations** section.

- b. Select an attribute from the list.
- c. Type or select the value for the options.

For example, if the element is a contact name and the category of the attribute is e-mail, supply the e-mail address for the contact name.

**TIP** If you want to specify a link to associate with a non-metric attribute, select a link definition from the **Link** list. For more information, see [“Managing Link Definitions” on page 71](#).

6. To assign access permissions, complete the following steps.

*Note:*

- In order to assign access permissions to an element, you must have the appropriate access permissions.

- You can assign access permissions to an element so that only designated individuals and groups can read or change the element.

a. Expand the **Permissions** section.

| Name          | Read                                | Write                               | Delete                              | Administer                          |
|---------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| SAS Demo User | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Add Users & Groups

- b. Click **Add Users & Groups**. For more information, see [“Add Users and User Groups” on page 136](#).
- c. In the Permissions table, click **Read**, **Write**, **Delete**, or **Administer** access permissions for each user or group. For more information about access permissions, see [“Working with Access Permissions” on page 138](#).
- d. To remove a user's name from the list of users who have access to the scorecard, click **X** to the right of the check boxes.
7. When you are finished editing the properties, click **OK**.

## Edit Multiple Elements

You can edit the time, owner, and values of more than one element at a time.

To edit multiple elements, complete the following steps in an open project:

1. Click **Edit Elements**. The Edit Elements page appears.

## Edit Elements

You can edit the time, owner, and values of more than one element at a time.  
» Read more...

---

### Element Selection

☒ Project elements: MT22Oct12 (project elements only)  
☐ Scorecards:

Element type: All Select...

Select the elements you want to change:  
☒ All elements  
☐ Selected elements:

☐ Override properties set on an individual cell

---

### Select the edits you want to make.

#### General Properties

☐ Element's lifetime: Period type: Month Start period: Float End period: Float  
☐ Owner: Select Owner...  
☐ Comment alert: Change...

---

#### Metric Attribute Properties

Select a metric attribute. This indicates what column the properties are applied to.

Metric attribute: Actual

☐ Value: Change...  
☐ Value rule: No Rule  
☐ Metric text:  
☐ Metric text rule: No Rule  
☐ Range: No Range New...  
☐ Global threshold: Interval type: Condition: Threshold: Change...  
☐ Personal threshold: Interval type: Condition: Threshold: Change...  
☐ Link: Change...

Apply any information that has been checked to the following set of periods:  
☒ Display period: 10/31/2012  
☐ Start date: End date:

2. To edit project elements, click **Project elements**. Otherwise, to edit scorecard elements, click **Scorecards**.

To edit the elements in all scorecards, click **All scorecards**. Otherwise, to select the scorecard that contains the elements that you want to edit, click **Select**. Then, expand the scorecard hierarchy and select the scorecards that you want to edit.

3. From the **Element type** list, select an element type.

4. To edit all elements, click **All elements**. Otherwise, to edit specific elements, click **Selected elements** and select the check boxes that are next to the elements that you want to edit.

5. To override cell properties, click **Override properties set on an individual cell**.

*Note:* To change any existing values on the selected elements, you must select this option.

6. To change the time properties of the elements, complete the following steps in the **General Properties** section.

**CAUTION:**

**If you change the periodicity of an element, data is lost.**

- a. Click **Element's lifetime**.
- b. Select a period type from the **Period type** list.
- c. Select a start period and an end period from the **Start period** and **End period** lists.

*Note:*

- Select **Float** in the lists to indicate that the start period or end period for the project has not been set.
- If an element contains values that are not included in the changed time settings, the values are retained in the database and can be displayed if the time settings are readjusted to include those values.

7. To change the owner of the elements, click **Owner** and click **Select Owner**. The Owner page appears. For more information about selecting an owner, see [“Select the Owner of a Template, Project, Scorecard, or Element” on page 135](#).
8. To specify whether you receive an alert when a comment is added, click **Comment alert** and click **Change**. The Alerts on Comments page appears. For more information, see [“Set Alerts on Comments” on page 137](#).
9. To specify the column to which metric attribute properties are applied, select an attribute from the **Metric attribute** list.
10. To change the metric attribute values for multiple elements, click **Value** and click **Change**. Then, select one of the following options on the Values page.

| Way to Set the Value                                                             | Option                            |
|----------------------------------------------------------------------------------|-----------------------------------|
| Provide a value                                                                  | Click <b>Entered value</b> .      |
| Specify a predefined formula to apply to the metric value                        | Click <b>Formula definition</b> . |
| Define a new formula or modify a predefined formula to apply to the metric value | Click <b>Formula definition</b> . |

11. (For entered value) Type a new value in the **Entered value** field.
12. (For formula definition specifying a predefined formula) Complete the following steps:
  - a. Select a formula from the **Formula** list.
  - b. Select a function, attribute, and metric attribute as needed.

- c. Click **Insert Formula**. The formula appears in the **Formula definition** field.
13. (For formula definition defining a new formula or modifying a predefined formula) Click **Advanced Formula**. For more information, see [“Creating a Formula” on page 117](#). If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see [Appendix 2, “Configuring Java,” on page 355](#).
14. To set a predefined rule for use on the value, click **Value rule** and select a rule from the list. For more information, see [Chapter 10, “Defining Rules,” on page 111](#).
15. To change or supply text, click **Metric text** and type the text into the field.
16. To set a predefined rule for use on the text, click **Metric text rule** and select a rule from the list.
17. To change or apply a range, click **Range**. Then, select a range from the list or click **New** to create a new range. For more information, see [“Create a Range” on page 124](#).
18. To change or apply a global threshold, click **Global threshold** and click **Change**. The Global Threshold Options page appears. For more information about editing thresholds, see [“Edit a Global or Personal Threshold” on page 108](#).
19. To change or apply a personal threshold, click **Personal threshold** and click **Change**. The Personal Threshold Options page appears. For more information about editing thresholds, see [“Edit a Global or Personal Threshold” on page 108](#).
20. To change or apply a link, click **Link** and click **Change**. The Link page appears. Then select a predefined link from the **Link** list and click **OK**. For more information, see [“Managing Link Definitions” on page 71](#).
21. To specify the current period, click **Display period**. Otherwise, to specify a date range, click **Start date** and click  that is next to the **Start date** and **End date** fields.
22. Click **OK**.

---

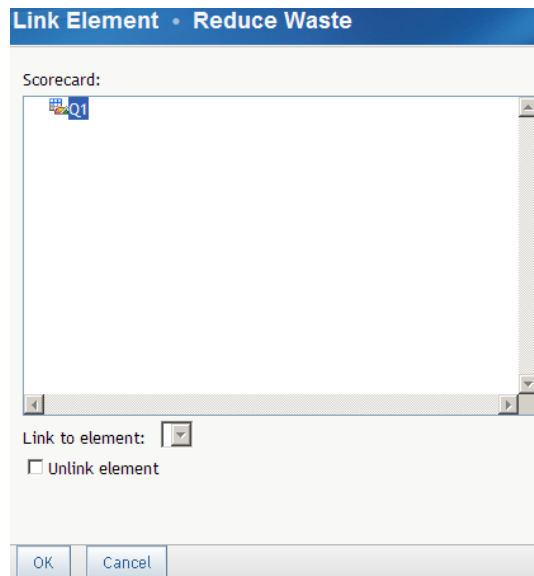
## Link Elements

In a project that contains multiple scorecards, you can link an element to an element of the same element type in a parent scorecard. Linked elements are used in the following ways:

- Thresholds that are crossed in a child scorecard cause a flag to appear in linked elements in the parent and grandparent scorecards.
- Parent scorecards that have a formula that uses the **Current Children** function include only those child elements that are linked.
- An aggregate view displays all linked elements on the same line of the aggregate table. Elements that are not linked are displayed on separate lines.

To link an element to an element in its parent scorecard, complete the following steps in an open project:

1. Select a scorecard below the level of the top scorecard.
2. Next to an element, click  and click **Link Element**. The Link Element page appears.



3. Select a parent scorecard from the **Scorecard** list.
4. Select an element from the **Link to element** list.

*Note:* You cannot link multiple elements in one scorecard to a single element in a parent scorecard.

5. To unlink the element, click **Unlink element**.

---

## Change Comment Alert Settings for an Element

You can choose to receive an alert when a comment is added to an element. You can select one element or multiple elements and change the options for all at one time.

To change the comment alert settings, open a project and click .

- To set the option for one element, click  next to that element and click **Alerts on Comments**.
- To set the option for multiple elements, select the elements. Then, at the top of the last column, click  and click **Alerts on Comments**.

The Alerts on Comments page appears. For more information, see [“Set Alerts on Comments” on page 137](#).

---

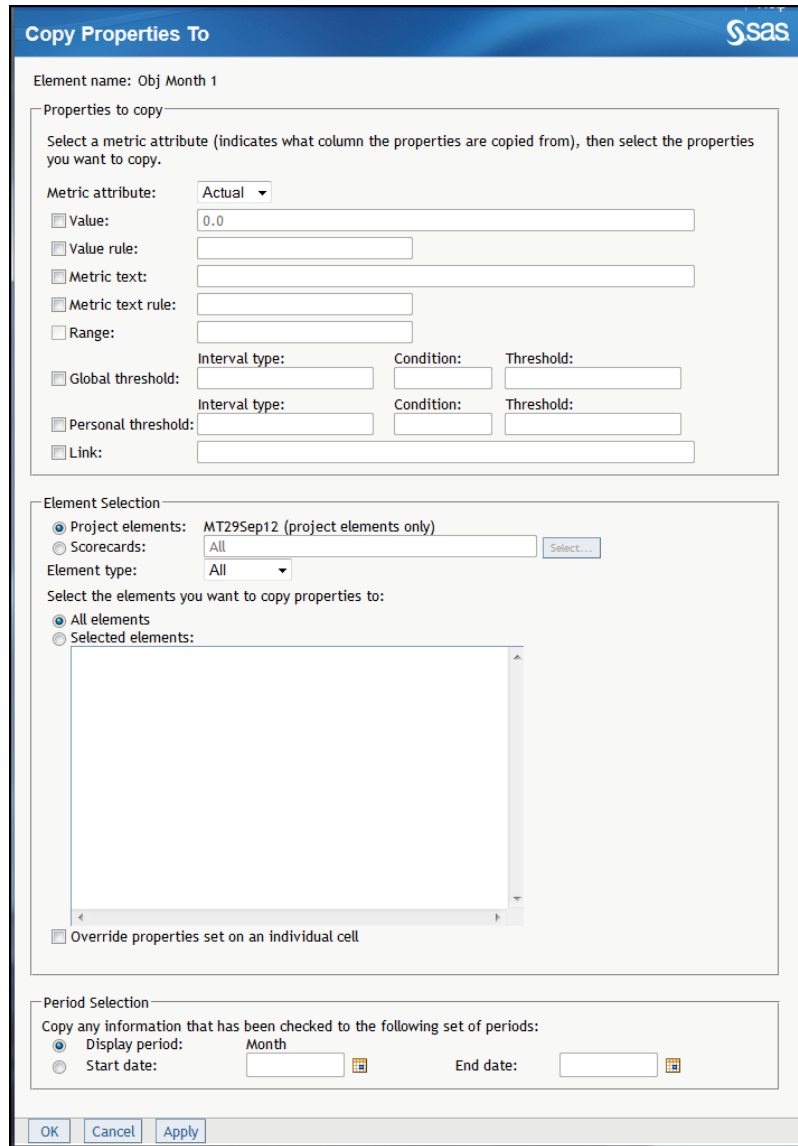
## Copy Element Properties

You can copy the properties of an element to other elements. Copying properties enables you to define a set of properties for an element, such as a value to be entered manually, a measure or a formula, a global threshold, a personal threshold, a range, and an action. You can then copy the properties from that element to a set of elements throughout the scorecard hierarchy for a given set of periods.

*Note:* Element associations are copied only to elements that are in the same scorecard.

To copy the properties of an element, complete the following steps in an open project:

1. Click .
2. Next to the element that you want to copy, click  and click **Copy Properties To**. The Copy Properties To page appears.



**Copy Properties To**

Element name: Obj Month 1

**Properties to copy**

Select a metric attribute (indicates what column the properties are copied from), then select the properties you want to copy.

Metric attribute: Actual

☐ Value: 0.0

☐ Value rule:

☐ Metric text:

☐ Metric text rule:

☐ Range:

☐ Global threshold: Interval type: Condition: Threshold:

☐ Personal threshold: Interval type: Condition: Threshold:

☐ Link:

**Element Selection**

☒ Project elements: MT29Sep12 (project elements only)

☐ Scorecards: All Select...

Element type: All

Select the elements you want to copy properties to:

☒ All elements

☐ Selected elements:

☐ Override properties set on an individual cell

**Period Selection**

Copy any information that has been checked to the following set of periods:

☒ Display period: Month

☐ Start date: End date:

OK Cancel Apply

3. From the **Metric attribute** list, select a metric attribute.
4. Select **Value**, **Value rule**, **Metric text**, **Metric text rule**, **Range**, **Global threshold**, **Personal threshold**, or **Link** to copy these properties.

*Note:* The fields to the right of these check boxes are unavailable.

5. To copy the properties to a project, select **Project elements**. Otherwise, to copy the properties to a scorecard, select **Scorecards**, and then click **Select**.

To copy the properties to all scorecards, select **All scorecards**. Otherwise, to select the scorecard that contains the elements that you want to copy, click **Select**. Then, expand the scorecard hierarchy and select the scorecards that you want to edit.

6. From the **Element type** list, select an element type.

7. To copy the properties to all elements in the selected project or scorecards, select **All elements**. Otherwise, copy the properties only to selected elements, select **Selected elements** and click on the elements that you want to select.
8. To override existing properties, select **Override properties set on an individual cell**.
9. To copy the properties to the currently displayed period, select **Display period**. Otherwise, to specify the time period that you want to copy the properties to, select **Start date** and click  that is next to the **Start date** and **End date** fields.

---

## Copy an Element

You can copy an element to a scorecard in the same project, or in a different project if the project is based on the same template. The copied element retains the link and other attributes of the original element. You can copy project elements only to other projects, and you cannot link project elements. You can copy scorecard elements only to other scorecards.

To copy an element, complete the following steps in an open project:

1. Click .
2. Next to the element that you want to copy, click  and click **Copy**. The Copy Element page appears.
3. Select the project and scorecard to which to copy the element.  
*Note:* You can copy the element to more than one scorecard. An element cannot be copied to itself.
4. To change the name of the element when it is copied, type the name in the **Element name** field.
5. Click **Copy**.

---

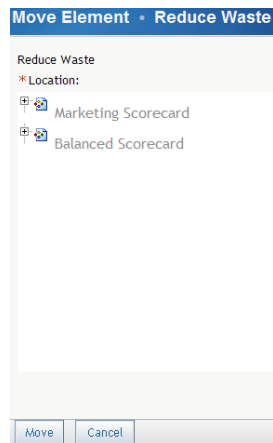
## Move an Element

You can move an element to a scorecard in the same project, or in a different project if the project is based on the same template.

To move an element to another scorecard, complete the following steps in an open project:

1. Click .
2. Next to the element that you want to move, click  and click **Move**. The Move Element page appears.





3. Select the project and scorecard to which to move the element.
4. Click **Move**.

---

## Delete an Element

To delete an element, open the project and click . In the element table, perform one of the following actions.

- To delete one item, click next to the element that you want to delete and click **Delete**.
- To delete more than one item, click the check box to the right of each item. Then click and click **Delete**.
- To delete all elements, click the check box at the top of the right-most column. Then click and click **Delete**.

*Note:* Deleting an element that is used in a formula renders the formula invalid.

---

## Format Numbers and Fonts in Cells

You can change the number format and font of the cells within a scorecard element.

To change cell format, complete the following steps in an open project:

1. Next to the element, click and click **Format Cells**. The Format Cells page appears.
2. To format numbers and dates in cells, expand the **Number Settings** section.

**Number Settings**

Use number formats to change the appearance of numbers, including dates.

| <input type="checkbox"/> | Metric Attribute | Type                  | Preview |
|--------------------------|------------------|-----------------------|---------|
| <input type="checkbox"/> | Status           | Current column format |         |
| <input type="checkbox"/> | Actual           | Current column format |         |
| <input type="checkbox"/> | Target           | Current column format |         |
| <input type="checkbox"/> | Performance      | Current column format |         |
| <input type="checkbox"/> | TestColumn       | Current column format |         |

**Options**

Select the type to change the selected metric type attributes. To format cells as text, select General.

Type: General

[Preview](#)

3. Select the metric attributes in the table to which to apply the format, or select the **Metric Attribute** check box in the column heading to select all of the attributes.
4. In the **Options** section, from the **Type** list, select the number format to apply to the selected attribute:

| Type                         | Description                                                         |
|------------------------------|---------------------------------------------------------------------|
| <b>Current Column Format</b> | Applies the format of each column to the cells in the selected row. |
| <b>General</b>               | Applies a text format.                                              |
| <b>Currency</b>              | Applies a currency format. An example is \$1,234.10.                |
| <b>Number</b>                | Applies a numeric format.                                           |
| <b>Percentage</b>            | Applies a percentage format. An example is 100%.                    |
| <b>Date</b>                  | Applies a date format. An example is 03Dec04.                       |

5. (For the **Currency** type) Complete the following steps:
  - a. To use the locale that is specified by your preferences, click **Use the locale selected in your preferences**.
  - b. To specify a different locale, click **Use this locale** and choose a locale from the list.
  - c. From the **Decimal places** list, select a value.
6. (For the **Number** type) Complete the applicable steps.
  - To use a numeric format other than the SAS format along with settings that are in your profile, click **Other** and click **Use the settings in your profile**.
  - To use a numeric format other than the SAS format along with settings different from those in your profile, click **Use these settings**. From the **Decimal places**

list, select a value. Then, choose whether to use a comma to separate 1000s and whether to switch the 1000 separator and the decimal separator.

- To use the SAS numeric format, complete the following steps:

1. Click **SAS Format**.
2. From the **List of formats** list, select a common format.
3. From the **Decimal places** list, select a value.

*Note:* This field is unavailable for the **BEST** format.

4. In the **Width** field, type a value.
7. (For the **Percentage** type) Choose whether to format the percentage as a standard percentage or to use the format from the locale. From the **Decimal places** list, select a value.
8. If you selected the **Date** type, select a format from the **Available date formats** list.
9. To view the format selection in the metric attribute table, click **Preview**.
10. To set the fonts that are displayed in cells, expand the **Font Settings** section.

**Font Settings**

To make text stand out, you can format any metric attribute.

Attributes:

| <input type="checkbox"/> | Metric Attribute | Type                  | Preview |
|--------------------------|------------------|-----------------------|---------|
| <input type="checkbox"/> | Status           | Current column format |         |
| <input type="checkbox"/> | Actual           | Current column format |         |
| <input type="checkbox"/> | Target           | Current column format |         |
| <input type="checkbox"/> | Performance      | Current column format |         |
| <input type="checkbox"/> | TestColumn       | Current column format |         |

Options

Select the formatting options.

☐ Current column format

Alignment

☐ Left  
☐ Center  
☒ Right

Style

☐ Bold  
☐ Italic  
☐ Underline  
☐ Strikeout  
☐ Wrap text

Color

Text:  
Default

Background:  
Default

Preview

11. Select the metric attributes in the table to which to apply the font or click **Metric Attribute** in the column heading to select all of the attributes in the table.
12. To apply the column format to the cells in the selected row, click **Current Column Format**.

*Note:* The other settings in the **Options** section are unavailable.

13. In the **Alignment** section, click the alignment for the text.
14. In the **Style** section, click one or more styles of text formatting.
15. From the **Text** and **Background** lists, select a color for the text and background.

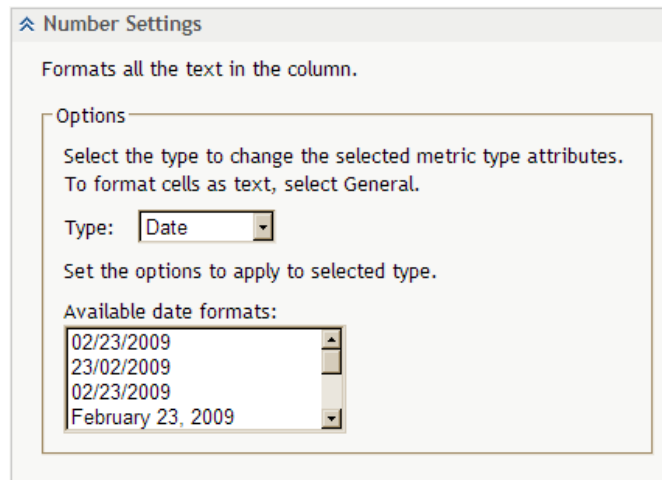
16. To view the font selection in the metric attribute table, click **Preview**.
17. Click **OK**.

## Format Numbers and Fonts in Columns

You can change the number format and font of the columns within a scorecard table.

To change column format, complete the following steps in an open project:

1. Select a column in a scorecard table.
2. At the top of the column, click  and click **Format Column**. The Format Columns page appears.
3. To format numbers and dates in columns, expand the **Number Settings** section.



4. From the **Type** list, select the number format to apply to the selected column:

| Type              | Description                                          |
|-------------------|------------------------------------------------------|
| <b>General</b>    | Applies a text format.                               |
| <b>Currency</b>   | Applies a currency format. An example is \$1,234.10. |
| <b>Number</b>     | Applies a numeric format.                            |
| <b>Percentage</b> | Applies a percentage format. An example is 100%.     |
| <b>Date</b>       | Applies a date format. An example is 03Dec04.        |

5. (For the **Currency** type) Complete the following steps:
  - a. To use the locale that is specified by your preferences, click **Use the locale selected in your preferences**.
  - b. To specify a different locale, click **Use this locale** and choose a locale from the list.
  - c. From the **Decimal places** list, select a value.

6. (For the **Number** type) Complete the applicable steps.
  - To use a numeric format other than the SAS format along with settings that are in your profile, click **Other** and click **Use the settings in your profile**.
  - To use a numeric format other than the SAS format along with settings different from those in your profile, click **Use these settings**. From the **Decimal places** list, select a value. Then, choose whether to use a comma to separate 1000s and whether to switch the 1000 separator and the decimal separator.
  - To use the SAS numeric format, complete the following steps:
    1. Click **SAS Format**.
    2. From the **List of formats** list, select a common format.
    3. From the **Decimal places** list, select a value.

*Note:* This field is unavailable for the **BEST** format.

    4. In the **Width** field, type a value.
7. (For the **Percentage** type) Choose whether to format the percentage as a standard percentage or to use the format from the locale. From the **Decimal places** list, select a value.
8. If you selected the **Date** type, select a format from the **Available date formats** list.
9. To view the format selection in the metric attribute table, click **Preview**.
10. To set the fonts that are displayed in cells, expand the **Font Settings** section.

**Font Settings**

Formats all the text in the column.

**Options**

Select the formatting options.

**Alignment**

☐ Left

☐ Center

☒ Right

**Style**

☐ Bold

☐ Italic

☐ Underline

☐ Strikeout

☐ Wrap text

**Color**

Text:

Background:

11. In the **Alignment** section, click the alignment for the text.
12. In the **Style** section, click one or more styles of text formatting.
13. From the **Text** and **Background** lists, select a color for the text and background.
14. To view the font selection in the metric attribute table, click **Preview**.
15. Click **OK**.

---

## Set a Global or Personal Threshold

To set a threshold, complete the following steps in an open project:

1. Select a project or scorecard table.
2. Select the element in the table to which you want to apply a threshold.
3. Next to the element, click  and click the applicable action.

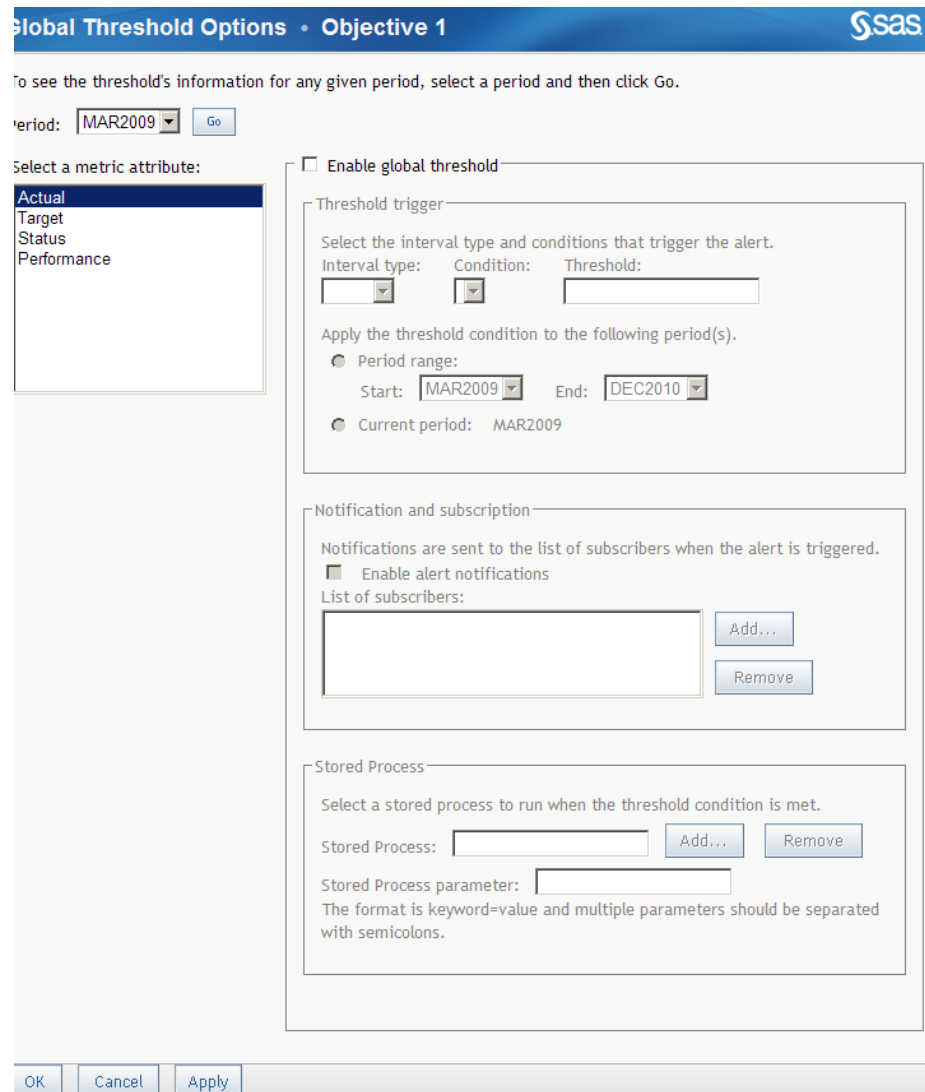
To set a global threshold

**Global Threshold Options**

To set a personal threshold

**Personal Threshold Options**

The applicable threshold page appears. The following example is the Global Threshold Options page.



Global Threshold Options • Objective 1

To see the threshold's information for any given period, select a period and then click Go.

Period:

Select a metric attribute:

- Actual
- Target
- Status
- Performance

☐ Enable global threshold

Threshold trigger

Select the interval type and conditions that trigger the alert.

Interval type:  Condition:  Threshold:

Apply the threshold condition to the following period(s).

☒ Period range:

Start:  End:

☒ Current period: MAR2009

Notification and subscription

Notifications are sent to the list of subscribers when the alert is triggered.

☐ Enable alert notifications

List of subscribers:

Stored Process

Select a stored process to run when the threshold condition is met.

Stored Process:

Stored Process parameter:

The format is keyword=value and multiple parameters should be separated with semicolons.

4. To view threshold information for a specified period, select a period from the **Period** list and click **Go**. The current period is displayed by default.
5. From the **Select a metric attribute** list, select the metric attribute to which you want to apply the threshold.
6. Activate the applicable threshold.

|                                  |                                           |
|----------------------------------|-------------------------------------------|
| To activate a global threshold   | Select <b>Enable global threshold</b> .   |
| To activate a personal threshold | Select <b>Enable personal threshold</b> . |

7. To specify the conditions that trigger alert notifications to subscribers, complete the following steps in the **Threshold trigger** section:

- a. Select an interval type from the **Interval type** list.
  - If you have applied a range to the metric attribute, the list contains intervals that are defined in the range properties.
  - If you have not applied a range to the metric attribute, **Value** is the only item in the **Interval type** list.

For more information, see [“Create a Range” on page 124](#).

- b. Select an operator from the **Condition** list. For example, if you want an alert to be triggered when the interval falls below a certain value, select the < (less than) operator.
- c. Type a value in the **Threshold** field or select an interval from the **Threshold** list.
- d. To specify the period of time to which the threshold applies, perform one of the following steps:
  - Select **Period range** and select a start period and end period from the **Start** and **End** lists.

*Note:* The default value of the start period is the selected period in the table view. The default value of the end period is the last period in the element's lifetime.

  - Select **Current period**.

8. To identify subscribers to alert when a threshold is triggered, complete the applicable steps in the **Notification and subscription** section:

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For global thresholds   | To enable alert notifications and add users to the list of subscribers so they are notified when an alert is triggered, select <b>Enable alert notifications</b> . To add a user or user group to the list of subscribers to a global threshold, click <b>Add</b> . For more information, see <a href="#">“Add Users and User Groups” on page 136</a> . To remove a user from the list of subscribers to a global threshold, click <b>Remove</b> . |
| For personal thresholds | To subscribe yourself so that you are notified when an alert is triggered, select <b>Enable alert notifications and subscribe me</b> .                                                                                                                                                                                                                                                                                                             |

*Note:* In order for a subscriber to receive alert notifications by e-mail, the subscriber's portal preferences must include one of the following selections for alert notifications:

- Via e-mail
- Both e-mail and alerts portlet

For more information, see [“Set Alert Preferences” on page 137](#).

*Note:* If an alert notification is triggered by a formula-based cell value, the notification occurs only when both of the following criteria are met:

- the formula-based cell value has changed

- the project, scorecard, or both are recalculated
9. To specify a stored process to run when the threshold is met, complete the following steps in the **Stored Process** section:
    - a. Click **Add**, expand the hierarchy as needed, and then select a stored process.
    - b. If the stored process requires one or more parameters, type the parameters in the **Stored Process parameter** field.

**TIP** Separate each parameter with a semicolon (;).
    - c. To delete the stored process, click **Remove**.
  10. Click **OK**.

---

## Edit a Global or Personal Threshold

To edit a threshold, complete the following steps in an open project:

1. Click **Edit Elements**. The Edit Elements page appears.
2. In the **Metric Attribute Properties** section, perform the applicable step:

|                              |                                                           |
|------------------------------|-----------------------------------------------------------|
| To edit a global threshold   | Click <b>Global Threshold</b> and click <b>Change</b> .   |
| To edit a personal threshold | Click <b>Personal Threshold</b> and click <b>Change</b> . |

The applicable threshold options page appears. The following example is for the Global Threshold Option page.



Global Threshold Options

Threshold trigger

Threshold settings determine when a flag is displayed.

Interval type:

Condition:

Threshold:

Set threshold:

Value

Remove thresholds on selected elements

No change

Notification and subscription

Notifications are sent to the list of subscribers when the alert is triggered.

Set subscribers on selected elements

List of subscribers:

Subscribe...

Remove

Remove all subscribers on selected elements

No change

Stored Process

Select a stored process to run when the threshold condition is met.

Stored Process:

Add...

Remove

Stored Process parameter:

The format is keyword=value and multiple parameters should be separated with semicolons.

OK

Cancel

3. To edit the conditions that trigger alerts to subscribers, perform the applicable steps in the **Threshold trigger** section:
  - To set a new threshold, complete the following steps:
    1. Click **Set threshold** and select an interval type from the **Interval type** list.
    2. Select an operator from the **Condition** list. For example, if you want an alert to be triggered when the interval falls below a certain value, select the < (less than) operator.
    3. Type a value in the **Threshold** field.
  - To remove all thresholds from the selected elements, click **Remove thresholds on selected elements**.
 

*Note:* This choice also removes all subscribers, including your personal subscription.
  - To make no change to elements with different thresholds, select **No change**.
4. To edit the list of subscribers who receive alerts when a threshold is triggered, perform the applicable step in the **Notification and Subscription** section:

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For global thresholds   | <ul style="list-style-type: none"> <li>• To add a user to the list of subscribers to a global threshold, click <b>Set subscribers on selected elements</b> and click <b>Subscribe</b>. For more information, see <a href="#">“Add Users and User Groups” on page 136</a>.</li> <li>• To remove a user from the list of subscribers, click the user and click <b>Remove</b>.</li> <li>• To remove all subscribers from the selected elements, click <b>Remove all subscribers on selected elements</b>.</li> <li>• To make no change to elements with different notifications, click <b>No change</b>.</li> </ul> |
| For personal thresholds | <ul style="list-style-type: none"> <li>• To be notified, click <b>Enable alert notifications and subscribe me</b>.</li> <li>• To remove notification, click <b>Remove my alert notifications subscription on selected elements</b>.</li> <li>• To make no change to elements with different notifications, select <b>No change</b>.</li> </ul>                                                                                                                                                                                                                                                                   |

5. To edit a stored process to run when the threshold is met, perform the applicable step in the **Stored Process** section:
  - a. Click **Add**, expand the hierarchy as needed, and then select a stored process.
  - b. If the stored process requires one or more parameters, type the parameters in the **Stored Process parameter** field.
 

**TIP** Separate each parameter with a semicolon (;).
  - c. To delete the stored process, click **Remove**.
6. Click **OK**.

## View Thresholds

To view the thresholds that have been set for a table, complete the following steps in an open project:

1. Select a project or scorecard table.
2. Customize the table so that threshold flags are displayed. For information, see [“Customize a Scorecard Table” on page 153](#).
3. Click one of the threshold icons (🔴 or 🟡) in a cell. The Threshold Conditions page appears.

The table displays the name of the scorecard, the value of the selected element, the threshold, and the absolute difference between the threshold and the value. The table also displays any scorecards that meet the threshold conditions for that metric attribute, starting at the selected scorecard and including any of its child scorecards.

*Note:* Click the scorecard name to display the scorecard.

## Chapter 10

# Defining Rules

---

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---

## Overview of Rules

### *Ways to Use Rules*

You can define a rule once on the Manage Rules page and then use the rule in multiple places in a project and in its scorecards. You can select which rule definition to use when you apply rules to one or more metric attributes. Rules are then validated in the data-entry form.

For more information, see:

- [“Edit Metric Attributes” on page 89](#)
- [“Edit Multiple Elements” on page 94](#)

## Types of Rules That You Can Define

The following table describes the types of rules that you can define.

| Rule Type | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeric   | <p>The rule evaluates the cell value against a lower and upper boundary. For example, if <i>value</i> is the cell value that the rule evaluates, then:</p> <p>lower boundary &lt;= value &lt;= upper boundary</p> <p>You do not have to specify both boundaries. If you do not specify both boundaries, you can have an unlimited upper or lower boundary. For example,</p> <p>10 &lt;= value</p> <p>validates that the cell value is equal to or greater than 10.</p> |
| Text      | The rule evaluates the cell value against a maximum length. The cell value must be text.                                                                                                                                                                                                                                                                                                                                                                               |
| Choices   | This rule displays the choices that you specify in a list in the form. Then, the user selects a choice from the list.                                                                                                                                                                                                                                                                                                                                                  |
| Formula   | The rule evaluates whether the value that was entered by the data-entry user passes the criteria as defined by the formula. For more information, see <a href="#">Chapter 11, “Working with Formulas,” on page 115</a> .                                                                                                                                                                                                                                               |

## Define a Rule

To define a rule, complete the following steps from the Project page:

1. Select **Project** ⇒ **Manage Rules**. The Manage Rules page appears.
2. Click . The **Properties** section appears below the **Rules** list.
3. On the **Identification** tab:
  - a. In the **Name** field, enter a unique name for the rule.
  - b. (Optional) In the **Description** field, enter an optional description of the rule.
  - c. Click **Required entry** if you want to require that the affected data cell be filled in. The user can save the form, but the user cannot submit the form without entering a value in the affected data cell.

*Note:* If the form does not have a workflow, then only the **Submit** button is available in the form. The form does not have a **Save** button.

**TIP** You can click **Save** at any time in the **Properties** section. Doing so saves a draft of the rule. The draft appears in the **Rules** list above the **Properties** section. The draft contains the selections that you made before you clicked **Save**. If you continue working in the **Properties** section but do not click **Save**, any subsequent selections can be lost.

4. Click the **Rule Properties** tab. To define the rule, select the type of rule that you want to define and complete the applicable steps:

| Rule Type | Step                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeric   | <p>In the <b>Lower boundary</b> and <b>Upper boundary</b> fields, enter the boundary values that you want the rule to use to evaluate cell value.</p> <p><i>Note:</i> If <i>value</i> is the cell value that the rule evaluates, then lower boundary <math>\leq</math> <i>value</i> <math>\leq</math> upper boundary. If you specify only one boundary, the unspecified boundary is an unlimited boundary. For example, <math>10 \leq</math> <i>value</i> validates that the cell value is equal to or greater than 10.</p>                                                                                   |
| Text      | <p>In the <b>Maximum length</b> field, enter the length value that you want the rule to use to evaluate the cell value.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Choices   | <p>In the <b>Choices</b> field, enter the choices from which the user can select in the affected cell. Enter each choice separated by a semi-colon (;). For example, enter three choices by typing:</p> <p>dog; cat; rabbit</p>                                                                                                                                                                                                                                                                                                                                                                               |
| Formula   | <p>In the <b>Formula</b> field, enter the formula that you want the rule to use to evaluate the cell value. To use the Formula Editor to define the formula, click <b>Advanced Formula</b>. The <b>Validation message</b> field indicates whether the formula validated correctly.</p> <p><i>Note:</i> In the <b>Validation message</b> field, you can specify a message to display to the data-entry user. This message appears if the data-entry user enters a value that is not valid for the formula. You can use this message to explain the formula and its expected values to the data-entry user.</p> |

- Click **Save** to save your selections. The draft of the rule appears in the **Rules** list above the **Properties** section. Click **Cancel** to exit the **Properties** section without saving your selections.

*Note:* If you click the column headings in the **Rules** list to sort items in the list, the feature does not sort the items correctly in languages other than English.

---

## Edit or View the Properties of a Rule

*Note:* If  is the only button available on the toolbar, the role and capability settings that are associated with your user name are limited to viewing only. If you require expanded access to SAS Strategy Management, contact your SAS Strategy Management administrator.

To edit the properties of a rule, complete the following steps on the Manage Rules page:

- Double-click the rule that you want to edit. The **Properties** section appears below the **Rules** list.
- Change the applicable settings in the rule as described in [“Define a Rule” on page 112](#).
- Click **Save** to save your selections. Click **Cancel** to exit the **Properties** section without saving your selections.

---

## Copy a Rule

To copy a rule, complete the following steps on the Manage Rules page:

1. Select the rule that you want to copy and click .  
The copied rule appears in the list. A number is appended to the rule's name.
2. To edit the copied rule, double-click its name. The **Properties** section appears below the **Rules** list.
3. Change the applicable settings in the rule as described in [“Define a Rule” on page 112](#).
4. Click **Save** to save your selections. Click **Cancel** to exit the **Properties** section without saving your selections.

---

## Delete a Rule

To delete a rule, complete the following steps on the Manage Rules page:

1. Select the rule that you want to delete and click .
2. A confirmation message appears. Click **Yes** to delete the rule.

## Chapter 11

# Working with Formulas

---

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---

## Apply a Formula to a Column

You can define and apply formulas to the columns in scorecard tables. When applying formulas, keep the following requirements in mind:

- Formulas can be applied only to columns that contain numeric values. Any calculation that cannot be computed appears as **#NUM!**.
- A formula on a cell always takes precedence over a column formula. Therefore, when you apply a formula to a column, any cells that already have a formula ignore the column formula; all other cells in the column accept the formula. Likewise, when you remove a formula from a column, the formula is removed only from those cells that accepted the column formula; the other cells retain their cell formulas.

To apply a formula to a column, complete the following steps in an open project:

1. Open the scorecard table to which you want to apply the formula.
2. In a column heading, click  and click **Apply Formula**.

*Note:* To see the action menu, the column selection must include numeric values.  
For more information, see [“Create a Column Selection” on page 130](#).

The Apply a Formula to a Column page appears.

3. To apply a predefined formula to the column, complete the following steps:
  - a. Select a formula from the **Formula** list.
  - b. Select a function from the **Function** list.
  - c. Click **Insert Formula**. The formula appears in the **Formula definition** field.
4. To define or edit a formula, click **Advanced Formula**. For more information, see [“Creating a Formula” on page 117](#). If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see [Appendix 2, “Configuring Java,” on page 355](#). After you exit the Formula Editor, continue to the following step.
5. To specify the dates to which the formula applies, complete the following steps:
  - a. To apply the formula to periods that extend from the selected period to the last period in the element's life time, click **Display date to the last date of the element's lifetime**.
  - b. To specify a start and end date, click **Start date** and click  next to the **Start date** and **End date** fields.
  - c. To apply the formula to the date that is specified in the column selection definition, click **Based on existing date**.

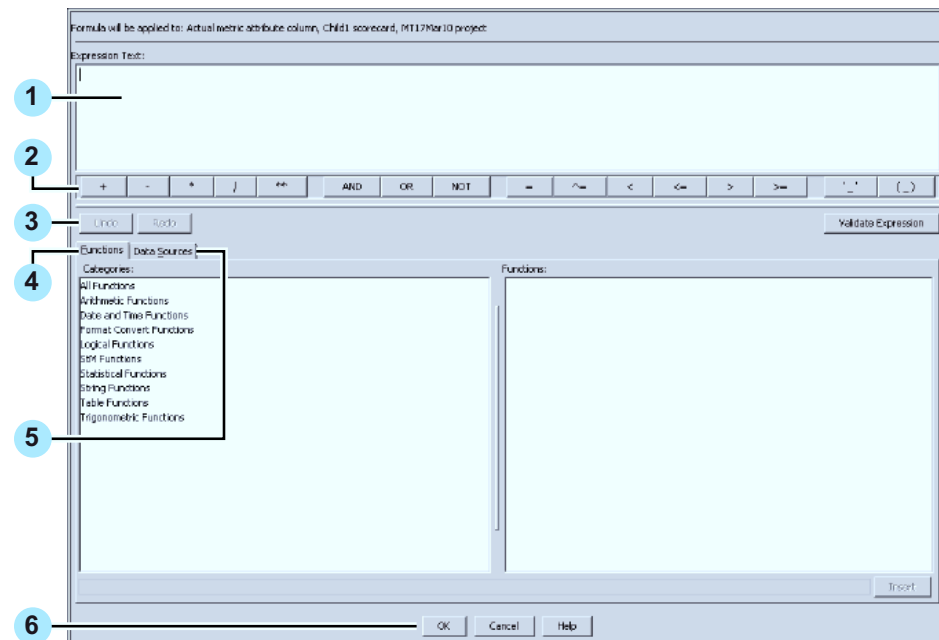
*Note:* When you apply a formula to a column selection, the current date is the absolute date that is specified in the column selection definition, or that is followed by an indicator of the relative period offset from the column selection definition. For more information, see [“Create a Column Selection” on page 130](#).



## Creating a Formula

### Your First Look at the Formula Editor

Use the Formula Editor to build and edit formulas.



**1 Expression Text area.**

The current formula appears in the **Expression Text** field. You can insert text into the formula at the insertion marker. Before you insert text, be sure to position the insertion marker at the correct location by clicking that location.

**2 Symbol toolbar**

To insert a symbol, use the symbol toolbar. For more information, see [“Insert a Symbol” on page 118](#).

**3 Undo and Redo buttons**

**4 Functions tab**

To insert a function, use the **Functions** tab. For more information, see [“Insert a Function” on page 118](#).

**5 Data Sources tab**

To insert a reference to a data source, use the **Data Sources** tab. For more information, see [“Insert a Data Source Reference” on page 119](#).

**6 OK and Cancel buttons**

*Note:*

- The Formula Editor is also used in SAS Financial Management. For more information about the Formula Editor, see the *SAS Financial Management*

*Formula Guide*. However, the **Data Sources** tab is not provided in SAS Financial Management and the tab is not described in its documentation.

- Any calculation that cannot be computed appears as **#NUM!**.

## Start the Formula Editor

You start the Formula Editor by clicking **Advanced Formula**.

*Note:* If you are starting the Formula Editor for the first time, you must configure your system for Java. The Formula Editor requires the Java 2 Runtime Environment (J2RE). For information about installing the J2RE, see [Appendix 2, “Configuring Java,”](#) on page 355.

## Close the Formula Editor

To close the Formula Editor, click **OK** to save and exit or click **Cancel** to exit without saving your work.

## Insert a Symbol

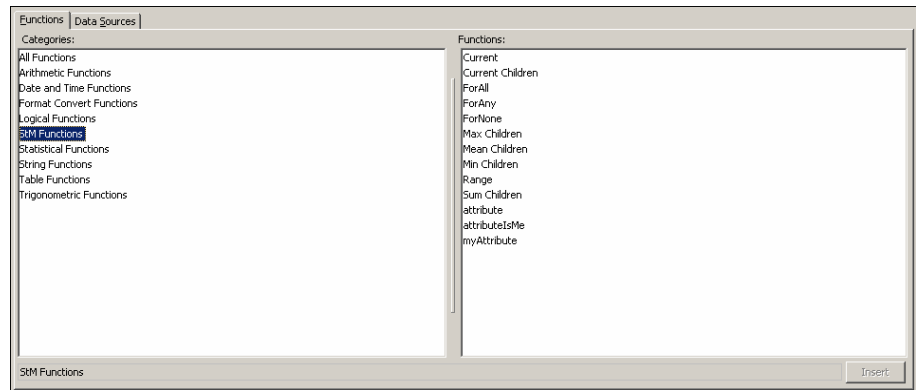
To insert a symbol, click the applicable button in the symbol toolbar. From left to right, the buttons are in the following groups:

|  |                                                                                                                     |
|--|---------------------------------------------------------------------------------------------------------------------|
|  | Arithmetic operators                                                                                                |
|  | Boolean operators                                                                                                   |
|  | Comparison operators, which can be used to compare two numeric values or two strings                                |
|  | A miscellaneous group, which includes a matching pair of single quotation marks and a matching pair of parentheses. |

## Insert a Function

To insert a function into the formula that you are building, complete the following steps:

- In the **Categories** list, click a category that contains the function. Each function is in the **All Functions** category and also in one other, more focused category. When you select a category, all the functions in the selected category are listed alphabetically in the **Functions** list.



**Note:** One of the selections in the **Categories** list is **StM Functions**. These are functions provided by Strategy Management. The other selections in the **Categories** list are standard SAS functions. For information about Strategy Management functions, see [Appendix 1, “Strategy Management Function Dictionary,”](#) on page 337.

2. In the **Functions** list, click a function. For information about Strategy Management functions, see [Appendix 1, “Strategy Management Function Dictionary,”](#) on page 337.

**TIP** When you select a function, a brief description of the function is displayed below the list.

3. Click **Insert**. A syntactic template of the function is inserted into the **Expression Text** field at the insertion point.
4. In the syntactic template, replace each argument placeholder with an appropriate argument.

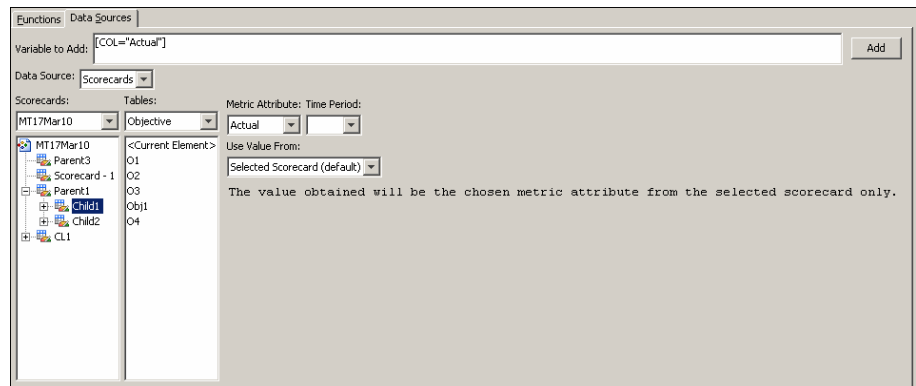
Special constants enable you to account for unresolved and missing values in a formula. The following special constants are supported by the Formula Editor:

| Special Constant | Description                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------|
| .                | Indicates a value that is missing.                                                                                           |
| _BLANK_          | Indicates a value that is missing. You can use _BLANK_ in an IF condition to determine whether a value is missing.           |
| _ERROR_          | Indicates an error such as divide-by-zero. You can use _ERROR_ in an IF condition to determine whether a value has an error. |

### ***Insert a Data Source Reference***

To insert a reference to a data source, complete the following steps:

1. Click the **Data Sources** tab.



2. From the **Data Source** list, select a data source.
3. From the **Scorecards** list, select a project. The scorecards in the project appear in the tree. Select a scorecard in the tree.
4. From the **Tables** list, select a table. The elements that have been defined for each table are displayed.

*Note:* *<Current Element>* applies to the element that you select in the scorecard table. Select *<Current Element>* if you are assigning the formula to a column or if the formula will be copied to another element as part of a scorecard or element copy operation.

5. From the **Metric Attribute** list, select a metric attribute.
6. From the **Time Period** list, select a time period.

*Note:* Select *<Current>* if you are assigning the formula to a column or if the formula will be copied to another element as part of a scorecard or element copy operation. The Formula Editor uses the period code, rather than the period name, in its syntax.

7. From the **Use Value From** list, select a scorecard.

*Note:* The value of the metric attribute is the value of the attribute from the selected scorecard.

8. Click **Add** to the right of the **Variable to Add** field. The contents of the **Variable to Add** field are inserted into the formula at the insertion point.

### Validate the Expression

When you have entered the formula text, click **Validate Expression** to verify that the formula is valid.

*Note:* Numeric constants without decimal points are limited to a range between  $-2,147,482,648$  and  $2,147,483,647$ . To use a numeric constant that is outside of that range, insert a decimal point and a zero after the constant, such as  $-2,147,482,649.0$ .

## Chapter 12

# Calculating a Project

---

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## Overview

If you have created formulas for your project, you can calculate them and display the results in the cells that contain formulas. Any calculation that cannot be computed appears as **#NUM!**.

For information about formulas for columns, see [“Apply a Formula to a Column” on page 115](#). For information about formulas for cells, see [“Edit Metric Attributes” on page 89](#) concerning the formula-based method for editing metric attributes.

---

## Calculate a Project

*Note:* The following task calculates all scorecards in a project. To calculate only one scorecard, see [“Calculate a Scorecard” on page 78](#).

To calculate to a project, complete the following steps in an open project:

1. Click **Project** ⇒ **Calculate**.
2. Click **Calculate**. The Calculate page appears.

3. You can specify a date range or a period to calculate. Complete one of the following steps:

To calculate according to a range of dates

Click **Select by date range**.

*Note:* This is the default selection.

In the **Start date** and **End date** fields, type a date or click  to select a date.

To calculate according to a period

Click **Select by period**.

*Note:* The default value is the period that is displayed in the table view.

From the **Period type** list, select a period type. Then, from the **Period** list, select a period.

4. If you have imported a project into your SAS Strategy Management installation, you must import the formulas that are associated with the project. To do so, click **Import formulas that have been exported from previous or current versions of SPM 2.x**. For more information about importing, see the *SAS Strategy Management: System Administration Guide*.
5. Click **Calculate**.

Chapter 13

# Working with Ranges

---

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---

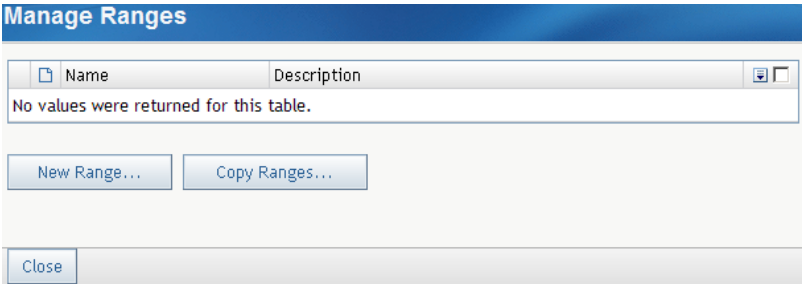
## Overview

For a description of ranges, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9.

---

## List Ranges

To list ranges, in an open project, click **Project** ⇒ **Manage Ranges**. The Manage Ranges page appears.



## Create a Range

*Note:* You cannot create a range unless you have Scorecard Modeler access permissions.

To create a range, complete the following steps:

1. List the ranges. For more information, see [“List Ranges” on page 123](#).
2. Click **New Range**. The New Range page appears.
3. Expand the **General Settings** section.

**General Settings**

Enter identifying information for this range.

Project: Balanced Scorecard

\* Range name:

Description:

4. Type a name for the new range in the **Range name** field.
5. (Optional) Type a description for the range in the **Description** field.
6. A range can contain several intervals, or subsets of data. To define an interval, expand the **Interval Definitions** section.

**Interval Definitions**

Enter an interval, and click Add Value. Values that are outside the lower and upper bounds are not displayed in the Dashboard view.

Boundary value:   

| Name        | Interval   | Label             | Grade                | Normalized Value | Color                | Icon                 | Delete               |
|-------------|------------|-------------------|----------------------|------------------|----------------------|----------------------|----------------------|
| Interval 1* | All Values | Lower Bound Intei | <input type="text"/> | 0.0              | <input type="text"/> | <input type="text"/> | <input type="text"/> |

\* Will not display in dashboards

7. You can specify a value for the interval or you can create a formula to calculate a range interval. The formula can use all of the constructs that are normally used for formula-based metric attributes. These constructs enable you to reference the values of other metric attributes within the same scorecard or different scorecards, or to access the values of the current metric attribute over time (for example, the mean of the last six periods).

*Note:*

- Any calculation that cannot be computed appears as **#NUM!**.
- Formula-based ranges might generate unexpected range results. The results of formula-based ranges are not calculated when you create them. They are calculated at run time. As a result, it is possible to create ranges that have overlapping intervals. When this happens, SAS Strategy Management returns the last interval that satisfies the condition.
- , If you reference an element or an attribute on a formula-based range, you must provide a full reference to that element or attribute. For more information, see [“Specify a Full Reference to an Element or Attribute” on page 354](#).

To create an interval, complete the applicable steps:



|                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For an interval based on a specific value | <p>Type a value for the lower bound of the range in the <b>Boundary value</b> field and click <b>Add Value</b>.</p> <p>The new interval appears in the table below the <b>Boundary value</b> field.</p>                                                                                                                                                                                                                                                                                                                     |
| For an interval based on a formula        | <p>Click <b>Add Formula</b> and perform one of the following steps:</p> <ul style="list-style-type: none"> <li>In the <b>Formula definition</b> field, type a formula.</li> <li>Click <b>Advanced Formula</b> to open the Formula Editor. For more information, see <a href="#">“Creating a Formula” on page 117</a>. If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see <a href="#">Appendix 2, “Configuring Java,” on page 355</a>.</li> </ul> |

8. In the **Interval 1** row, type a label in the **Label** field for values that fall below the lower bound of the interval.
9. In the **Grade** field, type a letter grade that represents the interval.
10. In the **Normalized Value** field, type a value that represents the interval.
11. Click the icon in the **Color** column, and select from the palette a color to be displayed with values that fall below the lower bound.
12. Click the icon in the **Icon** column, and select an icon to be displayed with values that fall below the lower bound.

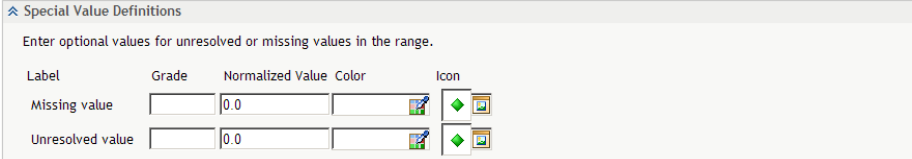
*Note:* If an image does not exist, no image is displayed for that interval. Images might be missing because a previously assigned image has been removed without updating the interval properties.

13. In the **Interval 2** row, select an operator from the list in the **Interval** column.
14. Specify a label, grade, normalized value, color, and icon to be displayed with the interval.
15. To add more intervals, repeat steps 7 through 10.
16. To verify that all of the intervals have values and that the boundary values of the intervals do not conflict with each other, click **Validate**.

*Note:*

- To remove an interval, click  in the row that contains the interval.
  - To display percentages within a range, specify the interval boundaries as decimal values. For example, specify a boundary of 90% as .90.
17. Unresolved or missing values might appear in the new range. Unresolved values (any calculation that cannot be computed) appear as **#NUM!**. Missing values appear as blank cells.

To define labels for these values, expand the **Special Value Definitions** section.



Special Value Definitions

Enter optional values for unresolved or missing values in the range.

| Label            | Grade                            | Normalized Value                 | Color                                                                               | Icon                                                                                |
|------------------|----------------------------------|----------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Missing value    | <input type="text" value="0.0"/> | <input type="text" value="0.0"/> |  |  |
| Unresolved value | <input type="text" value="0.0"/> | <input type="text" value="0.0"/> |  |  |

18. For the **Missing value** and **Unresolved value** labels, specify a grade, normalized value, color, and icon to be displayed with the value.

19. Click **OK**.

---

## Edit a Range

*Note:* You cannot edit a range unless you have Scorecard Modeler access permissions.

To edit a range, complete the following steps from the range list on the Manage Ranges page:

1. Click the name of the range. The Range Properties page appears.
2. Modify the general information, interval definitions, and special value definitions.

For more information, see [“Create a Range” on page 124](#).

---

## View Range Properties

To view properties and settings associated with an item, click  next to the item that you want to view, and then click **Properties**. The Properties window appears. You can only view this window. You cannot edit the properties and settings.

*Note:* If **Properties** is the only selection available on the menu, the role and capability settings associated with your user name are limited to viewing only. If you require expanded access to SAS Strategy Management, contact your SAS Strategy Management administrator.

---

## Copy a Range

To base a new range on a range that has already been created, complete the following steps from the range list on the Manage Ranges page:

1. Click **Copy Ranges**. The Copy Range page appears.
2. From the **Project** list, select the name of the project that contains the existing range.
3. Click **Go**.
4. From the **Range** list, select the name of the existing range.
5. Click **Go**.
6. Type a name for the new range in the **New range name** field.
7. Type a description for the range in the **Description** field.
8. Modify the interval definitions and special value definitions as needed.

For more information, see [“Create a Range” on page 124](#).

---

## Delete a Range

To delete a range, perform one of the following steps from the range list on the Manage Ranges page:

- To delete one range, click  next to the range that you want to delete and click **Delete**.
- To delete more than one range, click the check box to the right of each range, click  for the column, and click **Delete**.
- To delete all ranges, click the check box at the top of the right-most column, click  for the column, and click **Delete**.

---

## Apply a Range to a Column

To apply a range to a column, complete the following steps in an open project:

1. Click .
2. In a column label, click  and click **Apply Range**. The Apply a Range to a Column page appears.
3. From the **Range** list, select a range.
4. Specify the dates to which the range applies by performing one of the following steps:
  - To apply the range to periods that extend from the selected period to the last period in the element's lifetime, click **Display date to the last date of the element's lifetime**.
  - To specify a start and end date, click **Start Date**, and click  that is next to **Start Date** and **End Date** fields.
  - To apply the range to the date that is specified in the column selection definition, click **Based on existing date**.

*Note:* When you apply a range to a column selection, the existing date is the absolute date that is specified in the column selection definition, or that is followed by an indicator of the relative period offset from the column selection definition. For more information, see [“Create a Column Selection” on page 130](#).



## Chapter 14

# Working with Column Selections

---

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---

## Overview

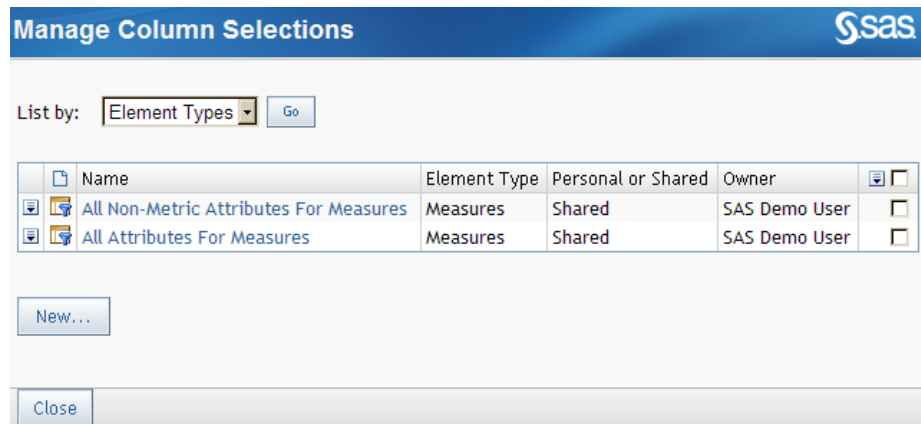
For a description of column selections, see [Chapter 2, “How Do You Describe a Strategy?”](#) on page 9.

---

## List Column Selections

To display the list of column selections, complete the following steps in an open project:

1. Click **Project** ⇒ **Manage Column Selections**. The Manage Column Selections page appears.



The "Manage Column Selections" dialog box features a header with the SAS logo. Below the header, there is a "List by:" label followed by a dropdown menu set to "Element Types" and a "Go" button. A table lists existing column selections with columns for Name, Element Type, Personal or Shared status, Owner, and a checkbox for sharing. Below the table are "New..." and "Close" buttons.

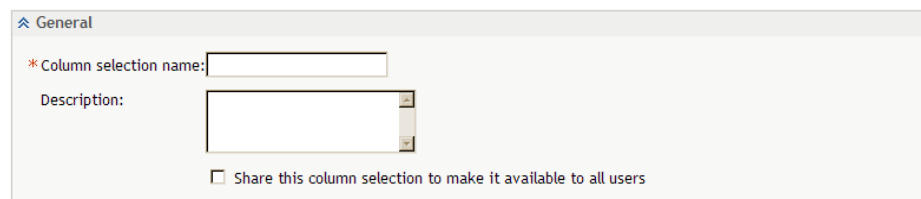
| Name                                   | Element Type | Personal or Shared | Owner         |                          |
|----------------------------------------|--------------|--------------------|---------------|--------------------------|
| All Non-Metric Attributes For Measures | Measures     | Shared             | SAS Demo User | <input type="checkbox"/> |
| All Attributes For Measures            | Measures     | Shared             | SAS Demo User | <input type="checkbox"/> |

- From the **List by** list, select which column selections to display in aggregate tables.
- Click **Go**.

## Create a Column Selection

To create a column selection, complete the following steps:

- List column selections. For more information, see [“List Column Selections” on page 129](#).
- Click **New**. The New Column Selection page appears.
- Expand the **General** section.

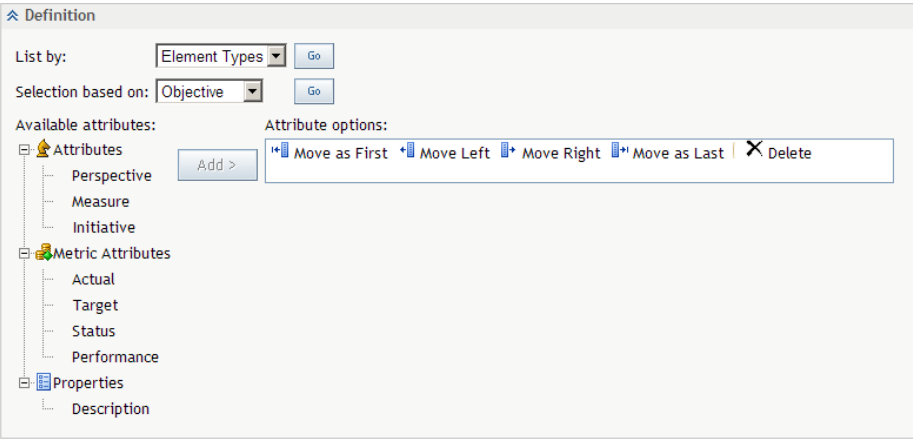


The "General" section of the "New Column Selection" form contains a text field for "Column selection name:", a text area for "Description:", and a checkbox labeled "Share this column selection to make it available to all users".

- Type a name for the column selection in the **Column selection name** field.
- (Optional) Type a description in the **Description** field.
- To make the column selection available to all users of the project, click **Share this column selection to make it available to all users**.

*Note:* By default, the column selection is available only to its creator.

- Expand the **Definition** section.



You can apply a column selection to the elements in a table view, to the associations in an association view, or you can create a column selection that is not connected to element types or associations.

8. To specify how you want to apply the column selection, complete the following steps:

a. From the **List by** list, select one of the following options:

|                      |                                                                                                                                                                                  |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Element Types</b> | Applies the column selection to elements in a table view.                                                                                                                        |
| <b>General</b>       | Creates a column selection that is not connected to element types or associations. The <b>General</b> column selection is used to display metric attributes in aggregate tables. |

b. Click **Go**.

9. To determine the element type on which the column selection is based, select an element type from the **Selection based on** list and click **Go**.

10. To display attributes as columns with the element type or association, complete the following steps:

a. Select attributes from the **Available attributes** list.

*Note:* The **General** column selection can contain only metric attributes.

b. Click **Add**.

c. (Optional) Type a label for each column in the **Label** field.

*Note:* By default, the column label is the same as the attribute name.

d. To move a column, click the check box that is next to the column name, and click **Move as First**, **Move Left**, **Move Right**, or **Move as Last**.

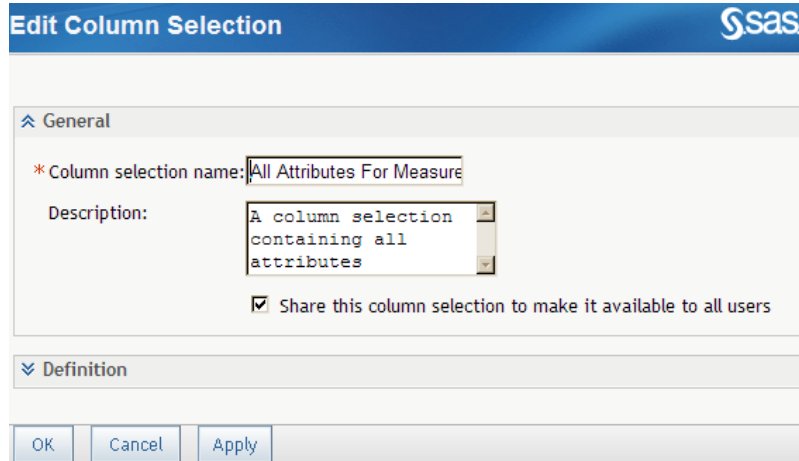
e. To delete a column, click the check box that is next to the column name, and click **Delete**.

11. Click **OK**.

## Edit Column Selection Properties

To edit the properties of a column selection, complete the following steps on the Manage Column Selections page:

1. To the left of the row, click  and click **Properties**. The Edit Column Selection page appears.



2. Edit the properties of the column selection. For information about column selection properties, see [“Create a Column Selection” on page 130](#).

## View Column Selection Properties

To view properties and settings associated with an item, click  next to the item that you want to view, and then click **Properties**. The Properties window appears. You can only view this window. You cannot edit the properties and settings.

*Note:* If **Properties** is the only selection available on the menu, the role and capability settings associated with your user name are limited to viewing only. If you require expanded access to SAS Strategy Management, contact your SAS Strategy Management administrator.

## Copy a Column Selection

To copy a column selection and add it to the list of column selections, complete the following steps in the Manage Column Selections page:

1. To the left of the row, click  and click **Copy**. The Copy page appears.
2. Type a name for the copy in the **Column selection name** field.

*Note:* By default, the copy is named *column-selection-nameCopy*.



---

## Delete a Column Selection

*Note:* To perform this task, you must have the appropriate access permissions.

To delete a column selection, on the Manage Column Selections page, click  to the left of the row and click **Delete**.

---

## Apply a Column Selection to a Table or Aggregate Table

To display the selected columns for an element type in a table, complete the following steps in an open project:

1. Click . The table view appears.
2. Select a project or scorecard.
3. Select an element type from the **Element type** list.

*Note:* The list includes only column selections based on element types and general column selections.

4. Select a column from the **Column selection** list.
5. Click **Go**.

---

## Apply a Column Selection to an Association

To display the selected columns for an association, complete the following steps in an open project:

1. Select a scorecard.
2. Click . The association view appears.
3. Select an association from the **Association** list.

*Note:* The list includes only column selections based on associations and general column selections.

4. Select a column from the **Column selection** list.
5. Click **Go**.

## Create a Column Selection for Use in a Data-Entry Form

When you create a data-entry form, you specify a column selection to use in that form. Before you can specify the column selection, you must create it.

To create a column selection to use in a form:

1. List column selections. For more information, see [“List Column Selections” on page 129](#).
2. Click **New**. The New Column Selection page appears and the **General** section is expanded.
3. Enter a name for the column selection in the **Column selection name** field.
4. (Optional) Enter a description in the **Description** field.
5. Click **Share this column selection to make it available to all users**.
6. Expand the **Definition** section.
7. From the **List by** list, select **General** and click **Go**. To use a column selection in a data-entry form, it must be defined as **General**.
8. In the **Available attributes** tree, select the metric attribute to use and click **Add**. The settings appear in the right section.
9. Enter a label for each column in the **Label** field. By default, the column label is the same as the attribute name.

**TIP** It is a best practice to make each label unique. The unique label is used in the scorecard table view because all of the elements are displayed in this view and the elements have a mixture of period types (months, quarters, years). However, in a data-entry form, only one period type is displayed. In a form, the column labels consist of the metric attribute name combined with the selected date option.

10. Select the data option.
  - To specify the current date, select **Selected date**.
  - To always use a specified date, select **Date**. Then enter a date in the field or click  to choose a date from the calendar.
  - To specify a period relative to the current date, select **Relative period** and enter a value in the field.

**TIP** Column selections in forms only contain one period type. Therefore, you do not select the period type to use.

11. By default, a column selection is Read-Only when it is displayed in a form. To enable the column selection for editing, click **Allow Data Entry**.
12. Click **OK**.

## Chapter 15

# Common Tasks

---

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---

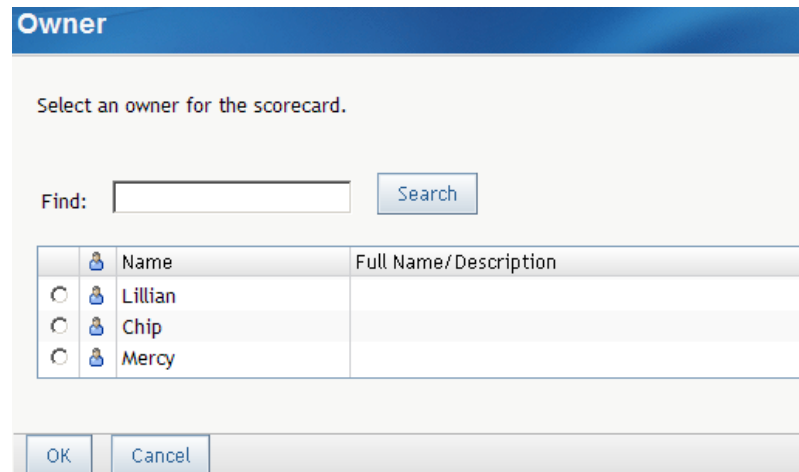
## Display the Template and Project Manager Page

To display the Template and Project Manager page, perform one of the following steps:

- If you are at the portal level, click **Manage Scorecard Projects**.  
*Note:* If this task does not appear in the portal, add the task to a portlet.
  - If you are using SAS Strategy Management Builder, click **Project** ⇒ **Manage Templates and Projects**.
- 

## Select the Owner of a Template, Project, Scorecard, or Element

One of the properties of a template, project, scorecard, or element is its owner. To select or change the owner, open the Properties window for the template, project, scorecard, or element, and click **Select Owner**. The Owner window appears.



**Owner**

Select an owner for the scorecard.

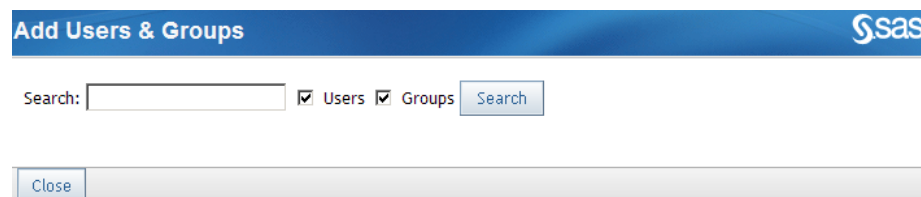
Find:

| <input type="radio"/> |  | Name    | Full Name/Description |
|-----------------------|--|---------|-----------------------|
| <input type="radio"/> |  | Lillian |                       |
| <input type="radio"/> |  | Chip    |                       |
| <input type="radio"/> |  | Mercy   |                       |

Select a user name from the list. If the list is large, you can search the list by typing a user name in the **Find** field, click **Search**, and select a user name from the resulting list.

## Add Users and User Groups

One of the properties of a template, project, scorecard, or element is its permissions and the users and user groups that have permission for access. To add one or more users or user groups, open the Properties window for the template, project, scorecard, or element, and expand the **Permission** section. Click **Add Users and Groups**. The Add Users and Groups page appears.



**Add Users & Groups** 

Search:  ☒ Users ☒ Groups

To add one or more users or user groups, complete the following steps:

1. Type a search string in the **Search** field.
2. Choose whether to include users and user groups.
3. Click **Search**. A table of results is displayed.

| <input type="checkbox"/> |  | Name                         | Description                                                                                               |
|--------------------------|--|------------------------------|-----------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> |  | BI Dashboard Administrators  | Dashboard product. The SAS Trusted User is made a member during initial deployment.                       |
| <input type="checkbox"/> |  | BI Dashboard: Administration | Provides BI Dashboard administration capabilities.                                                        |
| <input type="checkbox"/> |  | BI Dashboard Users           | The members of this group are allowed general viewing access of content for the SAS BI Dashboard product. |

4. In the table of results, select the check mark next to one or more items and click **Add**.

## Set Alert Preferences

The SAS Information Delivery Portal lets you set preferences for receiving alerts. In SAS Strategy Management, you might specify to receive an alert when an action occurs, such as when a comment is added to an element. When the alert is generated, it can be sent in any of the following ways:

- E-mail
- Short Message Service (SMS) text message
- Via an alerts portlet that you have added to a portal page

To specify which of these ways you want to receive your alerts, complete the following steps:

1. In SAS Information Delivery Portal, click **Options** ⇒ **Preferences** in the banner. The Preferences page appears.
2. In the **Notifications** section, in the **Alert notifications** list, select the way you want to receive your alerts.
3. Click **Apply**.
4. If you do not want to set any other preferences, click **OK**.

## Set Alerts on Comments

You can choose to receive an alert when a comment is added to an element.

Click **On** to enable alerts. Then select a notification method from the **Delivery method** list and click **OK**.

*Note:* If you are setting the comment alert option for multiple items at once and you want to maintain the different states of notification for multiple items, click **No change**.

Otherwise, click **Off** to disable alerts and click **OK**.

---

## Working with Access Permissions

### ***What Are Access Permissions?***

Access permissions control the method that a particular user or group can use to access a SAS Strategy Management object. More than one type of access permission can be assigned to a user or group. The following access permissions are available.

#### **Read**

Enables you to view or display the object. When users have Read access permission only, they cannot move or rename the object or change any of its information.

#### **Write**

Enables you to edit the object. Users can rename and change the properties and contents of the object. Read access permission is automatically granted with Write access permission.

#### **Delete**

Enables you to delete the object. Read and Write access permission is automatically granted when users have Delete access permission.

#### **Administer**

Enables you to change all access permissions for the object. Read, Write, and Delete access permission is automatically granted when users have Administer access permission.

The user who creates an object receives all access permissions for the object. Subsequent users who are added to the access permissions list for an object are given Read access permission by default.

A user inherits the access permissions of the group that the user belongs to. A group does not inherit access permissions that have been assigned to a specific user.

You assign access permissions when you perform the following tasks:

- Edit the properties of a user-defined template. For more information, see [“Edit User-Defined Template Properties” on page 54](#).
- Edit the properties of a project. For more information, see [“Edit Project Properties” on page 61](#).
- Edit the properties of a scorecard. For more information, see [“Edit Scorecard Properties” on page 81](#).
- Edit the properties of an element. For more information, see [“Edit Element Properties” on page 92](#).

You can also set access permissions for multiple objects. For more information, see [“Set Access Permissions for Multiple Objects” on page 138](#).

### ***Set Access Permissions for Multiple Objects***

You can set the access permissions for multiple objects from one location rather than navigating to each object. One location enables you to set the access permissions quickly.

To set access permissions for multiple objects, complete the following steps in an open project:

1. Click **Project** ⇒ **Security Administration**. The Security Administration - Project Permissions Display page appears.

Security Administration • Project Permissions Display

Administration Selection  
Balanced Scorecard

Project Permissions Display

| Object Name        | Type     | Inherited      | Owner | Identity | Read | Write | Delete | Administer |
|--------------------|----------|----------------|-------|----------|------|-------|--------|------------|
| Balanced Scorecard | Template | No Permissions |       |          |      |       |        |            |
| Balanced Scorecard | Project  |                |       |          |      |       |        |            |

Close Export Permissions... Expand All

2. From the **Administration Selection** list, select a project. The list of the project's objects and their access permissions appears in a table.
3. Click the name of an object. The object's properties page appears.
4. Set the access permissions.

## Export Access Permissions

You can export the access permissions for scorecards and elements as comma-separated values (CSV) files with the following filenames:

| Permission type | Filename                                 |
|-----------------|------------------------------------------|
| Scorecard       | <Project-name>_Scorecard_Permissions.csv |
| Element         | <Project-name>_Element_Permissions.csv   |

where <Project-name> is the name of the project in which the scorecard or element belong.

*Note:* Access permissions that are inherited from a project are not included in the CSV files. If the access permissions for all of the scorecards and elements are inherited, the CSV files are empty (except for the first row, which contains column headings).

To export the access permissions, complete the following steps in an open project:

1. Click **Project** ⇒ **Security Administration**. The Security Administration - Project Permissions Display page appears.
2. Click **Export Permissions**. The Security Administration - Specify Export Directory Name page appears.

Security Administration • Specify Export Directory Name

\*Directory name:

Save Cancel

3. In the **Directory name** field, type the path in which to create the CSV files.  
*Note:* The path is relative to the current working directory on the server.
4. Click **Save**.





## Part 3

---

# Navigating Data and Creating Views in SAS Strategy Management Builder

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## Chapter 16

# What Is a View?

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## Overview

SAS Strategy Management provides different ways to display and explore strategy content and data. These are called *views*. Depending on your strategy, data might be easier to understand in one type of view compared to another type. The following views are available:

- Table
- Aggregate
- Association
- Diagram
- Gauge (also called dashboard)
- Trend analysis

You can use these views in the following ways:

- You can navigate and explore your data using different views in SAS Strategy Management Builder. You can use only one view at a time. Some business users might access a view in the Builder to adjust the view, but the Builder is primarily used by scorecard modelers. For detailed information, see “Part 3. Navigating Data and Creating Views in SAS Strategy Management Builder.”
- You can create a portlet that is displayed on a portal page in the SAS Information Delivery Portal. Scorecard modelers create portlet views for their business users. Because you can have multiple portlets on a portal page, you can display and use multiple views at a time. Also, the new Strategy Management enhanced portlet can display one or more tiles. A *tile* is like a window, but it exists within the boundaries

of a portlet. In Strategy Management, a tile displays a view. For detailed information, see “Part 4. Creating Portlet Views for Business Users.”

*Note:* Strategy Management information can also be viewed in SAS BI Dashboard. For more information, see [Appendix 4, “View SAS Strategy Management Data in SAS BI Dashboard,”](#) on page 361.

The views are available in the following ways:

| View        | Builder          | Classic-style Portlet | Enhanced-portlet Tile |
|-------------|------------------|-----------------------|-----------------------|
| Table       | Yes              | Yes                   | Yes                   |
| Aggregate   | Yes              | Yes                   | Yes                   |
| Association | Yes              | Yes                   | Yes                   |
| Diagram     | Yes              | Yes                   | Yes                   |
| Gauge       | No               | Yes                   | Yes                   |
| Trend       | Yes <sup>1</sup> | Yes <sup>1</sup>      | Yes <sup>2</sup>      |

1. Links to the Trend Analysis page that provides the classic style dynamic analysis features.
2. Provides the trend analysis tile with enhanced dynamic features and a static trend chart option.

## Table

Tables display data in rows and columns.

**Figure 16.1** Table Example

| Name             |  |  | Period  | Actual                                                                                           | Status                                                                                | Icon                                                                                  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Revenues         |  |  | AUG2010 | \$24,655,000                                                                                     |  |  |
| Expenses         |  |  | AUG2010 |  \$16,461,750 |  |  |
| Profitability    |  |  | AUG2010 | \$8,193,250                                                                                      |  |  |
| Customers        |  |  | AUG2010 | 98                                                                                               |  |  |
| Customer Satisf: |  |  | AUG2010 | 78%                                                                                              |  |  |

The columns in the table are determined by the template with which the project is associated. The elements are displayed in rows. You can create elements in a table.

In a table, you can perform the following tasks:

- Display data that is organized by element type, attribute, and date.
- Create, copy, move, and delete elements.
- Customize the rows, columns, and types of links that are displayed in the table.

- Format columns and cells.
- Apply formulas and ranges to columns.
- Set global and personal threshold options.
- Display history.
- View and add comments.

## Aggregate

An aggregate table shows data from the selected scorecard and all of its children. You can choose to view the aggregated data by scorecard or by metric attribute.

*Note:* If a scorecard does not contain child scorecards, the aggregate table is not displayed.

**Figure 16.2** Aggregate Example

| Name              | Actual       |             |             | Status       |       |       |
|-------------------|--------------|-------------|-------------|--------------|-------|-------|
|                   | Asia Pacific | India       | China       | Asia Pacific | India | China |
| Revenues          | \$7,390,000  | \$4,500,000 | \$2,890,000 | ▲            | ▲     | ▲     |
| Expenses          | \$5,118,500  | \$3,240,000 | \$1,878,500 | ●            | ●     | ●     |
| Profitability     | \$2,271,500  | \$1,260,000 | \$1,011,500 | ▼            | ▼     | ▼     |
| Customers         | 98           | 98          | 98          | ●            | ●     | ●     |
| Customer Satisfac | 78%          | 78%         | 78%         | ▲            | ▲     | ▲     |

## Association

An association displays relationships between scorecard element types and their associated attributes in a project. The elements are displayed in a hierarchy to reflect their association.

**Figure 16.3** Association Example

| Name                       |  | Actual       | Target       | Performan... | Trend |
|----------------------------|--|--------------|--------------|--------------|-------|
| ▼ Quality management       |  |              |              |              | ●     |
| Profitability              |  | \$8,193,250  | \$3,000,000  | 50%          | ↗     |
| ▼ Customer loyalty program |  |              |              |              | ●     |
| ▼ Revenues                 |  | \$24,655,000 | \$10,000,000 | 18%          | ↗     |
| Market share               |  | \$45         | 75           | 59%          | ↗     |
| ▼ Customers                |  | 98           | 170          | 58%          | ↗     |
| New Customers              |  | \$89         | 150          | 59%          | ↗     |
| ▼ Customer Satisfaction    |  | 78%          | 87%          | 90%          | ↗     |
| Productivity               |  | \$75         | 95           | 79%          | ↗     |
| Hours spent with cu        |  | 45           | 65           | 69%          | ↗     |

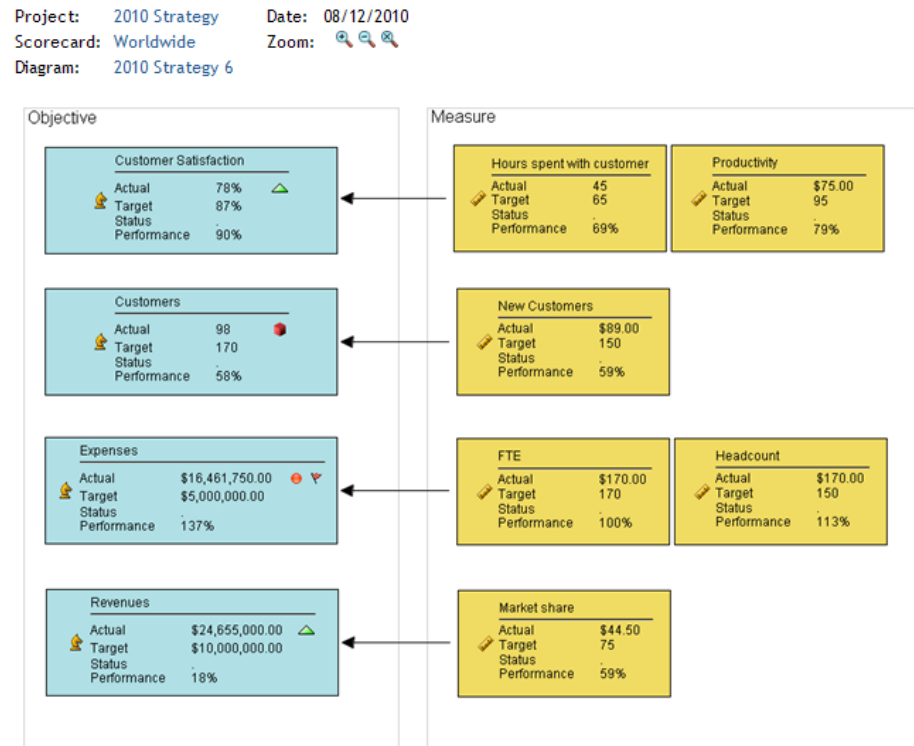
## Diagram

A diagram is a graphical way of representing elements, their relationships to one another, and their respective scores. A diagram is a way to present information found in tables, but in a more intuitive way. When you use a diagram, you can display results in the context of the strategy and provide answers about how well the organization is performing and why certain data or relationship is important.

A diagram enables users to see the relationship between strategy elements—relationships that are sometimes difficult to convey in a table. You can create diagrams that illustrate the relationships between scorecard elements or project element types.

*Note:* A diagram is often used to present the strategy map, a layered representation that conveys the drivers and relationships.

**Figure 16.4** Example of a Diagram View Displayed in a Classic-Style Portlet

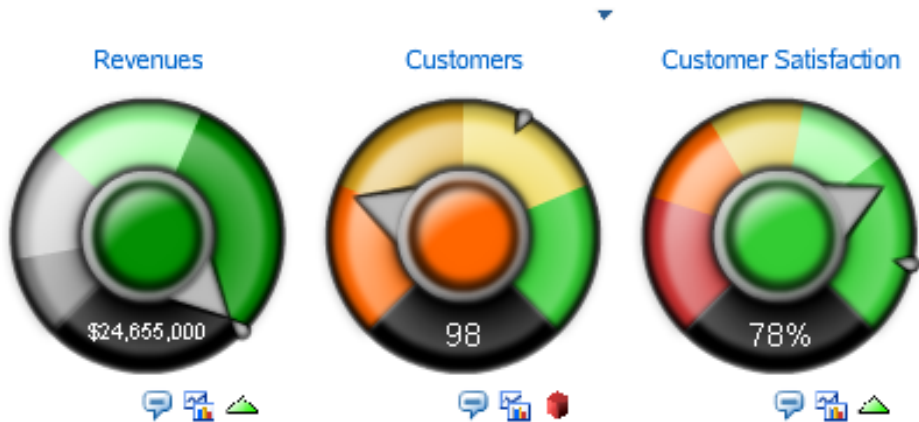


## Gauge (Also Called Dashboard)

A gauge (also called dashboard) displays ranges of data in a graphical format. You can display key performance indicators or any SAS Strategy Management elements by using the gauge view. Each element is represented by a gauge that displays the data ranges that are defined. In addition to displaying ranges, you can provide links to comments, trend data, and element properties.

Gauges can be displayed as a dial, a slider, a stoplight, a speedometer, or a bullet bar.

Figure 16.5 Example of a Gauge Dial



## Trend Analysis

An element's trend is its performance over time. You can view a trend analysis that displays the trend of an element's data. SAS Strategy Management provides different trend view implementations depending on the product feature.

| Product Feature         | Trend Implementation                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Builder                 | When you are working in the Builder using the table or association views, the Trend Analysis button is available. When you click this button, the Trend Analysis page appears.                                                                                                                                                                                                                                  |
| Classic-style portlet   | When you are working in the table, association, or dashboard views in a classic-style portlet, the Trend Analysis button might be available, depending on how the portlet is customized. When you click this button, the Builder opens and the Trend Analysis page appears.                                                                                                                                     |
| Enhanced-portlet tile   | The Strategy Management enhanced portlet can be customized to include a trend analysis tile. You can drag a value or an element from one or more table, aggregate, association, or gauge tiles onto the trend analysis tile. You can manipulate the resulting graph to further explore the trend analysis. You can also add or remove more data from other tiles. See <a href="#">Figure 16.6 on page 148</a> . |
| Enhanced-portlet option | The enhanced-portlet tiles for the table, association, diagram, and gauge views provide an option to display a static trend chart. If the tile is customized to use this option, you can click an icon that opens a trend chart. The data is static although you can change the date range using the date slider. See <a href="#">Figure 16.7 on page 149</a> .                                                 |

With the Trend Analysis page, the initial analysis uses the element whose row you clicked to open the Trend Analysis page. However, you can dynamically add to or change the analysis after it opens. For more information, see [Chapter 22, “Creating and Editing Trend Analysis Views,” on page 211](#).

For more information about the enhanced-portlet implementations of trend analysis, see the following sections:

- “Edit the Trend Analysis Tile Properties” on page 253
- Chapter 30, “Navigating and Viewing the Strategy Management Enhanced Portlet and Its Tiles,” on page 277

**Figure 16.6** Example of a Dynamic Trend Analysis in an Enhanced Portlet Tile

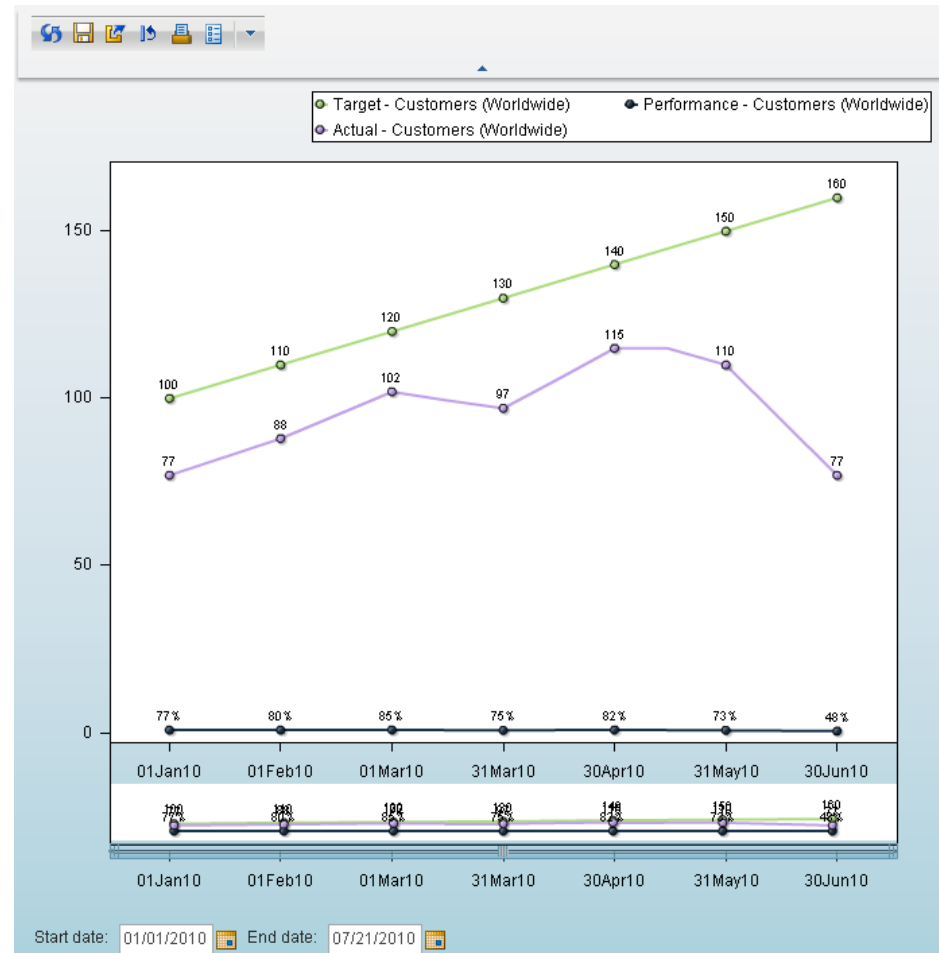
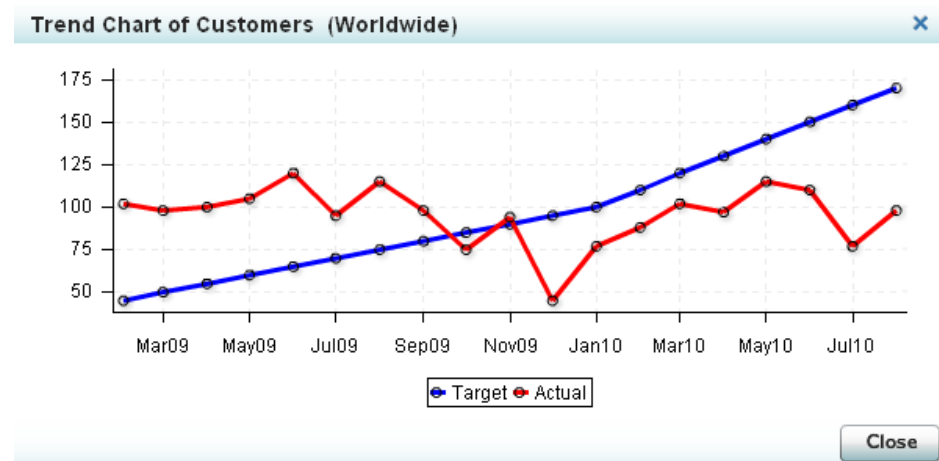




**Figure 16.7** Example of a Static Trend Chart in the Enhanced Portlet



## Chapter 17

# Creating and Editing Table Views

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---

## Open a Table

To open a table, complete the following steps:

1. Open a scorecard. For more information, see [“Open a Scorecard” on page 78](#).
2. In the toolbar, click  to display the table.
3. To display the most current updates to the data in the table, especially after you perform a calculation, click  in the toolbar.

---

## Specify How to View Scorecard Table Data

To specify how to view scorecard table data, complete the following steps in an open table:

1. To display the metric attributes by the type of element, select an element type from the **Element type** list.
2. To display the metric attributes that belong to a specified column selection in a scorecard table, select a column selection from the **Column selection** list.

Column selections are defined in the project options. For more information, see [“Create a Column Selection” on page 130](#).

3. To display data for a particular date, type a date in the **Date** field or click  to choose a date from the calendar.

*Note:* SAS Strategy Management matches the date that you specify to the appropriate time period for each element. For example, if one element is based on a yearly period, and another element is based on a monthly period, the table

displays data that is valid for the year and the month that contain the date that you specified.

- 4. Click **Go**. The table displays the data as you have specified.

## Sort Rows

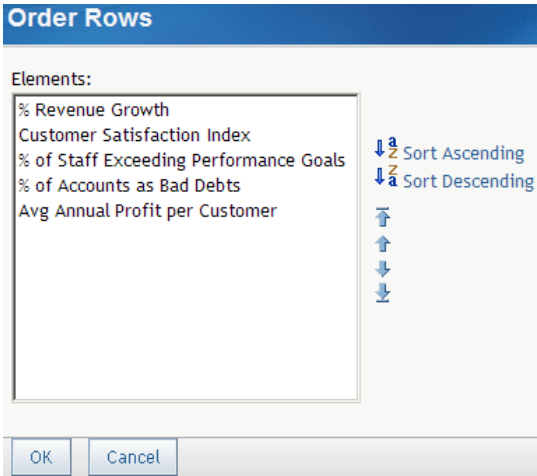
To sort the rows of data in a table according to the value of the column, click a column heading in the table to sort the rows by that column. The column used to sort the list contains either an up or down arrow in the column heading.

- An up arrow (▲) indicates that the list is sorted in ascending order (A-Z).
- A down arrow (▼) indicates that the list is sorted in descending order (Z-A).

## Change the Order of Rows in a Scorecard Table

To change the order of rows within a table, complete the following steps in an open table:

- 1. Click  for a specific row and click **Order Rows**. The Order Rows page appears.



- 2. Select an element.
- 3. To sort in ascending or descending alphabetic order, click **Sort Ascending** or **Sort Descending**.
- 4. To move scorecards, select one or more scorecards and use the following icons:

| Icon                                                                                | Action                                                     |
|-------------------------------------------------------------------------------------|------------------------------------------------------------|
|  | Moves the selected scorecard to the beginning of the list. |
|  | Moves the selected scorecard up.                           |
|  | Moves the selected scorecard down.                         |

| Icon                                                                              | Action                                               |
|-----------------------------------------------------------------------------------|------------------------------------------------------|
|  | Moves the selected scorecard to the end of the list. |

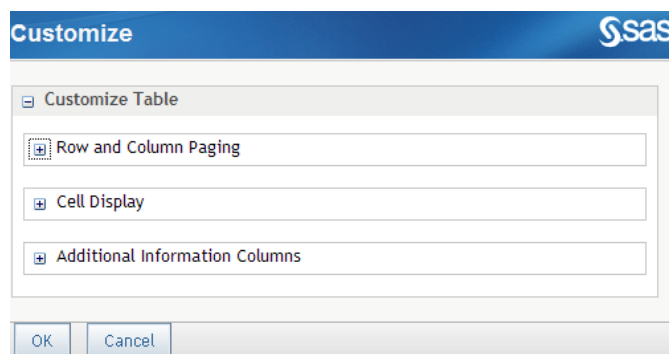
## Customize a Scorecard Table

You can change the way in which the information in a scorecard table view is displayed.

*Note:* Customized settings, except for row and column size, continue to apply to the project after it is closed and reopened.

To customize a scorecard table, complete the following steps in an open table:

1. Click **Customize** in the toolbar. The Customize page appears.



*Note:* The available options can vary depending on what you are customizing.

2. Expand the **Row and Column Paging** section and make the applicable selections:

- To display all the rows and columns in a scorecard table, click **All rows and columns**.
- To specify the number of rows and columns that are displayed, click **Specify number of rows and columns**. Then select the applicable number from the **Rows** and **Columns** lists.

3. Expand the **Cell Display** section and make the applicable selections:

- To display a formula icon when a formula is applied to the cell, click **Show formula icon**.
- To display thresholds, click **Show threshold icon** and click either **Personal** or **Global**.

*Note:* Cell display information applies only to cells that contain values. For example, cells that display range icons do not display threshold or formula icons.

- To display a rule icon when a rule is applied to the cell, click **Show rule icon**.

4. Expand the **Additional Information Columns** section and make the applicable selections:

- To display a column with links to comments, click **Comments**.
- To display a column with links to comment alerts, click **Comment Alert**.

- To display a column with links to a trend analysis chart, click **Trend Analysis Chart**.
  - To display a column with period information, click **Period**.
5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

## Chapter 18

# Creating and Editing Aggregate Views

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---

## Open an Aggregate Table

*Note:* Aggregate table can be displayed only with numerical data, that is, metric attributes.

To open an aggregate table, complete the following steps:

1. Open the project that contains the table. For more information, see [“Open a Project” on page 60](#).
2. Select a parent scorecard.
3. In the toolbar, click  to display the aggregate table.
4. Move the mouse pointer over each value, range icon, range color, or range label to display the names of the associated element.
5. To drill-down into a child scorecard, click the name of a child scorecard.

*Note:* To expand and collapse the hierarchy of an aggregate table, click the tree icon in the column heading.

6. To display the most current updates to the data in the table, especially after you perform a calculation, click  in the toolbar.

---

## Specify How to View Aggregate Table Data

To specify how to view aggregate table data, complete the following steps in an open aggregate table:

1. To display the metric attributes by the type of element, select an element type from the **Element type** list.
2. To display the metric attributes that belong to a specified column selection in a scorecard table, select a column selection from the **Column selection** list.

Column selections are defined in the project options. For more information, see [“Create a Column Selection” on page 130](#).

3. To display data for a particular date, type a date in the **Date** field or click  to choose a date from the calendar.

*Note:* SAS Strategy Management matches the date that you specify to the appropriate time period for each element. For example, if one element is based on a yearly period, and another element is based on a monthly period, the table displays data that is valid for the year and the month that contain the date that you specified.

4. Click **Go**. The table displays the data as you have specified.
5. To organize data in an aggregate table by scorecard or metric attribute, click **Scorecard** or **Metric Attribute**.

*Note:* Metric attributes are defined in the template with which the project is associated.

---

## Sort Rows

To sort the rows of data in a table according to the value of the column, click a column heading in the table to sort the rows by that column. The column used to sort the list contains either an up or down arrow in the column heading.

- An up arrow (▲) indicates that the list is sorted in ascending order (A-Z).
- A down arrow (▼) indicates that the list is sorted in descending order (Z-A).



## Chapter 19

# Creating and Editing Association Views

---

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---

## List Associations

*Note:* To perform this task, you must have the appropriate access permissions.

To list associations, complete the following steps:

1. Open a project. For more information, see [“Open a Project” on page 60](#).
2. Click  in the toolbar.
3. Click **Manage Associations** in the toolbar. The Manage Associations page appears and displays a list of associations.

---

## Create an Association

*Note:* To perform this task, you must have the appropriate access permissions.

To create an association, complete the following steps in a list of associations:

1. On the Manage Association page, click **New**. The New Association Wizard appears.
2. On the Properties page, type the name of the association and, optionally, a description.
3. Click **Next**.

4. On the Select Element Type page, specify an element type to display at the highest level in the association by selecting an element type from the **Element type** list. After you select a type, an **Association preview** appears.
5. Click **Next**.
6. On the Associate Attribute page, you can use an association to display attributes that are associated with an element type. Attributes are associated with element types in the template on which the project is based.
  - a. Select an attribute from the **Attribute** list.
  - b. Click **Add**. The attribute appears in the **Association preview** list.

### Associate Attribute

Select an attribute to add it as a new row in the association.

What is the linked attribute that is next in the association?

\*Attribute:

Association preview:

| Level | Element type:                                                                               |
|-------|---------------------------------------------------------------------------------------------|
| 1     |  Objective |

- c. Add as many attributes as needed.
7. Click **Next**.
8. On the Subtotaling and Totaling Rows page, you can display the totals and subtotals of rows in the association. You can also apply functions to the totals and subtotals.
  - a. To display row totals, click **Include totals**.
  - b. To include subtotals from the selected element type, select the check boxes that are below **Include subtotals for**.
  - c. To apply a function to the total for each metric type attribute, in the **Select metric type attribute functions for** group, select functions from the metric attribute lists. The default value for each of these lists is **None**.
9. Click **Next**.
10. On the Summary page, review the association information. If you want to make changes, click **Previous** to return to a previous page to change a property.
11. When you are satisfied with your settings, click **Finish**. To exit the wizard without saving changes, click **Cancel**.

---

## View an Association

To view an association, complete the following steps in an open scorecard table:

1. Click  on the toolbar.
2. Select an association from the **Association** list.
3. Select a column selection from the **Column selection** list. For more information, see [“Create a Column Selection” on page 130](#).

*Note:* Element type column selections are not included in the list. Only association column selections and general column selections are included.

4. To display data for a particular date, type a date in the **Date** field or click  to choose a date from the calendar.

*Note:* SAS Strategy Management matches the date that you specify to the appropriate time period for each element. For example, if one element is based on a yearly period, and another element is based on a monthly period, the table displays data that is valid for the year and the month that contain the date that you specified.

5. Click **Go**. The table displays the data as you have specified.
6. To display all the levels of associated attributes and subtotals, click **Expand All**.
7. To collapse all levels, click **Collapse All**.

---

## Customize an Association

You can change the way in which the information in an association is displayed.

*Note:* Customized settings, except for row and column size, continue to apply to the project after it is closed and reopened.

To customize an association, complete the following steps in an open association:

1. Click **Customize** in the toolbar. The Customize page appears.
2. Expand the **Cell Display** section. To display thresholds, click **Show threshold icon** and click either **Personal** or **Global**.

*Note:* Cell display information applies only to cells that contain values. For example, cells that display range icons do not display threshold icons.

3. Expand the **Additional Information Columns** section and make the applicable selections:
  - To display a column with links to comments, click **Comments**.
  - To display a column with links to comment alerts, click **Comment Alert**.
  - To display a column with links to a trend analysis chart, click **Trend Analysis Chart**.
4. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

---

## Edit Association Properties

*Note:* To perform this task, you must have the appropriate access permissions.

To edit the properties of an association, complete the following steps in a list of associations:

1. On the Manage Association page, click the association name. The Association Properties page appears.

2. In the **General** section, complete the following steps:
  - a. Type a new name in the **Association name** field.
  - b. (Optional) Type a new description in the **Description** field.
3. To change association levels, expand the **Association Definition** section.
  - a. To delete a level, click **XDelete** that is next to the attribute name.
  - b. To add a level, click **Add Level**. The Add Attribute to Association page appears.
  - c. Select an attribute from the **Attribute** list.
  - d. Click **OK** to save your changes and return the Association Properties page.
4. To change the display of totals and subtotals, and change the functions that are applied, expand the **Subtotaling and Totaling** section and complete the following steps:
  - a. To display row totals, click **Include totals**.
  - b. To include subtotals from the selected element types, select the check boxes below **Include subtotals for**.
  - c. To apply the function to the total for each metric type attribute, select functions from the lists under **Select metric type attribute functions for**.
5. Click **OK** to save your changes and exit the page. Click **Apply** to apply your changes and remain on the page. Click **Cancel** to exit the page without saving changes.

---

## Copy an Association

*Note:* To perform this task, you must have the appropriate access permissions.

To copy an association, complete the following steps in a list of associations:

1. On the Manage Association page, click  to the left of the association and click **Copy**. The Copy page appears.
2. Type the name of the copy. By default, the copy is saved with the name *Copy of association-name*. You can also type a description of the association.

---

## Delete an Association

*Note:* To perform this task, you must have the appropriate access permissions.

To delete an association, in a list of associations on the Manage Association page, click  to the left of the association and click **Delete**.

## Chapter 20

# Creating and Editing Diagram Views

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## Overview

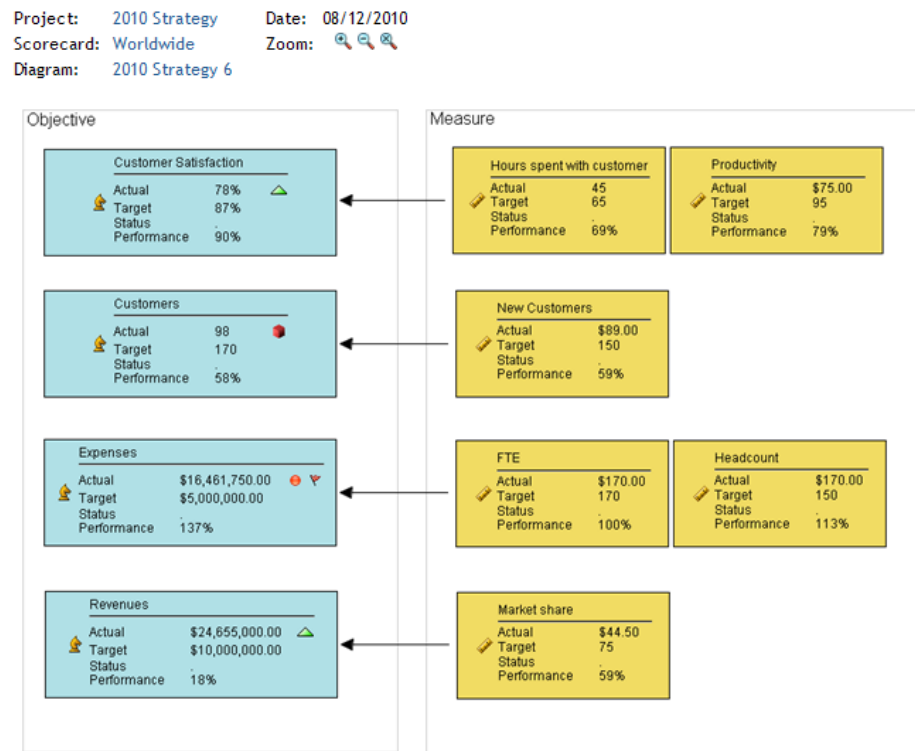
### What Is a Diagram?

A diagram is a graphical way of representing elements, their relationships to one another, and their respective scores. A diagram is a way to present information found in tables, but in a more intuitive way. When you use a diagram, you can display results in the context of the strategy and provide answers about how well the organization is performing and why certain data or relationship is important.

A diagram enables users to see the relationship between strategy elements—relationships that are sometimes difficult to convey in a table. You can create diagrams that illustrate the relationships between scorecard elements or project element types.

*Note:* A diagram is often used to present the strategy map, a layered representation that conveys the drivers and relationships.

**Figure 20.1** Example of a Diagram View Displayed in a Classic-Style Portlet



### Diagram Components

#### Overview

You can create diagrams that illustrate the relationships between scorecard elements. Diagrams can be based on project element types or scorecard element types.

Diagrams have two layers:

- a data node layer
- a shape layer

### **The Data Node Layer**

The data node layer consists primarily of data nodes that represent the elements in a scorecard or a project. A *data node* contains all of the data and metadata that are associated with an element, such as its labels, attributes, associations, and values. You can display any or all of the metric attributes of an element type in a data node.

Data nodes can show range icons and colors for each attribute value. You can also include icons that enable drill-down to the following features:

- trend charts
- comment manager
- metric attribute directives.

This layer can also include links that connect the data nodes. Data nodes are automatically built with drill-down capability, that is, clicking on an element displays another part of the application for more information.

For more information, see the following sections:

- [“Working with Elements” on page 167](#)
- [“Working with Data Nodes” on page 169](#)
- [“Working with Links” on page 175](#)

### **The Shape Layer**

The shape layer consists of shapes, text, images, and sections. Both shapes and sections can be used to contain the data nodes to better represent the data. A *section* is a resizable rectangle that can represent an element or a scorecard. You can organize nodes in a rectangle because they have a defined association with the rectangle element. Also, you can define arbitrary shapes to link to a web address.

For more information, see the following sections:

- [“Working with Shapes, Text, and Images” on page 177](#)
- [“Working with Lines” on page 183](#)
- [“Working with Sections” on page 186](#)

## **Editing Scorecard Data Using Diagrams**

You can edit the underlying scorecard data by adding, changing, and *deleting* elements in a diagram. You can also establish associations between elements within a diagram by drawing links between data nodes.

For more information about working with diagrams, editing diagram settings, and using diagrams to analyze data and correlations, see the following sections:

- [“Working with a Diagram” on page 192](#)
- [“Editing Diagram Settings” on page 193](#)
- [“Analyzing a Diagram to Validate a Strategy” on page 195](#)
- [“Managing a Diagram” on page 205](#)
- [“Viewing a Diagram” on page 206](#)

---

## Create a Diagram

To create a new diagram, complete the following steps:

1. Open a project.
2. Select a project or scorecard name in the hierarchy and click  on the toolbar.
3. Click **New Diagram**. The New Diagram Wizard appears.
4. The Name page displays the project and scorecard that contain your diagram, and the name of the diagram. In the **Diagram name** field, type the name of the new diagram.

*Note:* Project diagram names must be unique within a particular project. Scorecard diagram names must be unique within a particular scorecard.

5. Click **Next**.
6. On the Element Types page, click the names of the element types that you want the diagram to display. The **Element types** list provides the element types in your project and scorecard.

*Note:*

1. The diagram displays all of the elements of the element types that you select.
  2. To select more than one item, hold down the CTRL key and click to select multiple items in the list.
7. Click **Next**.
  8. On the Associations page, click an association name to select an association to display in the diagram. The **Associations** list provides the associations that have been established between your project or scorecard element types.

*Note:* To select more than one item, hold down the CTRL key and click to select multiple items in the list.

9. Click **Next**.
10. On the Layout page, click a method for laying out the element types in the diagram.
11. Click **Next**.
12. On the Finish New Diagram page, review your selections. To change a selection, click **Previous**.
13. Click **Finish** to save your selections and exit. Click **Cancel** to exit without saving your selections.

After the diagram is created, you must use the Diagram Editor to complete your diagram. For more information, see [“Working with Diagrams” on page 165](#).



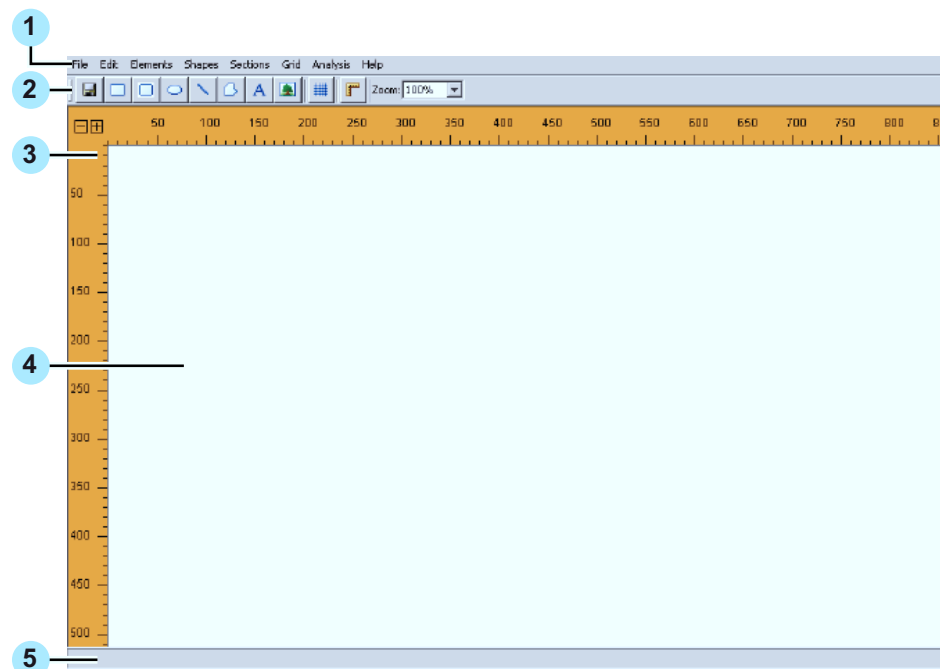
## Working with Diagrams

### The Diagram Editor Interface

#### Your First Look at the Diagram Editor

The Diagram Editor interface includes a menu bar with all its functions and a toolbar for its commonly used functions. The following image shows the Diagram Editor interface and its major parts:

**Figure 20.2** Diagram Editor Interface

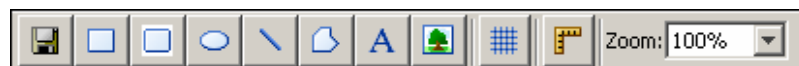


- 1 Menu bar
- 2 Toolbar. For a description of the toolbar buttons, see [“The Toolbar” on page 165](#).
- 3 Ruler
- 4 Drawing area
- 5 Progress indicator

Indicates the status or progress when opening or saving the diagram image file.

#### The Toolbar

The toolbar provides buttons that you use to create your diagram.



| Button                                                                              | Description                                         |
|-------------------------------------------------------------------------------------|-----------------------------------------------------|
|    | Saves the diagram.                                  |
|    | Creates a rectangle.                                |
|    | Creates a rectangle with rounded corners.           |
|    | Creates an ellipse.                                 |
|    | Creates a line.                                     |
|    | Creates a polygon.                                  |
|    | Open a list for adding text.                        |
|   | Enables you to add an image to the diagram.         |
|  | Toggles the display of the grid.                    |
|  | Toggles the display of the ruler.                   |
| Zoom                                                                                | Enables you to change the size of the diagram view. |

## Start the Diagram Editor

You can edit existing diagram or a diagram that you have created by using the Diagram wizard.

*Note:*

- You cannot import diagrams into SAS Strategy Management.
- If you are starting the Diagram Editor for the first time, you must configure your system for Java. The Diagram Editor requires the Java 2 Runtime Environment (J2RE). For information about installing the J2RE, see [Appendix 2, “Configuring Java,” on page 355](#).
- If you are starting the Diagram Editor for the first time in the Firefox web browser, you must also install the Adobe SVG plug-in. For more information, see [Appendix 3, “Install the Adobe SVG Viewer Plug-in,” on page 359](#).

To start the Diagram Editor, complete the following steps:

1. Open a project. For more information, see [“Open a Project” on page 60](#).
2. Select a project or scorecard name in the hierarchy, and click  in the toolbar.
3. Select a diagram.
4. Click .

## Close the Diagram Editor

To close the Diagram Editor, click **File** ⇒ **Exit**.

## Undo and Redo Common Actions

The Diagram Editor supports undo and redo for the following actions.

**TIP** You can undo or redo up to ten of these actions.

| Action                                         | Detailed Information                                                         |
|------------------------------------------------|------------------------------------------------------------------------------|
| Add or remove data nodes                       | <a href="#">“Add and Remove Data Nodes” on page 173</a>                      |
| Edit element properties                        | <a href="#">“Edit Element Properties” on page 168</a>                        |
| Hide an element                                | <a href="#">“Change How an Element Is Displayed” on page 168</a>             |
| Move an element                                | <a href="#">“Change How an Element Is Displayed” on page 168</a>             |
| Resize an element                              | <a href="#">“Change How an Element Is Displayed” on page 168</a>             |
| Edit data node properties                      | <a href="#">“Edit Data Node Properties” on page 169</a>                      |
| Move a shape, text, or image                   | <a href="#">“Move a Shape, Text, or Image” on page 179</a>                   |
| Edit the properties of a shape, text, or image | <a href="#">“Edit the Properties of a Shape, Text, or Image” on page 180</a> |
| Resize a shape or image                        | <a href="#">“Resize a Shape or Image” on page 179</a>                        |

## Working with Elements

### Overview

You can make changes to the scorecard data that underlies a diagram by adding, changing, and deleting elements in the diagram. In a single diagram, you can display any metric attribute from any scorecard, and you can display multiple instances of the same element but with element values for different dates.

### Add an Element

To add an element, complete the following steps:

1. Click **Elements** ⇒ **New**. The New Element list appears.
2. From the **Element types** list, select a type.

3. From the **Period types** list, select a type.
4. Click **OK**. An element of the selected type is added to the scorecard, and a corresponding node appears in the diagram. It is inserted at x, y coordinates 200, 200. You can insert a new node under other nodes; rearrange the other nodes to display the new node.

### Select the Date for an Element

A diagram can contain the same element multiple times, but each element might have a value for a different date.

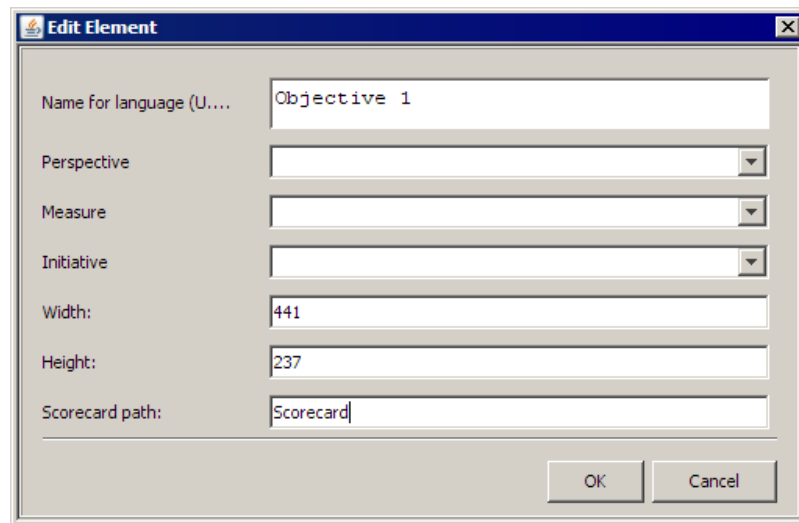
To select the date for an element, complete the following steps:

1. Right-click an element and click **Set Date**. The Set Date list appears.
2. Complete the applicable date selection:
  - To specify the current date, click **Current date**.
  - To specify a specific date, click **Specific date** and type a date in the field or click  to choose a date from the calendar.
  - To specify a relative period, click **Relative period**. Then type or select a positive or negative value.

### Edit Element Properties

To edit an element, complete the following steps:

1. Double-click the node that represents the element that you want to edit. The Edit Element list appears, showing all the attributes of the element and their current properties. The attributes vary according to the element. The attributes of an objective are shown below.



*Note:* Element type attributes are defined in the template for the project.

2. Change the value of any attribute by typing a value or selecting a value from a list.

### Change How an Element Is Displayed

You can change how an element is displayed by moving, resizing, and hiding elements.

- To move an element, drag the element to a new location.

- To change the dimensions of an element, select the element, and drag a handle to a new location.
- To hide an element, right-click the element and click **Hide**.

*Note:* Hiding an element in a diagram does not affect the underlying data.

- To display an element again, click **Elements** ⇒ **Add/Remove**. In the Add/Remove Elements list, select the element and click **OK**.

### **Delete an Element**

To delete a table element, complete the following steps:

1. Click the node that represents the element that you want to delete.
2. Click **Edit** ⇒ **Delete**. The node disappears from the diagram and the corresponding element is deleted from the underlying table.

You can also delete data from a table by deleting a link in the diagram. For more information, see [“Delete a Link” on page 177](#).

## **Working with Data Nodes**

### **Overview**

A data node contains all of the data and metadata that are associated with an element, such as its labels, attributes, associations, and values. You can display any or all of the metric attributes of an element type in a data node. The initial shape and background color of a data node are set in the template for the project. For more information, see [“Create a Template” on page 42](#).

### **Move Data Nodes**

When you first open a diagram that you have created, the data nodes are organized by the layout style that you selected when you created the diagram. To make the diagram more readable, drag the nodes so that they do not cover other nodes or links.

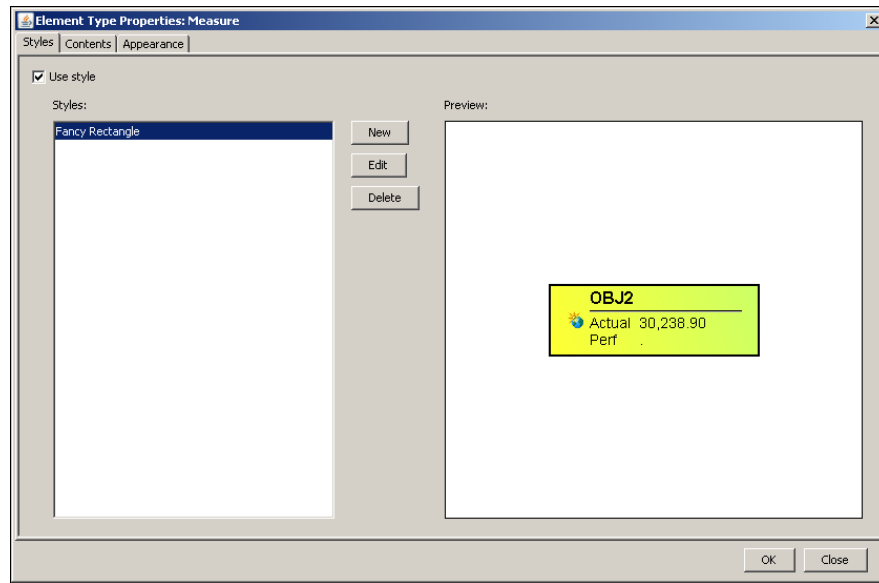
- To move a single node, drag the node to a new location. Any links that connect to the moved node move, stretch, or shrink accordingly.
- To move as a fixed formation node and all nodes that link to it or from it, hold down the SHIFT key and drag the assembly of nodes to a new location. Any links to or from a moved node that are not part of the assembly of nodes move, stretch, or shrink accordingly.

### **Edit Data Node Properties**

The node properties that are specified in the project template apply across all diagrams in all scorecards within the project. You can override these properties and specify additional properties for a particular diagram. For example, the scorecard master table might specify that nodes that represent strategic objectives are ellipses, yet within a particular diagram you can specify that nodes that represent strategic objectives are triangles. Then nodes that represent strategic objectives are generally ellipses, but in that particular diagram, nodes that represent strategic objectives are triangles.

To edit data node properties, complete the following steps:

1. Click **Elements** ⇒ **Element Type Properties** ⇒ **<element-type>**. The Element Type Properties window appears.



2. On the **Styles** tab, complete the following steps to specify a style.

*Note:*

- A style is a collection of settings such as font and background color. You can assign a style to specific element types in a diagram. Styles are stored at the template level so that they are available to all diagrams in all projects that use the template.
- The **Contents** and **Appearance** tabs are unavailable because the settings in the style override the settings on these tabs.

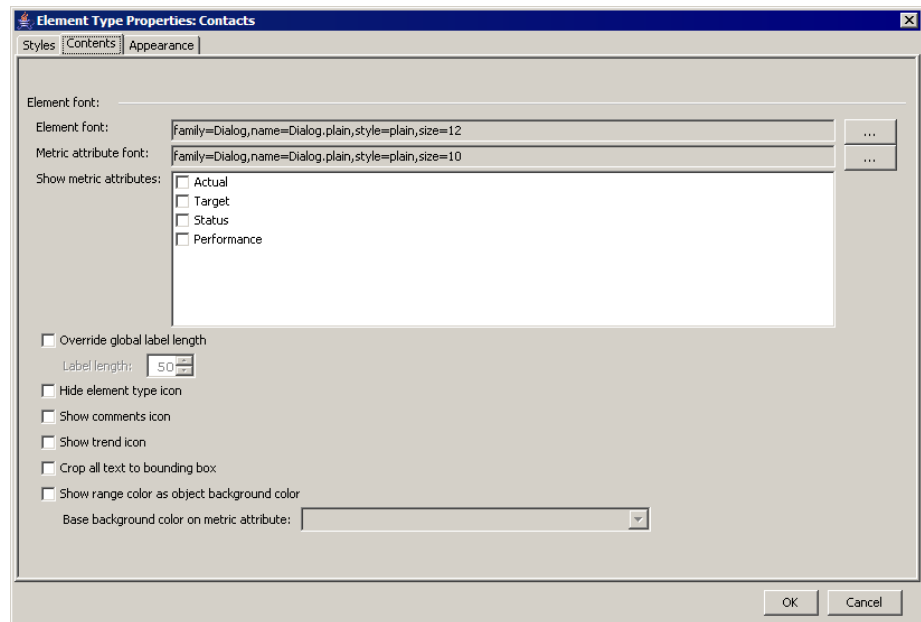
- a. Click **Use style**.
- b. Select a style.

*Note:* The style is immediately applied to the element. However, no permanent association is made between the style and the element. If you later change the style, that change is not reflected by this element. You must reset the style setting in order for the changed style to affect this element.

- c. To create or edit a style, complete the applicable step:
  - To create a style, click **New**. The Element Type Properties: New Style list appears.
  - To edit a style, select a style and click **Edit**. The Element Type Properties: Edit Style list appears.

*Note:* The Element Type Properties: Edit Style list is identical to the Element Type Properties: New Style list.

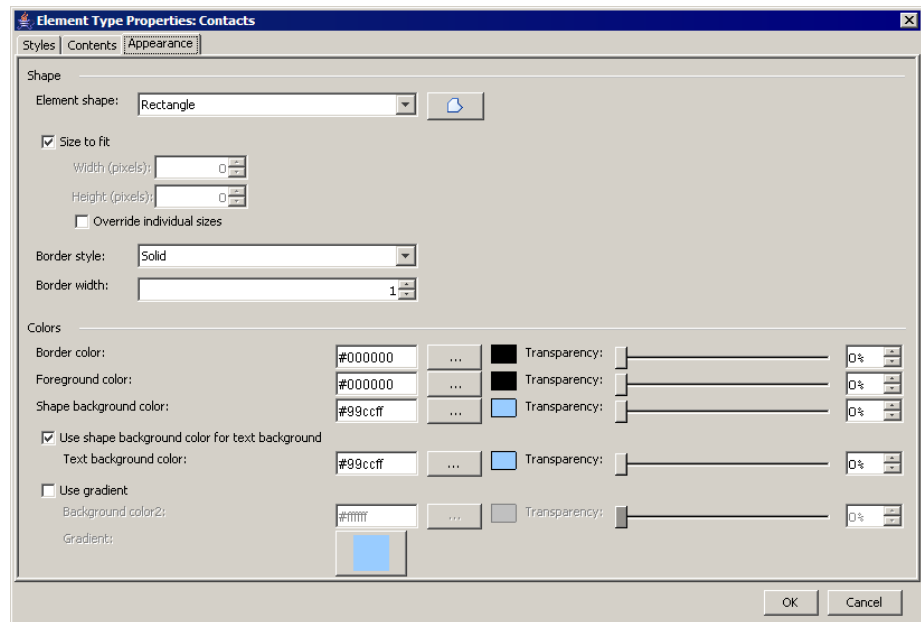
- d. Click the **Name** tab and name the style.
3. To view the contents properties, click the **Contents** tab. On this tab you can specify text appearance, metric attributes, and the display of range colors and icons for the data node.



4. To specify the font for the contents, complete the following steps:
  - a. Click the ellipsis (...) that is next to the **Font** field. The Select Font list appears.
  - b. Select a font, font style, and font size.
 

*Note:* By default, the list of fonts includes only basic fonts.
  - c. To include all the fonts that are installed on the computer, select **Include system fonts**.
 

*Note:* Be aware that if the specified font does not exist on the SAS Strategy Management server, the rendering of the font can differ when the diagram is viewed in SAS Strategy Management.
5. In the **Show metric attributes** list, click the metric attributes to display.
6. To limit the length of labels in a diagram, click **Override global label length**.
7. To prevent the display of the element type icon, click **Hide element type icon**.
8. To display the comment icon if comments exist, click **Show comments icon**.
9. To display the trend icon if there is trend history, click **Show trend icon**.
10. To keep text within the boundary lines of the data node, click **Crop all text to bounding box**.
11. To display the range color in the background of the data node using the color of the metric attribute that you selected in the **Base background color on metric attribute** list, click **Show range color as object background color**.
12. To view the appearance properties, click the **Appearance** tab.



To specify the shape, size, and color of the data node, complete the following steps:

- a. From the **Element shape** list, select a shape.
  - b. To select a scalable vector graphic (SVG) drawing to display with the element type, click . The Select Drawing list appears. Complete the applicable steps:
    - To select a drawing, click a drawing from the **Drawings** list.
    - To add a drawing to the list, click **Upload Drawing** and navigate to the drawing file.
    - To refresh the list of drawings, click **Refresh**.
  - c. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.
  - d. To specify that the nodes be sized to fit in the diagram display, click **Size to fit**.
 

*Note:* If you select **Size to fit**, you can also select **Override individual sizes** to specify that nodes of that element type be sized to fit the diagram display.
  - e. To specify a different size for nodes of this element type, clear **Size to fit** and type the number of pixels in the **Width (pixels)** and **Height (pixels)** fields.
13. To specify the border, complete the following steps:
- a. From the **Border style** list, select a style.
  - b. Type the number of pixels in the **Border width** field.
  - c. Click the ellipsis (...) that is next to the **Border color** field and select a color from the palette, or type a hexadecimal value for the color.
  - d. Click **OK** to save the color setting.
  - e. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field.
14. To specify the foreground and background colors, complete the following steps:

*Note:*



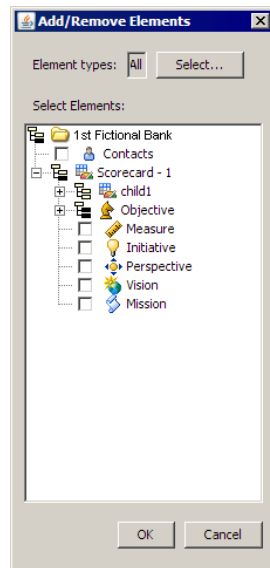
- You cannot specify the background color of an image.
  - The **Background color** field is not available if **Show range color as object background** is selected on the **Contents** tab.
- a. Click the ellipsis (...) that is next to the **Foreground color** or the **Background color** field and select a color from the palette, or type a hexadecimal value for the color.
  - b. Click **OK** to save the color setting.
  - c. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
15. To specify the text background color, complete one of the following steps:
- To use the same background color for the text and the shape, click **Use shape background color for text background**.
  - To specify a color, click the ellipsis (...) that is next to the **Text background color** field and select a color from the palette, or type a hexadecimal value for the color. Click **OK** to save the color setting.
16. To specify a gradient in the background color, complete the following steps:
- Note:* You cannot specify a gradient for an image.
- a. Click **Use gradient**.
  - b. Click the ellipsis (...) that is next to the **Background color2** field and select a color from the palette, or type a hexadecimal value for the color in the field.
  - c. Click **OK** to save the color setting.
  - d. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
  - e. Click the button that is next to **Gradient**. The Pick a Gradient list appears.
  - f. Click the image of a gradient pattern to use and then click **OK**.
17. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Add and Remove Data Nodes**

You can determine which data nodes are displayed in the diagram and which data nodes are not displayed.

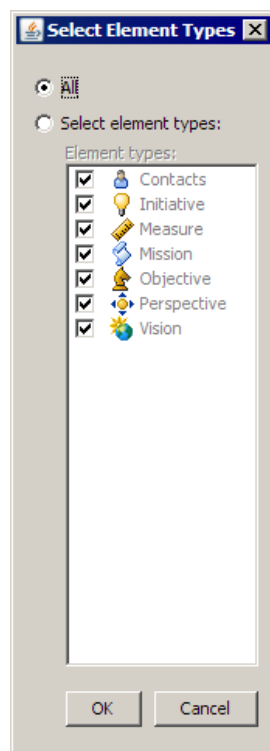
To select the elements for display as data nodes, complete the following steps:

1. Select **Elements** ⇒ **Add/Remove**. The Add/Remove Elements list appears.



*Note:* The hierarchy icons that contain selected elements are highlighted.

2. To limit which element types are displayed in the list, click **Select**. The Select Element Types list appears.



3. Select the element types to display and click **OK**.
4. In the Add/Remove Elements list, expand a hierarchy, and select or clear an element.

*Note:* Adding or removing elements in a diagram does not affect the underlying data.

5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

In a new diagram, the data nodes are organized by the layout style that you selected when you created the diagram. After you change the layout, you might want to remove certain nodes. You can redisplay the removed nodes in their last position. When you save the diagram, any removed nodes are removed from the display.

### **Delete a Data Node**

#### **CAUTION:**

**When you delete a data node from a diagram, you delete the underlying element and all values for the element in the database for the scorecard. You also delete any shapes in the diagram that are associated with the element.**

To delete a data node, complete the following steps:

1. Select a data node.
2. Click **Edit** ⇒ **Delete**.

## **Working with Links**

### **Overview**

Links depict associations between data nodes. These associations are set in the following places:

- The attribute definitions are set in the project, and the scorecard element properties are set in the template.
- The properties for each element are set in a project or scorecard.

### **Create a Link**

In addition to the associations that are displayed as links when you open a diagram, you can also create a link between data nodes.

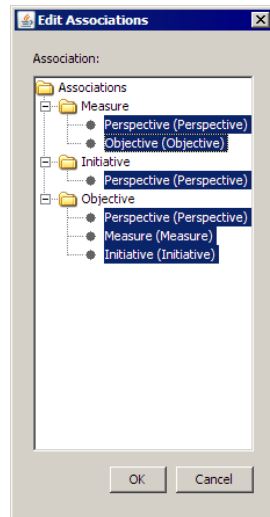
To create a link, hold down the CTRL key and drag the mouse pointer from one node to another. If the source node has an attribute of the type of the target node, the target node allows an association and the mouse pointer changes to a green check mark. Release the mouse button to add a link between the two nodes.

If an association is not allowed, the mouse pointer changes to a red X, and a link is not created.

### **Change Associations**

To view and change the associations that are displayed as links in a diagram, complete the following steps:

1. Click **Elements** ⇒ **Associations**. The Edit Associations list appears and displays a list of all of the selectable associations. The currently selected associations are highlighted.

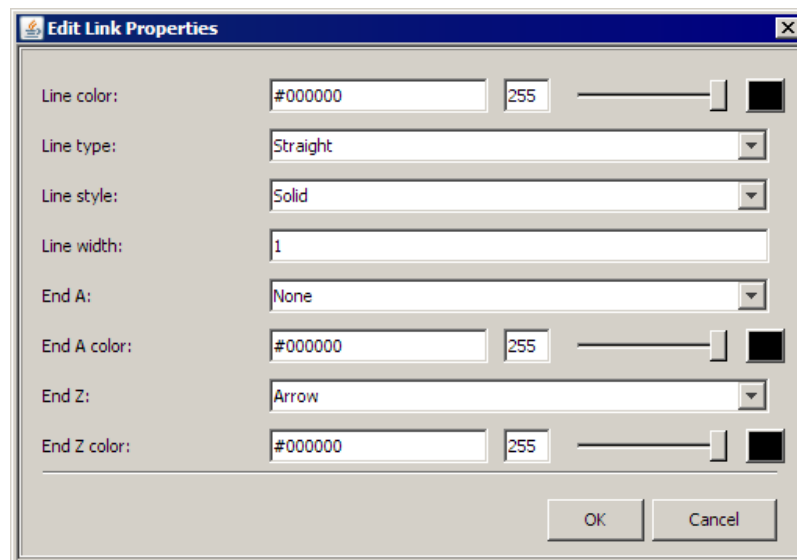


2. Click any item in the **Association** list to select it or to deselect it.
3. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Edit All Link Properties**

To change the appearance of all the links in the diagram, complete the following steps:

1. Click **File** ⇒ **Link Settings**. The Edit Link Properties list appears with the current settings.



2. To change the color of a link or a connection point, click the button that is associated with the **Line color**, **End A color**, or **End Z color** field and select a color from the palette, or type a hexadecimal value for the color. Click **OK** to save the color setting.

*Note:* End A is the element whose attribute is End Z. For example, if a Strategic Objectives element contains an attribute that links that Strategic Objectives element to a specific Perspectives element, then End A is the Strategic Objectives element, and End Z is the Perspectives element that is its attribute.

3. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .

4. From the **Line type** list, select the type of line to use.
5. From the **Line style** list, select the style of line to use.
6. In the **Line width** field, type the width of the line in pixels.
7. From the **End A** and **End Z** lists, specify how to represent the origination point and endpoint of the link.
8. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### ***Edit Individual Link Properties***

You can override diagram link settings and change the properties of an individual link.

To change the properties for a single link, right-click the origination point or endpoint of the link, and click **Link** ⇒ **Properties**.

### ***Manipulate a Link***

To activate the handles of a curved link, click the origination point or the endpoint of the link. To manipulate the curvature of a curved link, drag a handle.

### ***Route Links around Other Content***

You can route the links between element nodes around other content in the diagram so that the other content remains visible. The links between elements are orthogonal. That is, they consist of multiple straight line segments that can be arranged at different angles.

To route a link around other diagram content, complete the following steps:

1. Select a link and right-click one of the handles.
2. Click **Link** ⇒ **Insert point**. Insert as many points as you need.
3. Drag the link handles to arrange the line segments.

### ***Delete a Link***

Deleting a link deletes both the selected link and the data value that underlies the link.

To delete a link, click the origination point or endpoint of the link, and click **Link** ⇒ **Delete**.

#### **CAUTION:**

**When you delete a link, you delete data.**

## ***Working with Shapes, Text, and Images***

### ***Overview***

Within a diagram, you can include shapes (rectangles, ellipses, and polygons), text, and images.

- Rectangles and ellipses are defined by four points at the corners of a rectangle. The border of a rectangle is defined by the four points, but the border of an ellipse is defined by a rectangle that snugly contains the ellipse.
- Polygons can have any number of vertices and can be any polygonal shape, such as triangle, pentagon, or octagon.
- Text is contained in a rectangular box that snugly contains the text.

- An image is contained in a rectangular box. Images are stored in the Customer folder on the SAS Solutions Services server. For access to other images, contact your system administrator.

### Create a Shape

To create a shape, use the following buttons:

| Button                                                                            | Description                               |
|-----------------------------------------------------------------------------------|-------------------------------------------|
|  | Creates a rectangle.                      |
|  | Creates a rectangle with rounded corners. |
|  | Creates an ellipse.                       |
|  | Creates a line.                           |
|  | Creates a polygon.                        |

The new shape appears at the center of the diagram. Selection handles appear around the shape. A rectangle starts as a square; an ellipse starts as a circle; a polygon starts as a triangle.

### Create Text

To create text, complete the following steps:

1. Click . The Enter Text list appears.
2. Type a single line of text. Later, you can edit the properties of the text to create more lines of text. For more information, see [“Edit the Properties of a Shape, Text, or Image” on page 180](#).

### Create an Image

To create an image, complete the following steps:

1. Click . The Select Image list appears.
2. Select an image file.
3. To add an image file to the list, click **Upload Image**, navigate to the image file, select it, and click **OK**.
4. To refresh the list of images, click **Refresh**.

*Note:*

1. Images might be missing because a previously uploaded image has been removed.
2. Most uncompressed image formats are supported by the Diagram Editor. The Diagram Editor uses Java Virtual Machine (JVM). The JVM installed on your computer might support compressed formats. See the documentation for your JVM for information about the image formats that are supported.
5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Select or Deselect a Shape, Text, or Image**

To select or deselect a shape, text, or image, complete the applicable step:

- To select a shape, text, or image, click anywhere inside the item. Handles appear at the points that define the item.
- To deselect a shape, text, or image, click anywhere in the diagram background. The handles disappear.
- To select more than one item, hold down the CTRL key and click each item or drag the mouse pointer across the background to create a selection rectangle that completely contains the items.

### **Move a Shape, Text, or Image**

To select or deselect a shape, text, or image, complete the applicable step:

- To move a shape, text, or image without changing its dimensions, drag the item.
- To move several items together as a single unit, first select all of the items and then drag any one of them. The items retain their relative positions to each another. For more information, see [“Select All Shapes in a Diagram” on page 192](#).

### **Delete a Shape, Text, or Image**

To delete a shape, text, or image, select the item and click **Edit** ⇒ **Delete**.

### **Copy and Paste a Shape, Text, or Image**

To copy a shape, text, or image, select the item and click **Edit** ⇒ **Copy**.

To paste the item elsewhere in the diagram, click on the area where you want to paste the copy and click **Edit** ⇒ **Paste**.

### **Add or Remove a Vertex within a Polygon**

To add or remove a vertex, complete the following steps:

1. Select the polygon. Handles appear at all of the vertices.
2. To add a vertex, right-click a handle and click **Insert Point**. A new vertex appears, marked by a green handle.
3. To remove a vertex, right-click the vertex that you want to remove and click **Delete Point**.

### **Group or Ungroup Shapes, Text, and Images**

To group shapes, text, and images, select all of the items that you want to be members of the group, and click **Shapes** ⇒ **Group**.

To ungroup the items, select an item within the group and click **Shapes** ⇒ **Ungroup**.

### **Rotate a Polygon**

To turn a polygon upside down, select the polygon and click **Shapes** ⇒ **Rotate** ⇒ **Horizontal**.

To reverse the left and right sides of a polygon, select the polygon and click **Shapes** ⇒ **Rotate** ⇒ **Vertical**.

### **Resize a Shape or Image**

To change the dimensions of a shape or image, select the item, and drag a handle to a new location.

When you drag a handle of a rectangle, ellipse, or image, two handles on one side of the item always move together so that the item maintains its shape. When you drag a handle of a polygon, only the selected handle moves.

*Note:* You can also edit the properties of a rectangle or ellipse to change the width and height. You cannot edit the properties of a polygon to change its dimensions. For more information, see “[Edit the Properties of a Shape, Text, or Image](#)” on page 180.

### **Edit the Properties of a Shape, Text, or Image**

To edit the properties of a shape, text, or image, complete the following steps:

1. Right-click the item and click **Edit**. The Shape Properties window appears.

*Note:* Some properties might not apply to selected shape, text, or image.

2. In the **Name for language** field, type the name of the diagram.

*Note:* A field is available for each language that has been defined. If a label does not exist in the language that is currently set for a project, the label is displayed in the default language.

3. To view the appearance properties, click the **Appearance** tab.

4. To specify the font, complete the following steps:

- a. Click the ellipsis (...) that is next to the **Font** field. The Select Font list appears.
- b. Select a font, font style, and font size.

*Note:* By default, the list of fonts includes only basic fonts.

- c. To include all the fonts that are installed on the computer, select **Include system fonts**.

*Note:* Be aware that if the specified font does not exist on the SAS Strategy Management server, the rendering of the font can differ when the diagram is viewed in SAS Strategy Management.

5. To specify the foreground and background colors, complete the following steps:

*Note:*

- You cannot specify the background color of an image.
  - The **Background color** field is not available if **Show range color as object background** is selected on the **Contents** tab.
- a. Click the ellipsis (...) that is next to the **Foreground color** or the **Background color** field and select a color from the palette, or type a hexadecimal value for the color.
  - b. Click **OK** to save the color setting.
  - c. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field.

6. To specify the border, complete the following steps:

- a. From the **Border style** list, select a style.
- b. Type the number of pixels in the **Border width** field.
- c. Click the ellipsis (...) that is next to the **Border color** field and select a color from the palette, or type a hexadecimal value for the color.
- d. Click **OK** to save the color setting.



- e. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
7. To specify a gradient in the background color, complete the following steps:
 

*Note:* You cannot specify a gradient for an image.

  - a. Click **Use gradient**.
  - b. Click the ellipsis (...) that is next to the **Background color2** field and select a color from the palette, or type a hexadecimal value for the color in the field.
  - c. Click **OK** to save the color setting.
  - d. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
  - e. Click the button that is next to **Gradient**. The Pick a Gradient list appears.
  - f. Click the image of a gradient pattern to use and then click **OK**.
8. To view the position properties, click the **Position** tab. On this tab you can specify the position, alignment, and depth of the shape, text, or image.
9. To specify the position, complete the following steps:
  - a. In the **Left** field, type the distance in pixels between the left border of the item and the left border of the diagram.
  - b. In the **Top** field, type the distance in pixels between the top border of the item and the top border of the diagram.

*Note:* You cannot specify the width and height of text.

  - c. In the **Width** field, type the width of the item in pixels. You can also change the width by dragging the handles of the item.
  - d. In the **Height** field, type the height of the item in pixels. You can also change the height by dragging the handles of the item.
10. To specify the alignment, complete the following steps:
 

*Note:* You cannot specify the alignment of text.

  - a. From the **X alignment** list, select a value to control the horizontal position of any associated text.
  - b. From the **Y alignment** list, select a value to control the vertical position of any associated text.
  - c. From the **Text orientation** list, select a value to control the orientation of any associated text.
11. To specify the depth, type an integer value in the **Depth** field.
 

*Note:* If an item overlaps another item in a diagram, then the item with the greater depth value is covered by the item that has the smaller depth value.
12. To view the HTML properties, click the **HTML** tab. On this tab you can specify HTML code for the shape, text, or image.
13. To specify a web address, complete the following steps:
  - a. In the **Hyperlink** field, type a web address to launch when the item is clicked.
  - b. In the **Hyperlink target** field, type a value that specifies how the web address content is displayed. The following choices are available:

**\_self**

displays the web address content in the frame that contains the diagram, replacing the diagram with the web address content. If **Hyperlink target** is blank, this is the default value.

**\_new**

displays the web address content in a new browser window. If the new browser window is already open, that browser window is reused.

**\_blank**

displays the web address content in a new browser window. No existing browser window is reused.

**\_top** or **\_parent**

displays the web address content in the current browser window, replacing SAS Strategy Management with the web address content.

*the-name-of-a-frame*

displays the web address content in the designated frame.

- c. To specify HTML, such as JavaScript, in the **HTML** field, type the HTML code.

*Note:* If you specify JavaScript, the code is active in the displayed diagram. For example, you can specify the following code:

```
onmouseover="JavaScript:
alert('Revenue Growth')"
```

and whenever a user moves the mouse pointer over this shape, text, or image, the following message appears in a list:

```
Revenue
Growth
```

You must enclose the right side of the JavaScript expression in double quotation marks.

### ***Using a Shape, Text, or Image to Contain Other Items***

You can use a shape, text, or image to contain other items, such as shapes and data nodes, in a diagram. Such a container is useful for creating a visual grouping of items.

You can capture an item within another item in either of the following ways:

- Drag one item into another item (the container) so that the borders of the container item completely surround the contained item.
- Drag one item (the container) so that its borders completely surround another item.

When you drag a container to a new location, all of the captured items within the container move with the container in a fixed formation. To move the shape without moving the contents, hold down the SHIFT key while dragging the shape.

You can capture data nodes inside a container by sorting the nodes. To sort data nodes, complete the following steps:

1. Associate a node with a container by dragging the node into the container.
2. Select any data node.
3. Right-click the selected data node and click **Sort This Node by Attribute**. The Sort list appears, showing a list of all the available attributes.
4. Select the attribute by which to group the nodes.

Nodes are captured by containers according to the following rule. Node A is captured by container X if the node A element has the attribute that you select, and if container X represents the first value or the only value of that attribute for the element. For example, if you associate an employee with a container and sort nodes by the owner attribute, then all the nodes whose owner is a given employee are captured by the container that represents that employee. If you sort data nodes into containers and then change some of the data that affects the result of the sort operation, the diagram is not automatically refreshed. To align the diagram with the new data, you must repeat the sort operation.

5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.
6. To remove a data node from a container, hold down the SHIFT key and drag the node.

## Working with Lines

### Overview

You can use straight or curved lines to connect containers. A straight line can be a single straight line segment or a chain of two or more straight line segments that are connected in a zigzag arrangement. A curved line can be a single smooth curve or a chain of two or more smooth curves that are connected at cusp points. Single straight line segments and single smooth curves should meet most of your needs.

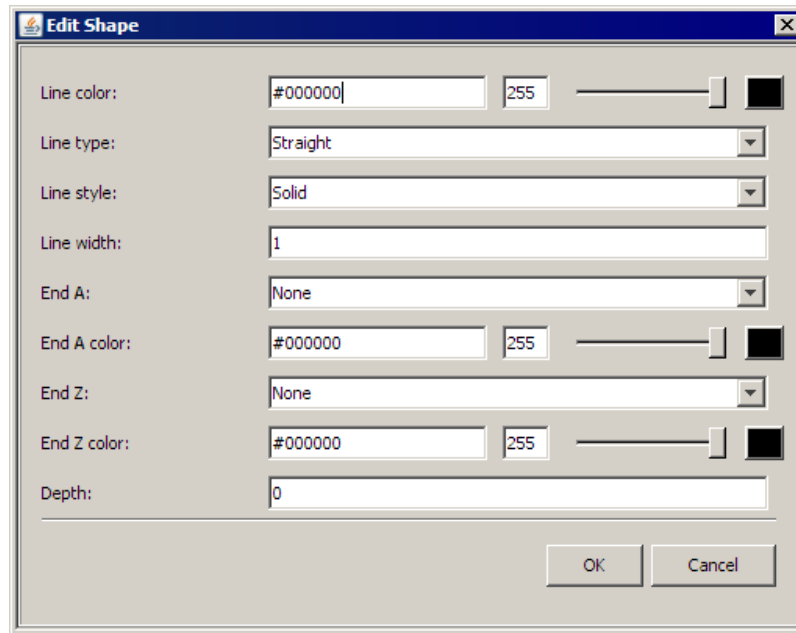
### Add a Line

To add a line to a diagram, click  on the toolbar. A new line appears at the center of the diagram. The line starts as a horizontal straight line with a handle at each end. To make the handles disappear, click anywhere in the diagram background. To make the handles appear, click either endpoint.

### Turn a Straight Line into a Curved Line

To turn a straight line into a curved line, complete the following steps:

1. Click either endpoint of the straight line to display the line's handles.
2. Right-click the line (not a handle) and click **Properties**. The Edit Shape list appears.



3. From the **Line Type** list, select **Curved**. The line now has four handles that define a curve.
4. To return to a single straight line segment, you must delete two segments that define the curve. Right-click an endpoint and click **Delete Point**. Repeat to delete a second endpoint. The remaining segment is the straight line.

### ***Add and Remove Line Segments***

To add a straight line segment to an existing straight line or to a chain of line segments, complete the following steps:

1. Click either endpoint of the line to display the line's handles.
2. Right-click a handle and select **Insert Point**. The line splits into two segments.

To remove a straight line segment from an existing chain of segments, complete the following steps:

1. Click an endpoint of an existing segment to display handles at all of the endpoints.
2. Right-click a handle that marks the endpoint that you want to remove and click **Delete Point**. The point is removed and the chain of segments is redrawn without it.

### ***Move a Line Segment***

To move one endpoint of a straight line segment, drag the handle that is located at that endpoint. To move all endpoints together, hold down the SHIFT key and drag a handle.

### ***Reshape a Curved Line***

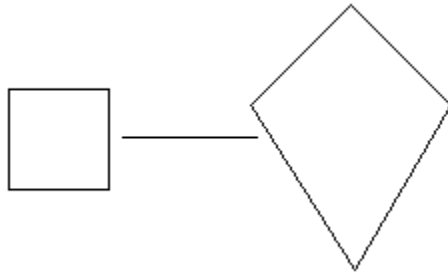
You can reshape a curved line in the following ways:

- To reshape a curved line, drag the handles.
- To move a curved line without changing its shape, hold down the SHIFT key and drag a handle. In this way, you can produce any smooth arc or S-shaped curve at any location in a diagram.
- To produce an arc, arrange the handles in a trapezoidal formation.
- To produce an S-shaped curve, arrange the handles in a Z formation.

### Use a Line to Connect Two Containers

When you use a line to connect two containers, you typically attach each endpoint of the line to one of the containers. When an endpoint of a line is attached to a container, the endpoint moves with the container whenever you move the container.

To attach one endpoint of a line to a container, hold down the CTRL key and drag the endpoint into the container. The endpoint takes a position near the border of the container and is attached to the container.



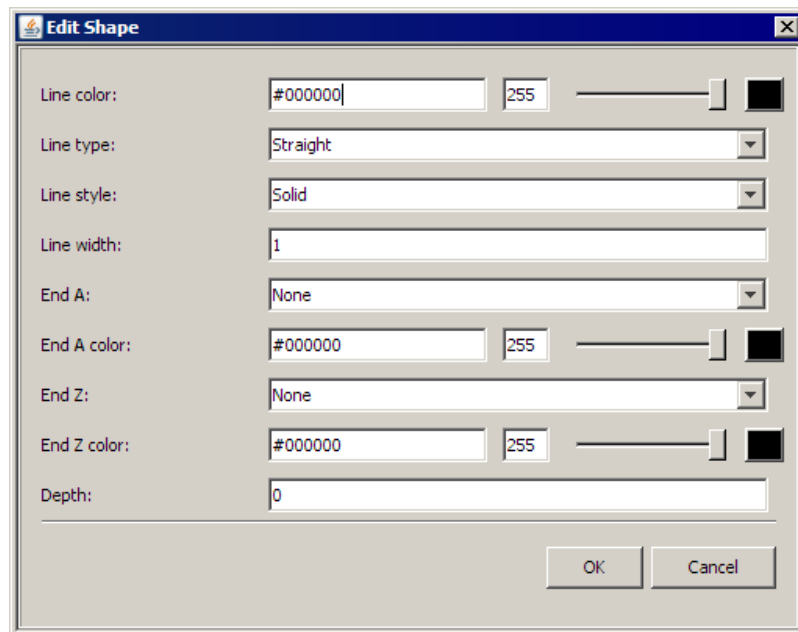
To break an attachment between an endpoint of a line and a container, complete the following steps:

1. Click an endpoint of the line. Observe whether the end that you want to detach is marked with a horizontal bar (end A) or a vertical bar (end Z).
2. To detach end A, right-click the line and click **Unattach A**.
3. To detach end Z, right-click the line and click **Unattach Z**.

### Edit the Properties of a Line

To edit the properties of a line, complete the following steps:

1. Click an endpoint to select it.
2. Right-click a handle and click **Edit**. The Edit Shape list appears.



3. To change the color of the line, complete the following steps:

- a. Click the button next to the **Line color** field and select a color from the palette, or type a hexadecimal value for the color. Click **OK** to save the color setting.
- Note:* To specify a black line, leave the field empty.
- b. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field.
4. From the **Line type** list, select the type of line.
5. From the **Line style** list, select the style of line.
6. In the **Line width** field, type the width of the line in pixels.
7. To specify how to represent end A (the end whose handle is marked with a horizontal bar) and end Z (the end whose handle is marked with a vertical bar), complete the following steps:
  - a. From the **End A** and **End Z** lists, select a shape.
  - b. Click the button that is next to the **End A color** and **End Z** fields and select a color from the palette, or type a hexadecimal value for the color. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

*Note:*

- To specify a black line, leave the field empty.
- The color is applied only when the end shape is an arrowhead or a solid circle.

8. To specify the depth, type an integer value in the **Depth** field.

*Note:* If an item overlaps another item in a diagram, then the item with the greater depth value is covered by the item that has the smaller depth value.

### **Copy and Paste a Line**

To copy a line, select the line, right-click, and click **Edit** ⇒ **Copy**.

To paste the copy elsewhere in the diagram, click **Edit** ⇒ **Paste**.

### **Delete a Line**

To delete a line, select the line and click **Edit** ⇒ **Delete**.

## **Working with Sections**

### **Overview**

Sections are movable and resizable rectangles. You can use sections to organize the data in a diagram by project, scorecard, and attribute.

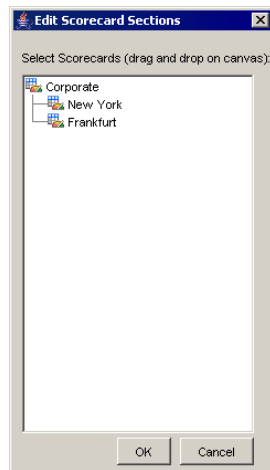
### **Add a Project Section to a Diagram**

To add a section for the current project to a diagram, click **Sections** ⇒ **Add Project Section**.

### **Add Scorecard Sections to a Diagram**

To add scorecard sections to a diagram, complete the following steps:

1. Click **Sections** ⇒ **Add Scorecard Sections**. The Add Scorecard Sections list appears.

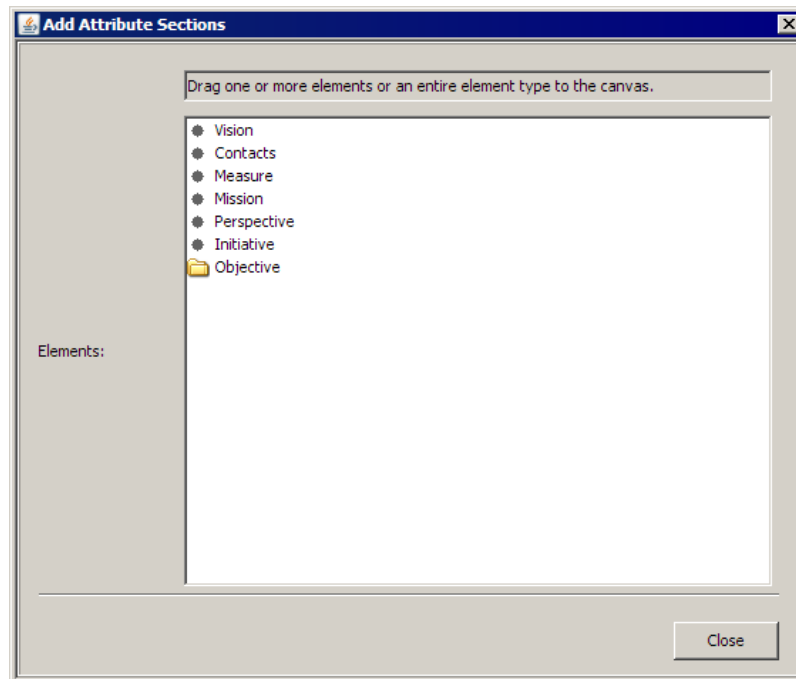


2. Drag a scorecard from the list onto the diagram. A section is created that has the name of the scorecard. You can also drag a parent scorecard onto a diagram to create a scorecard section for each child scorecard in the parent scorecard.

### **Add Attribute Sections to a Diagram**

To add attribute sections to a diagram, complete the following steps:

1. Click **Sections** ⇒ **Add Attribute Sections**. The Add Attribute Sections list appears. Attributes for the element types in the scorecard are available.



2. Drag an attribute from the list onto the diagram. A section is created that has the name of the attribute. You can also drag an attribute category onto a diagram to create a section for each attribute in the category.

### **Resize a Section**

To change the dimensions of a section, complete the following steps:

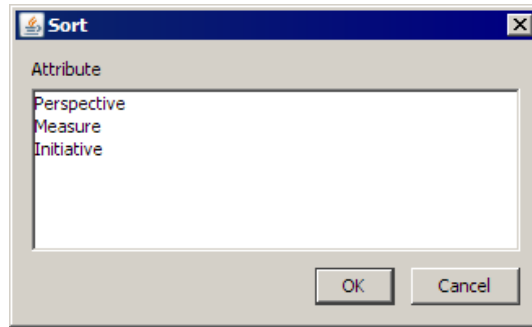
1. Click the section. Handles appear at the corners.
2. Drag a handle to a new location.

### Use Sections to Group Data Nodes

To group data nodes into sections in accordance with a selected attribute, complete the following steps:

1. Select any node and click one of the following paths:
  - **Elements ⇒ Sort This Node by Attribute**
  - **Elements ⇒ Sort All of This Type By Attribute**

The Sort list appears.



2. Click the attribute or element type to group the nodes by.

Nodes are grouped together in the sections that you have created. If you sort data nodes into sections and then change some of the data that affects the result of the sort operation, the diagram is not automatically refreshed. To align the diagram with the new data, you must repeat the sort operation.

To sort data nodes into project sections and scorecard sections, select any node and click one of the following paths:

- **Elements ⇒ Sort This Node by Scorecard or Project**
- **Elements ⇒ Sort All of This Type By Scorecard or Project**

Nodes are grouped together in their respective sections: project nodes are grouped into the project section and scorecard nodes into their scorecard sections. If you sort data nodes into sections and then change some of the data that affects the result of the sort operation, the diagram is not automatically refreshed. To align the diagram with the new data, you must repeat the sort operation.

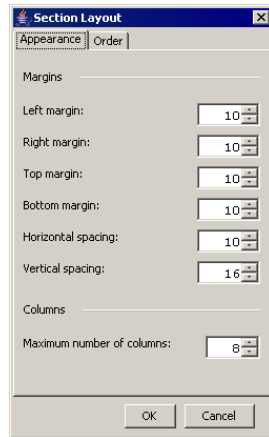
### Sort and Lay Out the Data Nodes in a Section

As you group data nodes in a section, the data nodes might become poorly spaced and difficult to read.

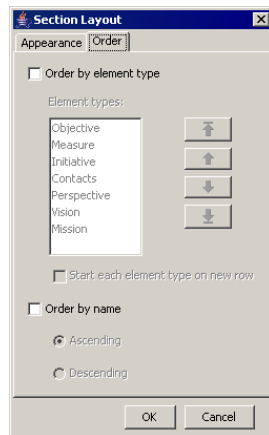
To sort and lay out the data nodes in a section, complete the following steps:

1. Right-click a section and click **Sort and Layout Nodes**. The Section Layout list appears.





2. In the **Margins** area, specify the margins around each element.
3. In the **Columns** area, specify the maximum number of columns.
4. Click the **Order** tab.



5. To order the elements by element type, complete the following steps:
  - a. Click **Order by element type**.
  - b. To change the order, select a type in the **Element types** list and click the arrows to the right to move the selection.
  - c. To start each element type on a new row, click **Start each element type on a new row**.
6. To order the elements by name, click **Order by name** and select the order method.

### ***Lock the Contents of a Section***

After you arrange the contents of a section, you can lock the contents so that no item is inadvertently moved out of the section. However, you can add new items to the section.

To lock the contents, select a section and click **Sections** ⇒ **Lock Contents**.

### ***Edit the Properties of an Attribute Section***

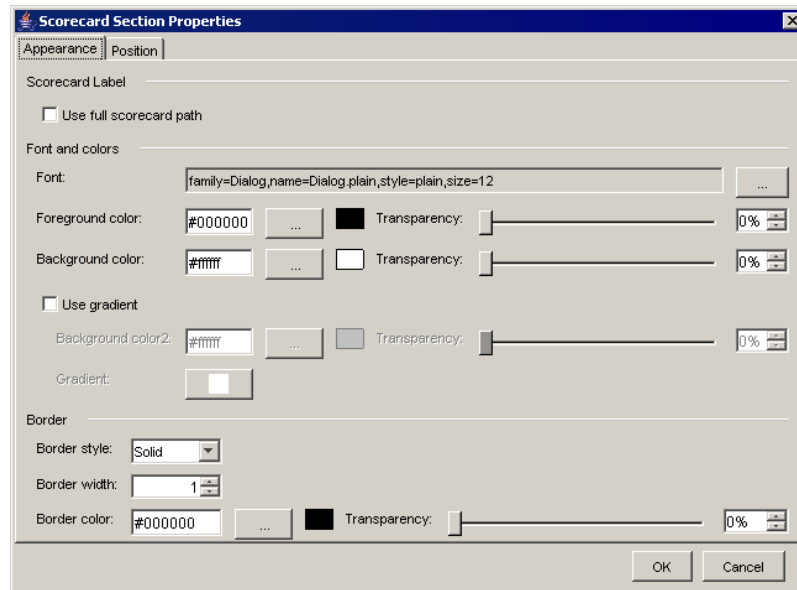
You edit the properties of an attribute section the same way you edit the properties of a shape, text, or image. For more information, see [“Edit the Properties of a Shape, Text, or Image” on page 180](#).

### Edit the Properties of a Project Section or a Scorecard Section

*Note:* The properties for a project section and a scorecard section are identical.

To edit the properties of a project section or a scorecard section, complete the following steps:

1. Right-click the section and click **Edit**. The Project Section Properties or the Scorecard Section Properties list appears.



2. On the **Appearance** tab, you can specify the font, color, and border of the section.
3. To include the scorecard path so that you can distinguish duplicate items from different projects and scorecards, click **Use full scorecard path**.
4. To specify the font, complete the following steps:
  - a. Click the ellipsis (...) that is next to the **Font** field. The Select Font list appears.
  - b. Select a font, font style, and font size.
 

*Note:* By default, the list of fonts includes only basic fonts.
  - c. To include all the fonts that are installed on the computer, select **Include system fonts**.
 

*Note:* Be aware that if the specified font does not exist on the SAS Strategy Management server, the rendering of the font can differ when the diagram is viewed in SAS Strategy Management.
5. To specify the foreground and background colors, complete the following steps:
 

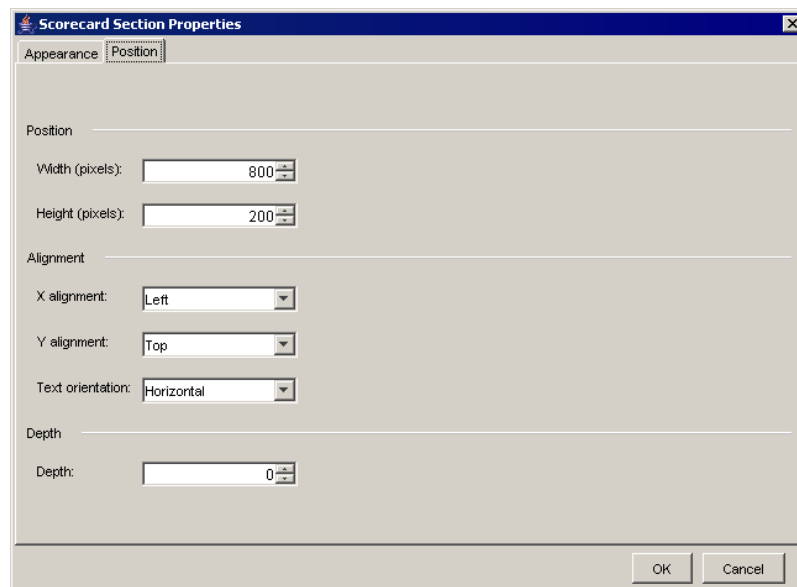
*Note:*

  - You cannot specify the background color of an image.
  - The **Background color** field is not available if **Show range color as object background** is selected on the **Contents** tab.
  - a. Click the ellipsis (...) that is next to the **Foreground color** or the **Background color** field and select a color from the palette, or type a hexadecimal value for the color.
  - b. Click **OK** to save the color setting.

- c. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
6. To specify a gradient in the background color, complete the following steps:
 

*Note:* You cannot specify a gradient for an image.

  - a. Click **Use gradient**.
  - b. Click the ellipsis (...) that is next to the **Background color2** field and select a color from the palette, or type a hexadecimal value for the color in the field.
  - c. Click **OK** to save the color setting.
  - d. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
  - e. Click the button that is next to **Gradient**. The Pick a Gradient list appears.
  - f. Click the image of a gradient pattern to use and then click **OK**.
7. To specify the border, complete the following steps:
  - a. From the **Border style** list, select a style.
  - b. Type the number of pixels in the **Border width** field.
  - c. Click the ellipsis (...) that is next to the **Border color** field and select a color from the palette, or type a hexadecimal value for the color.
  - d. Click **OK** to save the color setting.
  - e. To select a saturation value (transparency), move the **Transparency** slider that is next to the color field .
8. To view the position properties, click the **Position** tab. On this tab you can specify the position, alignment, and depth of the section.



9. To specify the position, complete the following steps:
  - a. In the **Width** field, type the width of the item in pixels. You can also change the width by dragging the handles of the item.
  - b. In the **Height** field, type the height of the item in pixels. You can also change the height by dragging the handles of the item.

10. To specify the alignment, complete the following steps:

*Note:* You cannot specify the alignment of text.

- a. From the **X alignment** list, select a value to control the horizontal position of any associated text.
- b. From the **Y alignment** list, select a value to control the vertical position of any associated text.
- c. From the **Text orientation** list, select a value to control the orientation of any associated text.

11. To specify the depth, type an integer value in the **Depth** field.

*Note:* If an item overlaps another item in a diagram, then the item with the greater depth value is covered by the item that has the smaller depth value.

12. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Copy and Paste a Section**

To copy a section, select the section and click **Edit** ⇒ **Copy**.

To paste the copy elsewhere in the diagram, click on the area where you want to paste the copy and click **Edit** ⇒ **Paste**.

### **Delete a Section**

To delete a section, select the section and click **Edit** ⇒ **Delete**.

## **Working with a Diagram**

### **Select All Shapes in a Diagram**

To select all of the shapes, text, images, lines, and sections in a diagram, click **Edit** ⇒ **Select All**.

### **Use the Grid to Arrange Objects in a Diagram**

Every diagram has a grid, which can be either visible or hidden. To use the grid, complete the applicable steps:

- To show or hide the points of the grid, click **Grid** ⇒ **Show Grid**.
- To change the coarseness of the grid, click **Grid** ⇒ **Grid Size**, and select a coarseness.
- To align shapes with the grid, click **Grid** ⇒ **Snap To Grid**. Any node or container that you drag to a new location snaps to alignment with the grid.
- If you select a container, right-click, and click **Shapes** ⇒ **Resize To Grid**. Each handle of the container snaps to the nearest grid point. The result is to subtly change the size and shape of the container.

*Note:* If the grid is shown, performance can decrease, particularly for small grid sizes when they are viewed in zoomed-out mode. To increase performance, hide the grid. Even when the grid is hidden, **Snap to Grid** continues to be in effect.

### **Zoom Diagram View**

To magnify or shrink your view of a diagram, click **Grid** ⇒ **Zoom**, and select a percentage.

### ***Make a Diagram More Readable***

If you need to improve the readability of a diagram, consider the following tips:

- Use containers or sections to group data nodes.
- Limit the number of data nodes, containers, and connecting arrows. One way to do this is to focus on a limited set of relationships. Do not try to show everything in one diagram.
- Drag nodes so that nodes do not cover other nodes or arrows.
- Do not make the diagram too big. The rulers in the Diagram Editor represent screen pixels. Consider the typical screen dimensions of your users' computers when you create a diagram.

### ***Select a Language for a Diagram***

If you have defined more than one language, you can select the language in which to display the diagram. Click **Elements** ⇒ **User Defined Language** and select a language.

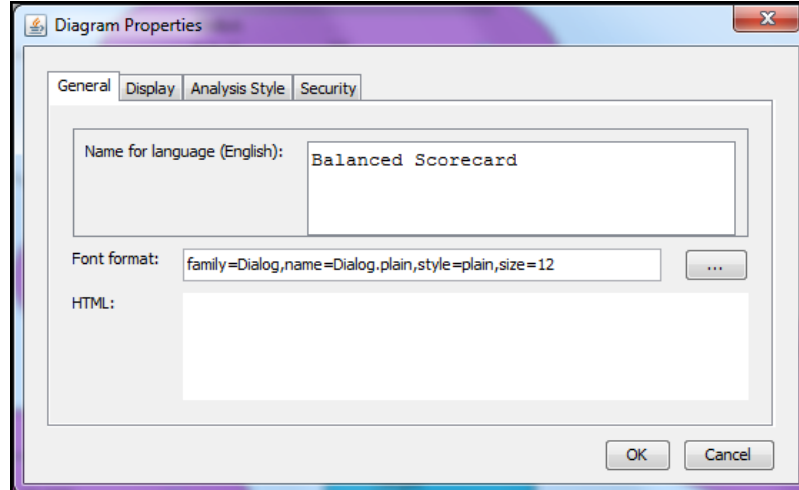
### ***Preview a Diagram in HTML***

To preview a diagram as it will appear when you display it in the Diagram view, click **File** ⇒ **HTML Preview**. A browser window is opened to display the diagram.

## ***Editing Diagram Settings***

To edit the settings for the entire diagram, complete the following steps:

1. Click **File** ⇒ **Diagram Settings**. The Diagram Properties list appears.



2. In the **Name for language** field, type the name of the diagram.

*Note:* A field is available for each language that has been defined. If a label does not exist in the language that is currently set for a project, the label is displayed in the default language.

3. To specify the default text font for all of the shapes in the diagram, complete the following steps:
  - a. Click the ellipsis (...) that is next to the **Font** field. The Select Font list appears.
  - b. Select a font, font style, and font size.

*Note:* By default, the list of fonts includes only basic fonts.

- c. To include all the fonts that are installed on the computer, select **Include system fonts**.

*Note:* Be aware that if the specified font does not exist on the SAS Strategy Management server, the rendering of the font can differ when the diagram is viewed in SAS Strategy Management.

- 4. To specify HTML, such as JavaScript, in the **HTML** field, type the HTML code.

*Note:* If you specify JavaScript, the code is active in the displayed diagram. For example, you can specify the following code:

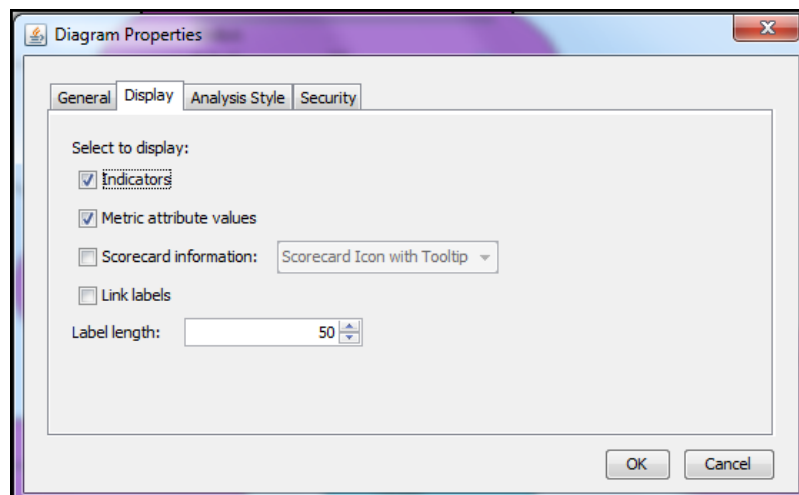
```
onmouseover="JavaScript:
alert('Revenue Growth')"
```

and whenever a user moves the mouse pointer over this shape, text, or image, the following message appears in a list:

```
Revenue
Growth
```

You must enclose the right side of the JavaScript expression in double quotation marks.

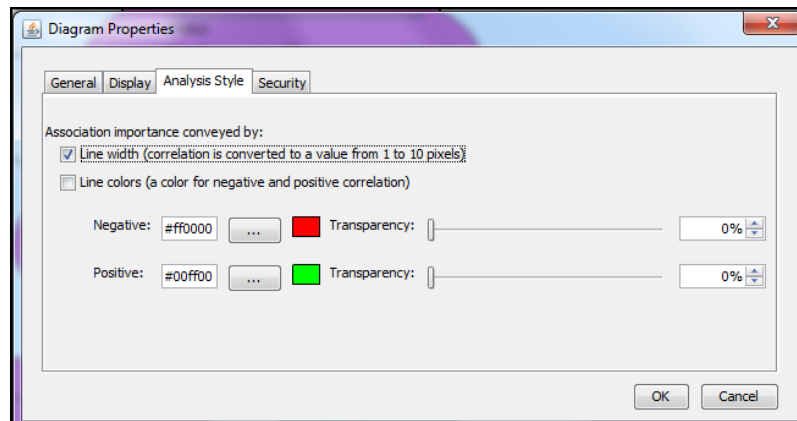
- 5. To specify display settings, click the **Display** tab and complete the following steps:



- a. Click **Indicators** to specify that any data node that is associated with a numeric value to which a range is applied shows the image for the subrange that contains the value.
- b. Click **Metric attribute values** to specify that any data node that is associated with a numeric value shows that numeric value. If no value exists, a period (".") is displayed.
- c. Click **Scorecard information** to specify that certain scorecard information is displayed. Select the information to display from the list.
- d. Click **Link labels** to display labels on all of the links in the diagram.
- e. Click **Label length** to specify the maximum number of characters per line of text in the nodes of the diagram.

The text is wrapped in accordance with this maximum, but the maximum can be exceeded slightly in some cases in order to avoid splitting words. **Label length** applies only to element nodes for which a width and height have not been explicitly set.

6. To specify analysis style settings, click the **Analysis Style** tab and complete the following steps:



- a. Click **Line width** to specify that the line width varies according to the correlation value. Correlation values range from -1.0 to 1.0. The line representing a value in this range would be between 0 and 10 pixels wide.
  - b. Click **Line colors** to specify that the line color varies according to the correlation value. Type values for the negative and positive correlation values, and set the transparency.  
*Note:* By default, a negative correlation (-1.0) is red and a positive correlation (+1.0) is green.
7. To control whether element details are shown in the diagram, click the **Security** tab, and then click **Enable element details**.
8. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

## Analyzing a Diagram to Validate a Strategy

### Overview

When two elements in a SAS Strategy Management model are connected by an association (such that the first element is thought to influence the second element, and both elements have sufficient and overlapping periodic metric attribute data), then it might be useful to calculate the correlation coefficient between the two elements.

The correlation coefficient (correlation analysis) can help determine whether the first element influences the second element. A correlation coefficient is a floating point number between -1 and 1, where 1 indicates a positive correlation and -1 means indicates a negative correlation. A value of 0 indicates no correlation. The correlation coefficient is calculated to a precision of two decimal places.

You can analyze the correlation in a diagram. To perform the analysis, you must select an association in the diagram and a date range. For the association, you must select two metric attributes: a "from" metric attribute and a "to" metric attribute. The "from" metric attribute influences the "to" metric attribute. The "from" and "to" metric attributes do not need to have the same name, but they must be inherently related to each other and mean the same thing.

*Note:* This feature might not be available. See your Strategy Management administrator to determine whether this feature is enabled.

For example, it would probably not make sense to compare the metric attribute named "Actual" against the metric attribute named "Performance." Similarly, the metric attributes should probably be of the scale, such as both values being integers or both values being percentages.

*Note:* The longer the date range, the more accurate the correlation results.

The results of the analysis are displayed in the diagram. The results are calculated dynamically from the input choices specified, and the results are not saved after you close the editor session. However, you can export the results. For more information, see the step to export analysis results to a comma-separated values file in [“Manage Analysis Definitions” on page 198](#).

*Note:* The presence or absence of a correlation does not definitively state the influence between the elements, but it merely suggests an influence. Because the influence is merely a suggestion, do not redesign a scorecard based only on the correlation coefficient. For example, do not assume that a negative correlation indicates no influence between the two elements. A negative correlation between expenses and profits indicates only that as expenses go down, profits go up. But expenses certainly have an influence on profits.

### Create an Analysis Definition

When you create an analysis definition, you set the properties required for the analysis. Later, you run the analysis. The analysis definition is saved to the SAS Strategy Management server so that it can be used in the future.

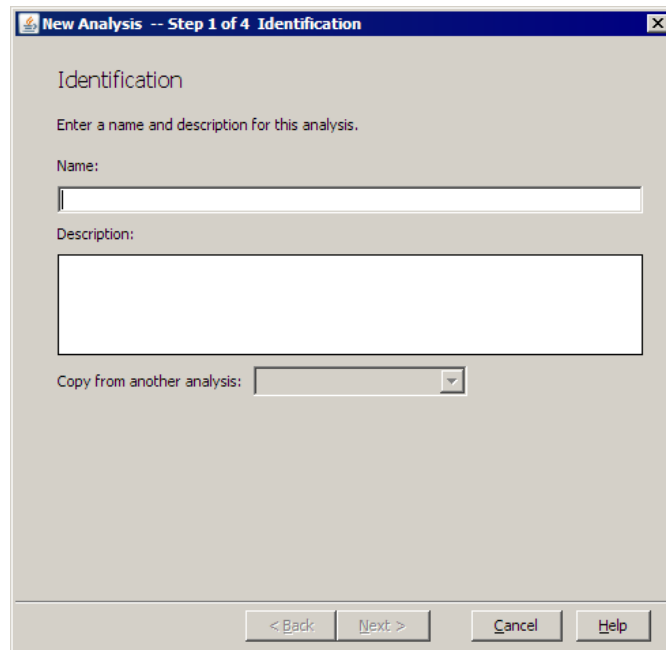
Before you create an analysis, the following conditions must be met:

- You must have an association selected. Click **Elements** ⇨ **Association**. In the Edit Association list, you must have the association to use in the analysis selected for display.
- You must have the metric attributes on which the analysis is based selected. In the Diagram Editor, right-click the element and click **Element Type Properties**. In the Properties list, click the **Contents** tab. In the **Show metric attributes** list, make sure that the attributes that you want to use in the analysis are selected.

To create an analysis, complete the following steps:

1. Click **Analysis** ⇨ **New**. The New Analysis wizard appears.





**New Analysis -- Step 1 of 4 Identification**

Identification

Enter a name and description for this analysis.

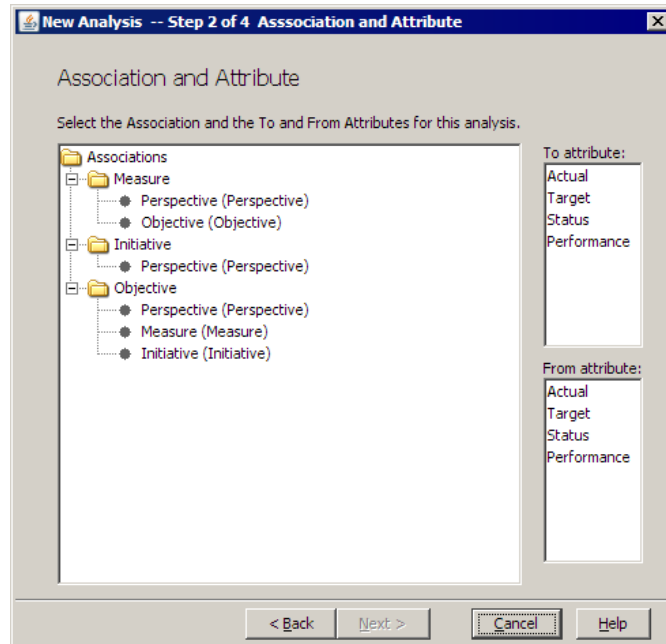
Name:

Description:

Copy from another analysis:

< Back Next > Cancel Help

2. Type the name of the analysis.
3. (Optional) Type the description and choose whether to copy another analysis to this analysis.
4. Click **Next**.
5. On the Association and Attribute page, select an association.



**New Analysis -- Step 2 of 4 Association and Attribute**

Association and Attribute

Select the Association and the To and From Attributes for this analysis.

Associations

- Measure
  - Perspective (Perspective)
  - Objective (Objective)
- Initiative
  - Perspective (Perspective)
- Objective
  - Perspective (Perspective)
  - Measure (Measure)
  - Initiative (Initiative)

To attribute:

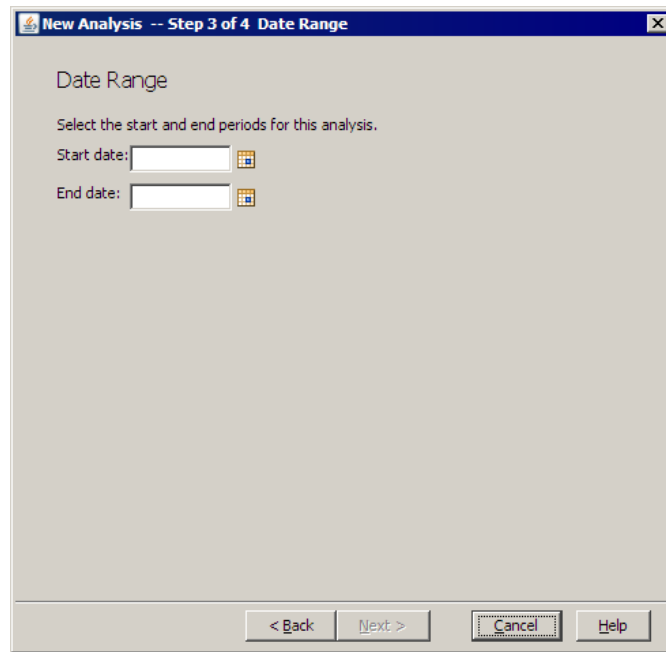
Actual  
Target  
Status  
Performance

From attribute:

Actual  
Target  
Status  
Performance

< Back Next > Cancel Help

6. Click a metric attribute in the **To attribute** field.
7. Click a metric attribute in the **From attribute** field.
8. Click **Next**.
9. On the Date Range page, specify the start and end dates.

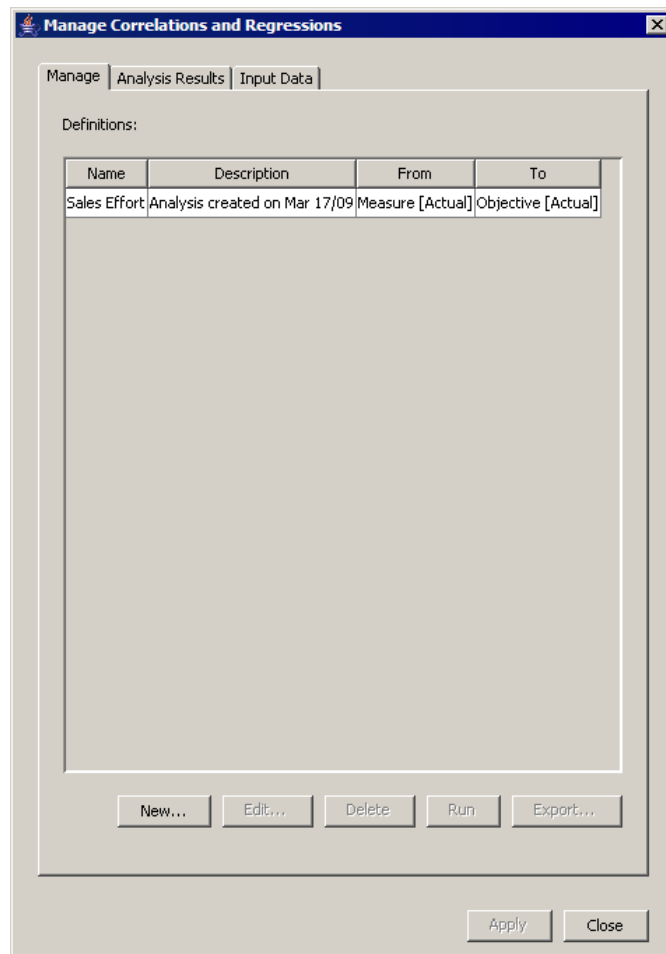


10. Click **Next**.
11. On the Summary of Selections page, review your choices. To make changes, click **Back**.
12. Click **Finish** to save your selections and exit. Click **Cancel** to exit without saving your selections.

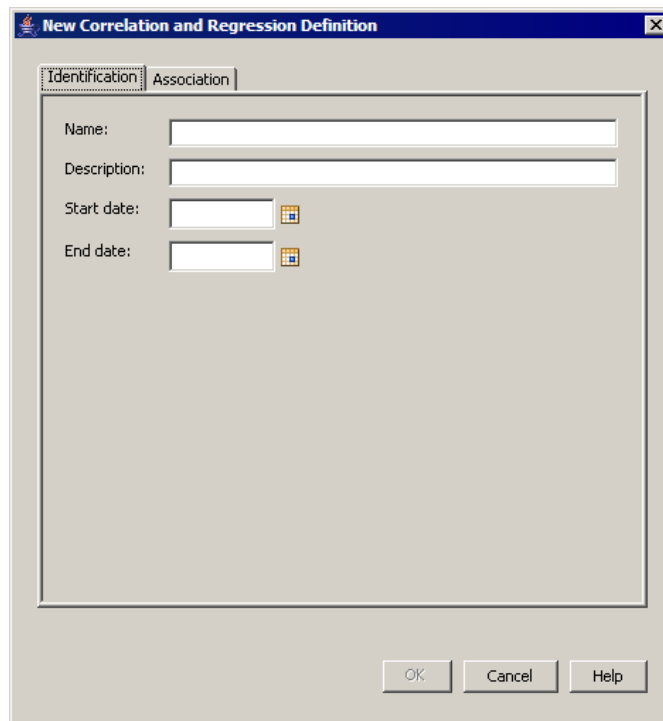
### ***Manage Analysis Definitions***

To manage analysis definitions, complete the following steps:

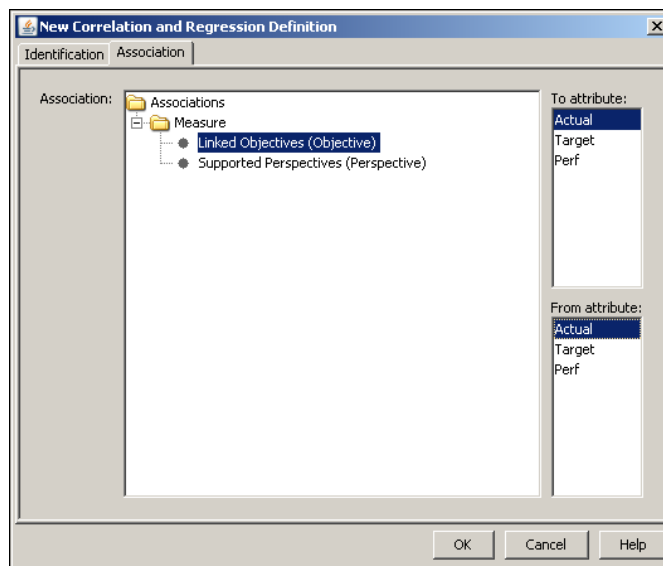
1. Click **Analysis** ⇒ **Edit**. The Manage Correlations and Regressions list appears.



2. To create a new analysis definition, complete the following steps:
  - a. On the **Manage** tab, click **New**. The New Correlation and Regression Definition list appears.



- b. On the **Identification** tab, type the name and, optionally, a description.
- c. Specify the start and end dates.
- d. Click the **Association** tab.

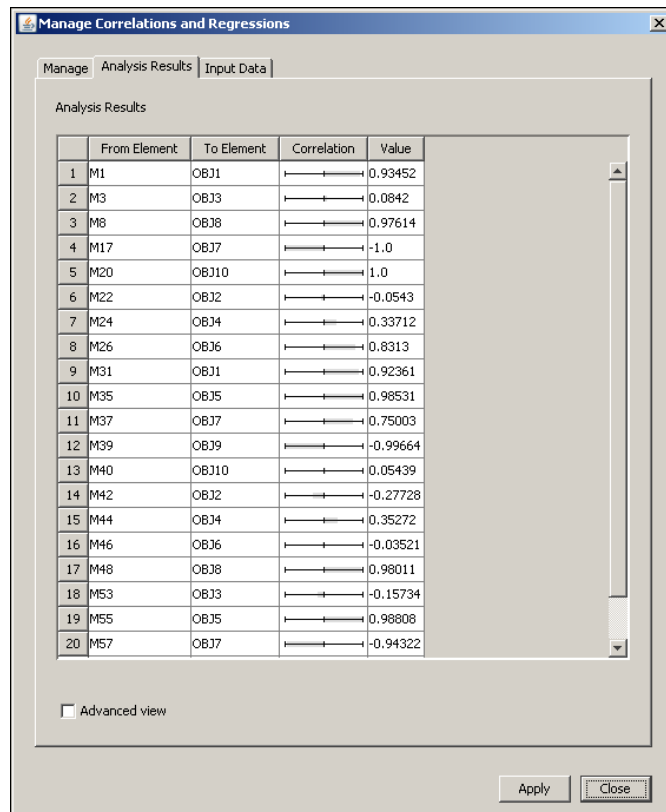


- e. Select an association.
  - f. Click a metric attribute in the **To attribute** field.
  - g. Click a metric attribute in the **From attribute** field.
3. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.
  4. In the New Correlation and Regression Definition list you can perform the following additional tasks:

- To edit an analysis, select an analysis definition and click **Edit**.
- To delete an analysis, select an analysis definition and click **Delete**.
- To run an analysis, select an analysis definition and click **Run**.
- To export the analysis results to a comma-separated value (CSV) file, first run the analysis. Then, to export all analyses, click **Export**.

*Note:* To export only the currently displayed analysis, click the **Input Data** tab and click **Export**.

- To view the analysis results after running an analysis, click the **Analysis Results** tab.



- To view more detailed information about the results, click **Advanced view**.

|   | From Element | To Element | Correlation | Value                       | Linear Regression f(x) | P Value   | Y Probt    | X Probt    | Y Stderr |
|---|--------------|------------|-------------|-----------------------------|------------------------|-----------|------------|------------|----------|
| 1 | M1           | OBJ1       | 0.93452     | 691.823439 + 0.49293045 * x | 2.88886E-6             | 9.064E-5  | 2.88886E-6 | 115.509517 | 0.       |
| 2 | M3           | OBJ3       | 0.0842      | -205465.0 + 233.659848 * x  | 0.78449093             | 5.1992E-7 | 0.78449092 | 19837.4596 | 83.      |
| 3 | M8           | OBJ8       | 0.97614     | -200002.43 + 1.89692879 * x | 1.21449E-8             | 2.002E-56 | 1.21463E-8 | 0.59426781 | 0.       |
| 4 | M17          | OBJ7       | -1.0        | 30000.0 + -1.0 * x          | 0.0                    | 0.0       | 0.0        | 0.0        | 0.       |

- To view the input data used in the analysis, click the **Input Data** tab.

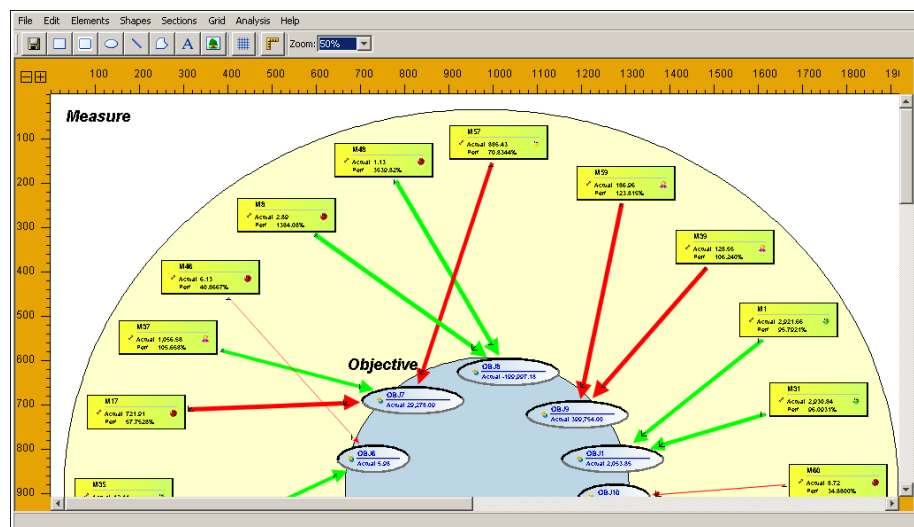
| Manage Correlations and Regressions    |           |             |         |            |
|----------------------------------------|-----------|-------------|---------|------------|
| Manage   Analysis Results   Input Data |           |             |         |            |
| Association Data                       |           |             |         |            |
|                                        | Period Id | Period Name | M1      | OBJ1       |
| 1                                      | 165       | JUN2009     | 1332.79 | 1214.63295 |
| 2                                      | 166       | JUL2009     | 1438.34 | 1268.289   |
| 3                                      | 167       | AUG2009     | 1564.33 | 1391.99844 |
| 4                                      | 168       | SEP2009     | 1554.31 | 1483.45545 |
| 5                                      | 169       | OCT2009     | 1576.53 | 1504.95735 |
| 6                                      | 170       | NOV2009     | 1679.95 | 1652.36867 |
| 7                                      | 171       | DEC2009     | 1894.31 | 1684.2833  |
| 8                                      | 177       | JAN2010     | 2050.96 | 1794.51272 |

Table 1 of 22

Export...

Apply Close

- Click **Export** to export only the currently displayed analysis.
- Click **Apply** to apply the analysis to the diagram that is displayed in the editor. The correlation is applied and the output appears.

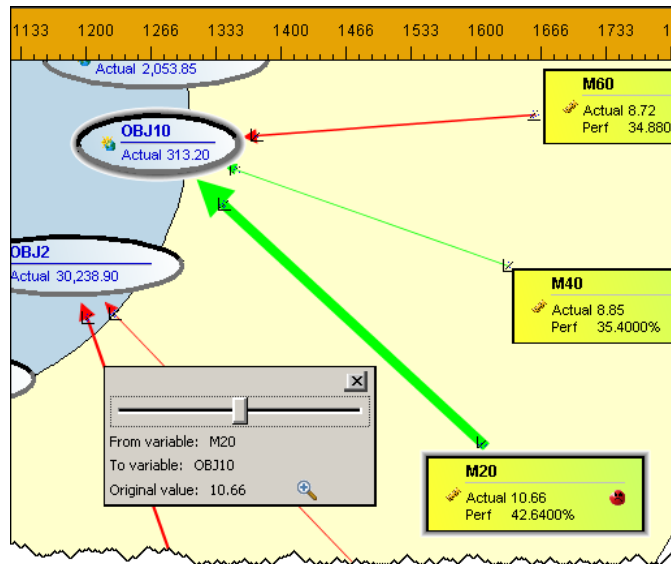


The changes made to the diagram are saved. When you exit the Diagram Editor, the changes are retained.

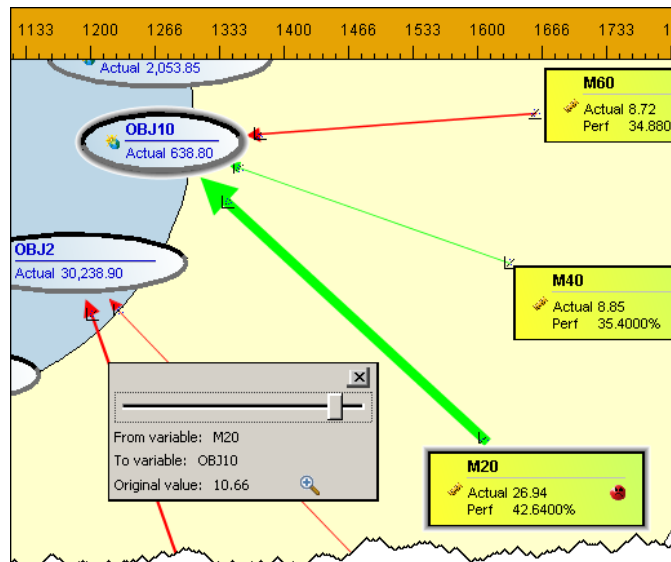
### Analyze the Correlation Between Two Elements

To see the effects of the relationship between two elements, complete the following steps:

- In the diagram, right-click the end of the correlation arrow of the element that you want to analyze and then click **Show regression slider**. The correlation slider appears.



- Click and drag the slider to the left or right to see the effects that an increase or decrease in the value of the **From** element has on the value of the **To** element.

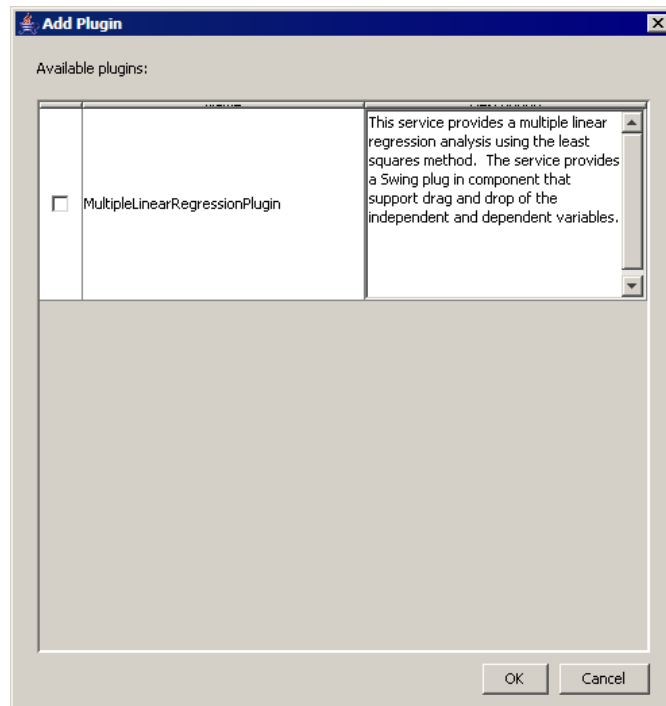


- Click  to view more information about the statistical relationship.
- When you are finished, click X to remove the slider.

### Add an Analysis Plug-in

To add an analysis plug-in, complete the following steps:

- Specify the plug-in analysis settings by selecting a metric attribute for analysis. For more information, see [“Editing Diagram Settings” on page 193](#).
- Click **Analysis** ⇒ **Add Plug-in**. The Add Plug-in list appears.



3. Select the check mark next to one or more analysis plug-ins.
4. Click **OK**. The Add Plug-in list closes, and, if needed, a list to specify options for the analysis plug-in appears.

### ***Perform a Multiple Linear Regression Analysis***

Use the multiple linear regression plug-in to perform a multiple linear regression analysis using the least squares method.

To perform a multiple linear regression analysis, complete the following steps:

1. Hold down the CTRL key and drag one or more elements onto the **Independent input variables** list.
2. Hold down the CTRL key and drag one element onto the **Output variable** list.
3. Specify the start and end dates.
4. Click **Run**. After the analysis runs, you can view the analysis results and the input data used for the analysis.

To investigate the impact of the input variables on the output variable, complete the following steps:

1. Click the **Explore** tab.
2. Adjust the values of the input variables using the controls. The impact of the changes is reflected in the output variable, which is displayed above the inputs.



## Managing a Diagram

### View Diagram Properties

To view the properties of a diagram, complete the following steps:

1. Open a project.
2. Select a project or scorecard.
3. Select a project or scorecard name in the hierarchy and click  in the toolbar.
4. Click **Manage Diagrams**.
5. Click  that is next to a diagram name in the table and click **Properties**. The Diagram Properties page appears.
6. If required, change the name of the diagram.

### Copy a Diagram

You can copy a diagram to other scorecards in the same project. You can build a diagram that serves as a master at the top level of the scorecard hierarchy, comparable to a slide presentation, and then copy that diagram to one or more child scorecards.

A diagram that is copied to another scorecard might not look exactly like the original. Because diagrams contain nodes that are specific references to elements in the source diagram, elements that have the same name in the default language must exist in the target scorecard. If the elements do not have the same name, the diagram node cannot be copied. Containers can be copied unless they are bound to elements for which a copy does not already exist in the target scorecard.

To copy a diagram, complete the following steps in the Diagram Editor:

1. Click **File** ⇒ **Copy Diagram**. The Select Scorecard for Diagram Copy list appears.
2. In the **Name** field, type the name of the copy of the diagram.
3. From the **Scorecards** list, select the scorecards where you want to copy the diagram.
4. If you want to replace an existing diagram in a scorecard, click **Replace existing**.

### Save a Diagram

To save the changes that you have made to a diagram, click **File** ⇒ **Save** in the Diagram Editor.

### Revert to the Saved Diagram

If you have not saved your recent changes to a diagram, you can revert to the last saved diagram. Click **File** ⇒ **Revert To Saved** in the Diagram Editor.

## Export a Diagram

To export a diagram as a scalable vector graphic (SVG), complete the following steps in the Diagram Editor:

1. Click **File** ⇒ **Export**. The Save list appears.
2. Navigate to a location.
3. Name the file.
4. Click **Save**.

**TIP** You can also consider making a screen capture of the diagram image.

## Delete a Diagram

To delete a diagram, complete the following steps:

1. Open a project.
2. Select a project or scorecard.
3. Select a project or scorecard name in the hierarchy and click  on the toolbar.
4. Click **Manage Diagrams**.
5. Click  that is next to a diagram name in a table and click **Delete**.

---

# Viewing a Diagram

## View a Diagram

To view a diagram, complete the following steps:

1. Open a project.
2. Select a project or scorecard name in the hierarchy and click  on the toolbar.
3. Click **Manage Diagrams**.
4. Click the diagram name.
5. To view updates, such as changes to metric values, click **Go**, which is next to the zoom controls.

**TIP** Diagrams are cached on a per-user, per-date basis; each user must update the diagram view in order to see the most current data. In order to update the diagram, click .

*Note:* If the **Go** button does not respond and you are using the Firefox web browser, ensure that you have the Adobe SVG Viewer installed. For more information, see [Appendix 3, “Install the Adobe SVG Viewer Plug-in,”](#) on page 359.

*Note:*

1. Elements whose dates fall outside the date that is specified for the diagram are not displayed.
2. If a label in a diagram does not exist in the currently set language for a project, the label is displayed in the default language.

### Change the Position of a Diagram

*Note:* The project options for the diagram format must be set to show diagrams in scalable vector graphic (SVG) format. For more information, see [“Specify Project Options” on page 64](#).

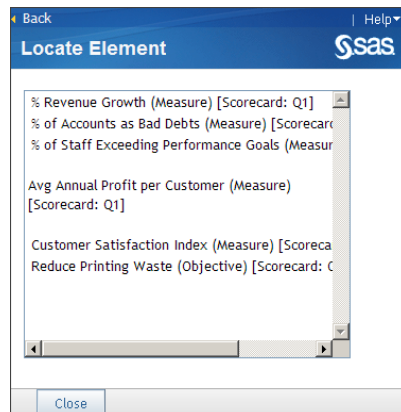
To change the position of the diagram in order to view other areas, press the Alt key and drag the mouse pointer over the diagram. The diagram moves in the same direction as the mouse pointer.

### Locate Elements, Element Types, and Associations

*Note:* The project options for the diagram format must be set to show diagrams in scalable vector graphic (SVG) format. For more information, see [“Specify Project Options” on page 64](#).

To locate elements in a diagram, complete the following steps:

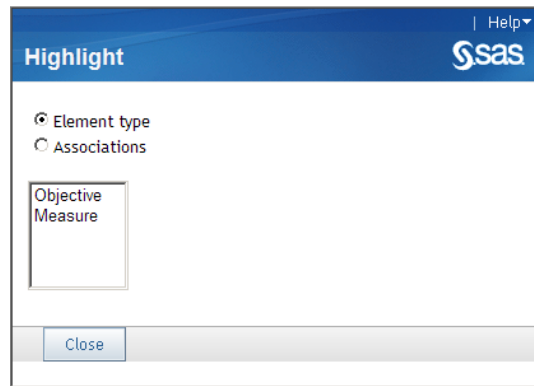
1. Click . The Locate Element list appears.



2. Select one or more elements.
3. Click **Close**. The elements are highlighted by blinking red borders.

To highlight an element, complete the following steps:

1. Click . The Highlight page appears.



2. Select the element types or associations that you want to highlight.
3. From the list, select one or more items.
4. To reset the highlighting to its default state, click .

### View Element Attributes

To view the attributes of elements that are represented by nodes in a diagram, click on a diagram node. Metric attributes and non-metric attributes are listed for the element on the Element Attributes page.

| Element Attributes • Q1 |       |
|-------------------------|-------|
| Metric Attributes       |       |
| Attribute name          | Value |
| Actual                  |       |
| Target                  |       |
| Status                  |       |
| Performance             |       |
| Non-Metric Attributes   |       |
| Attribute name          | Value |
| Perspective             |       |
| Measure                 |       |
| Initiative              |       |
| Close                   |       |

## Chapter 21

# Creating and Editing Gauge (Also Called Dashboard) Views

---

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---

## Creating and Editing Gauge Views

Gauge views, also called dashboard views, are not available in the Builder. However, you can create gauge views in both classic portlets and enhanced-portlet tiles. For more information, see the following topics:

- [“Edit a Performance Dashboard Portlet” on page 267.](#)
- [“Edit the Gauge View Tile Properties” on page 250.](#)



## Chapter 22

# Creating and Editing Trend Analysis Views

---

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---

## Overview

This trend analysis view uses the Trend Analysis page. This page is accessed by views that are displayed using:

- SAS Strategy Management Builder
- Strategy Management classic-style portlets

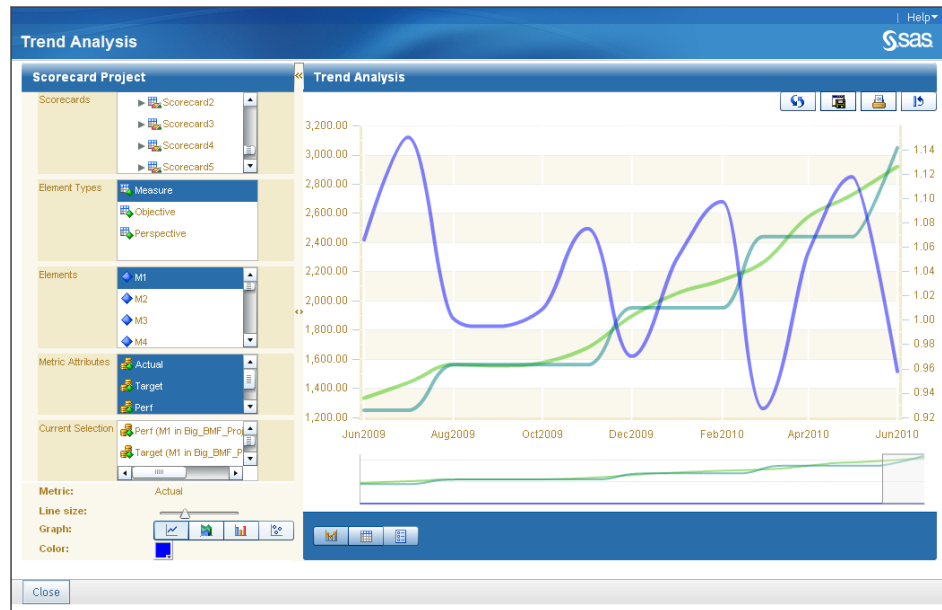
For information about other types of trend analysis provided by SAS Strategy Management, see [“Trend Analysis” on page 147](#).

---

## Access Trend Analysis from a Table

To access a trend analysis from a scorecard table, complete the following steps:

1. Open a project. For more information, see [“Open a Project” on page 60](#).
2. Click  on the toolbar.
3. Click  to the left of an element and click **Show Trend Analysis**. The Trend Analysis page appears.



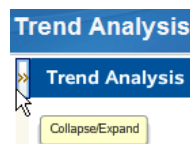
*Note:* If the table view has been customized to display the Trend Analysis page, you can also click  on the toolbar. For information, see “Customize a Scorecard Table” on page 153.

- To close the Trend Analysis page, click **Close** in the bottom left corner.

## Select the Metric Attributes to Analyze

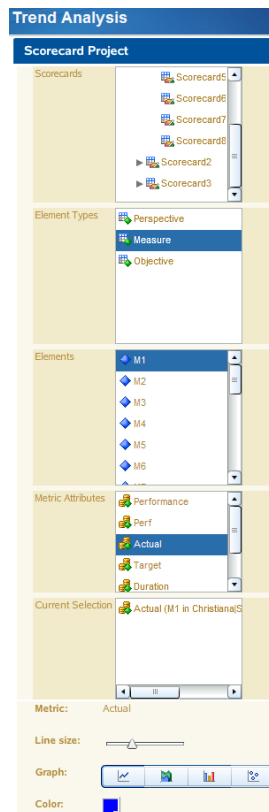
To select one or more metric attributes to analyze, complete the following steps:

- Expand the left pane of the Trend Analysis page.

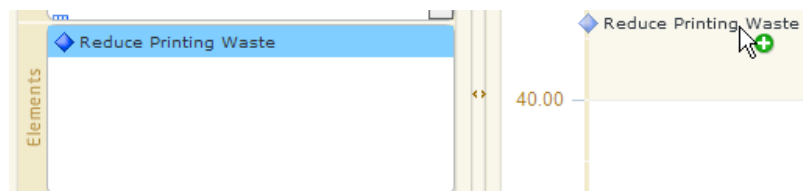


The left pane expands.

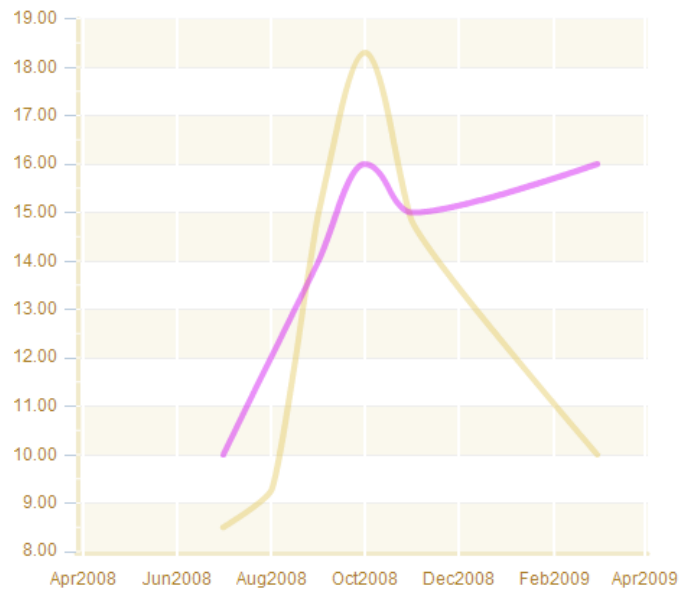




2. In the **Scorecards** section, select a scorecard.
3. In the **Element Types** section, select an element type.
4. Complete one of the following steps:
  - To analyze all of the metric attributes for an element, drag an element from the **Elements** section onto the graph.



The metric attribute values appear on the graph.



- To analyze specific metric attributes, drag one or more metric attributes from the **Metric Attributes** section onto the graph.

*Note:* The **Current Selection** section displays the items included in the trend analysis.

5. To remove an item from the trend analysis, select the item in the **Current Selection** section and click **Delete**.

---

## Customize the Display of a Metric Attribute

To customize how a metric attribute is displayed in the graph, complete the following steps in the left pane of the Trend Analysis page:

1. In the **Current Selection** section, select an attribute.
2. Below the **Current Selection** section, specify the line size, type of graph, and color.

*Note:* As you specify each property, the display is updated.

---

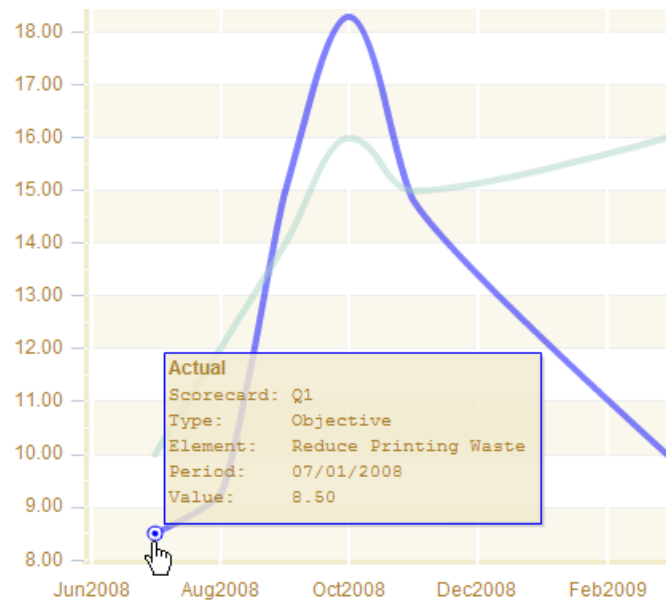
## Navigate a Trend Analysis

To navigate a trend analysis, complete the following steps in the right pane of the Trend Analysis page:

1. To change the start and end dates displayed in the analysis, move the start and end points on the slider below the analysis. The default date range is specified in the project options.



2. To display the underlying data for a data point, pause the mouse pointer over the data point.



3. To reload data for your selected time period, click  in the upper right corner of the right pane.
4. To save the analysis as an image, click  in the upper right corner of the right pane.
5. To print the analysis, click  in the upper right corner of the right pane.
6. To restore the default value, click  in the upper right corner of the right pane.

## Customize the Trend Analysis

You can display the trend analysis data as a chart or as a grid, and you can change the display properties.

*Note:* Customized settings are applied only to the current project and the current session.

To customize the trend analysis, complete the following steps in the right pane of the Trend Analysis page:

1. To view the chart as a grid, click .

**TIP** When you hover on the column heading in the grid, a tooltip appears that provides the full scorecard path of the element. Use this tooltip to differentiate between elements that have the same name but are in different scorecards.

2. To return the view to a chart, click .

3. To change the properties of the display, click . The **General Properties** section appears.

**General Properties**

Show chart legend ☐

Ignore missing values ☒

Drop shadow for chart series ☐

Line chart series interpolation Curve ▾

Date unit interval Months ▾

Date label interval Months ▾

Date range Start date: 07/01/2009 End date: 07/01/2010

Update Chart

4. Choose whether to show the chart legend, ignore missing values, and display a drop shadow for the chart series.
5. Specify values for the line chart series interpolation, date unit interval, and the date label interval.
6. To change the date range, type a date in the field or click to select the start and end dates.

*Note:* The default date range is specified in the project options.

7. Click **Update Chart**.
8. To reload data for the selected time period, click . The customizations are displayed.

## Chapter 23

# Managing Views

---

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---

## Specify a Default View

You can specify that a type of view be the default view for a project. When you open the project, the specified view appears automatically. For information about specifying the default view, see [“Specify Project Options” on page 64](#). You can specify any of the following views to be the default:

- Table
- Aggregate
- Association
- Diagram

---

## Set Default Options for a View

For each type of view, you can set default options. A view automatically uses these options when you display your data in that type of view. For information about setting default options, see [“Specify Project Options” on page 64](#). You can set the options for the following types of views:

- Table

- Aggregate
- Association
- Diagram
- Trend Analysis

---

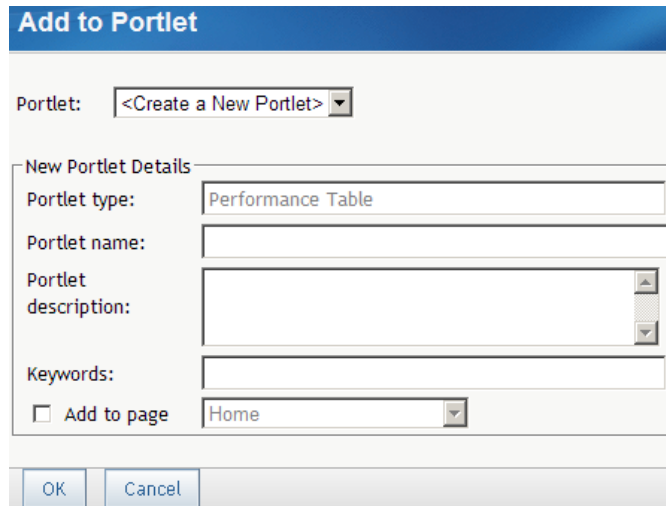
## Save a View to a Portlet

If you have a view that you want to use for a portlet, you can create a new portlet for that view and specify the portal page on which to create the portlet.

*Note:* This feature does not save a data-entry form to a portlet. Instead, it saves a link to a portlet. When clicked the link opens the form in the Strategy Management Builder.

To save a view to a portlet, complete the following steps in that view:

1. Click . The Add to Portlet page appears.



2. To add to an existing portlet, select the portlet from the **Portlet** list.

*Note:* The list includes only those portlets that are of the same type of view as the current view. For example, when you add a portlet from the table view, the **Portlet** list includes only Performance Table portlets.

3. To create a new portlet and add to that portlet, complete the following steps:
  - a. Click **<Create a New Portlet>** from the **Portlet** list.
  - b. Specify the portlet name, description, and keywords.
  - c. To specify the page on which the portlet appears, click **Add to page** and select a page from the list.

*Note:* If you do not click **Add to page**, the portlet is created but is not added to a page. You can search for the portlet later and add it to a page.

4. Click **OK**.

---

## Set the Default Date for Views

You can set the default date for use by all the views in a project. For information about setting the default date, see [“Specify Project Options” on page 64](#). This setting affects all the following types of views:

- Table
- Aggregate
- Association
- Diagram

---

## Print a View

You print a view by first displaying a preview of the page in a browser window.

To print a view in Strategy Management Builder, complete the following steps:

1. Open a project or scorecard. See [“Open a Project” on page 60](#) or [“Open a Scorecard” on page 78](#).
2. Display a view.
3. Click . A list appears.
4. Type the name and click **OK**. A new browser window appears.
5. Print the page as you would print any web page in your browser.

---

## Link to a View Using a Web Address

You can display the web address for a view within SAS Strategy Management so that you can copy the web address. You can use the web address in any application that accepts a web address, such as a bookmark in Microsoft Internet Explorer or a desktop shortcut.

The web address contains information that is needed to recreate the view, such as the column selection and the date.

To copy the web address for a view, complete the following steps:

1. Open a project or scorecard. See [“Open a Project” on page 60](#) or [“Open a Scorecard” on page 78](#).
2. Click . The Show and Copy URL window appears.
3. To use the specified date when displaying the view, click **Always use this date**.

*Note:* This selection adds the date information to the web address. Every time you load the view using this web address, the specified date is used for the view. If

you want to load the view using the current date, whatever that date might be, then do not select this option.

4. Click **Copy & Close**.

*Note:* If you are using the Firefox web browser, the **Copy & Close** function is not supported. Instead, right-click inside the **URL** field, click **Select All**, and then click **Copy**.

If a Microsoft Internet Explorer runtime error message appears, complete the following steps.

*Note:* These steps might vary depending on your version of Microsoft Internet Explorer.

1. In Microsoft Internet Explorer, click **Tools** ⇒ **Internet Options**. The Internet Options list appears.
2. Click the **Advanced** tab.
3. In the **Settings** list, in the **Browsing** category, clear **Disable Script Debugging (Internet Explorer)**.
4. Click **OK**.
5. Refresh the browser window.

---

## Linking to Information from Within a Scorecard

### Overview

You can associate links with elements in a scorecard. When these links are clicked, they can open other information, such as documents or SAS Strategy Management views.

### Link from a Scorecard to a View

*Note:* Before you can link to a view, you must have the web address for the view. For information about copying the web address for a view, see [“Link to a View Using a Web Address” on page 219](#).

To add a link in a scorecard that opens a view, complete the following steps:

1. Open a project or scorecard. See [“Open a Project” on page 60](#) or [“Open a Scorecard” on page 78](#).
2. For the element that you want to include the link to the view, click  and click **Edit Metric Attributes**. The Metric Values, Ranges, and Links page appears.
3. In the **Metric attribute** list, select the metric attribute to use.
4. In the **metric attribute Links** section, click **metric attribute Link**.
5. From the **Link** list, select the predefined link that opens the web address. For more information, see [“Managing Link Definitions” on page 71](#).
6. Click **OK**.

The scorecard appears with the link to the view. When the scorecard is displayed in a portlet, the link to the view is available for business users.



### ***Link from a Scorecard to a Document***

To add a link in a scorecard that opens a document, such as a report or presentation, complete the following steps:

1. Open a project or scorecard. See [“Open a Project” on page 60](#) or [“Open a Scorecard” on page 78](#).
2. For the element that you want to include the link to the view, click  and click **Edit Metric Attributes**. The Metric Values, Ranges, and Links page appears.
3. In the **Metric attribute** list, select the metric attribute to use.
4. In the *metric attribute* **Links** section, click *metric attribute* **Link**.
5. From the **Link** list, select the predefined link that opens a document. For more information, see [“Managing Link Definitions” on page 71](#).
6. Click **OK**.

The scorecard appears with a link to the document. When the scorecard is displayed in a portlet, the link to the document is available for business users.



## Part 4

---

# Creating Portlet Views for Business Users

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## Chapter 24

# Overview of Portlet Types

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---

## Portlet Types

SAS Strategy Management provides the following portlets:

- SAS Strategy Management classic portlets, which provide features for navigating through and viewing strategy data and other content. Classic portlets provide limited ways for the business user to adjust view properties.
- SAS Strategy Management enhanced portlets and tiles, which provide features for navigating through and viewing strategy data and other content. These portlets and tiles provide enhanced ways for the business user to adjust the view properties.

*Note:* The trend view implementations differ between the classic and enhanced portlets. For more information, see [“Trend Analysis” on page 147](#).



## Chapter 25

# Creating a Portlet

---

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---

## Overview

A SAS Information Delivery Portal page must exist before you can create a Strategy Management portlet. For information about creating a portal page, see [“Create a Page” on page 31](#).

---

## Create a Portlet

To create and add a portlet to a portal page, complete the following steps:

1. Navigate to the page on which you want to add a portlet.
2. Click **Options** ⇒ **Edit Page Content**. The Edit Page Content page appears.

**Edit Page Content • Home**

Layout: ☒ By column ☐ By grid

Number of columns: ☐ 1 ☒ 2 ☐ 3

Column width:  %  %

Portlet layout:

| Column 1                | Column 2  |
|-------------------------|-----------|
| My Collection Dashboard | Bookmarks |

Add Portlets...

OK Cancel

3. Click **Add Portlets**. The Add Portlets to Page page appears.
4. From the **Portlet type** list, select the type of portlet that you want to create:

| Portlet Type                | Description                          |
|-----------------------------|--------------------------------------|
| Performance aggregate table | Aggregate table (classic style)      |
| Performance association     | Association (classic style)          |
| Performance data entry      | Data entry form (classic style)      |
| Performance diagram         | Diagram (classic style)              |
| Performance dashboard       | Dashboard (classic style)            |
| Performance table           | Table (classic style)                |
| Strategy management         | Strategy management (enhanced style) |

5. Type the name, description, and keywords, if any.
6. Click **Add**.
 

*Note:* If you want to add more portlets to the portal page, repeat steps 4, 5, and 6.
7. When you are finished adding portlets, click **Done**.
8. On the Edit Page Content page, click **OK**. The new portlet appears on the page.

You must edit the portlet to customize it and make it usable.

- For information about editing enhanced-style portlets, see [Chapter 27, “Editing a Strategy Management Enhanced Portlet and Its Tiles,”](#) on page 237.
- For information about editing classic-style portlets, see [Chapter 28, “Editing Classic-Style Portlets,”](#) on page 259.



## Change the Layout of Portlets

To change the layout of the portlets on the portal page, complete the following steps:

1. Navigate to the page from which you want to delete a portlet.
2. Click **Options** ⇒ **Edit Page Content**. The Edit Page Content page appears.

3. For the layout, click **By column** to lay out the portlets in columns. Click **By grid** to lay out the portlets using a grid.

*Note:* If you use a grid, you can fit more portlets on a page, especially by stacking a number of small portlets next to a large portlet.

4. Click the number of columns that you want to use.
5. To adjust the width of the columns, type the percentage value that you want to use for each column.
6. Specify the portlet layout in the **Portlet layout** section.
  - If you selected **By column**, the layout selections appear in lists. To move a portlet to another column list, click the portlet and click the Right and Left arrows. If you want to move a portlet within a column, click the Up or Down arrows. To delete a portlet, click **X**.
  - If you selected **By grid**, the layout selections appear in lists. Select one or more portlets for each row. If you want a portlet to span more than one column, select that portlet in each affected column list for that row. Click **Add Row** to add more rows to the page.

**Edit Page Content • sdr**

Layout: ☐ By column ☒ By grid

Number of columns: ☐ 1 ☒ 2 ☐ 3

Column width:  %  %

Portlet layout:

|        |                                            |                                              |
|--------|--------------------------------------------|----------------------------------------------|
| Row 1: | <input type="text" value="sdr stm"/>       | <input type="text" value="sdr stm"/>         |
| Row 2: | <input type="text" value="sdr dashboard"/> | <input type="text" value="sdr dashboard"/>   |
| Row 3: | <input type="text" value="sdr table"/>     | <input type="text" value="sdr association"/> |

Portlets:

- sdr association
- sdr dashboard
- sdr stm
- sdr table

Buttons: Add Row..., Add Portlets..., OK, Cancel

7. Click **OK**. The new portlet layout is saved.

## Delete a Portlet

To delete a portlet from a portal page, complete the following steps:

1. Navigate to the page from which you want to delete a portlet.
2. Click **Options** ⇒ **Edit Page Content**. The Edit Page Content page appears.

**Edit Page Content • Home**

Layout: ☒ By column ☐ By grid

Number of columns: ☐ 1 ☒ 2 ☐ 3

Column width:  %  %

Portlet layout:

| Column 1                | Column 2  |
|-------------------------|-----------|
| My Collection Dashboard | Bookmarks |

Buttons: Add Portlets..., OK, Cancel

3. In the **Portlet layout** section, select the portlet to delete and click .

4. Click **OK**. The new portlet is deleted from on the page.



## Chapter 26

# The Strategy Management Enhanced Portlet Interface

---

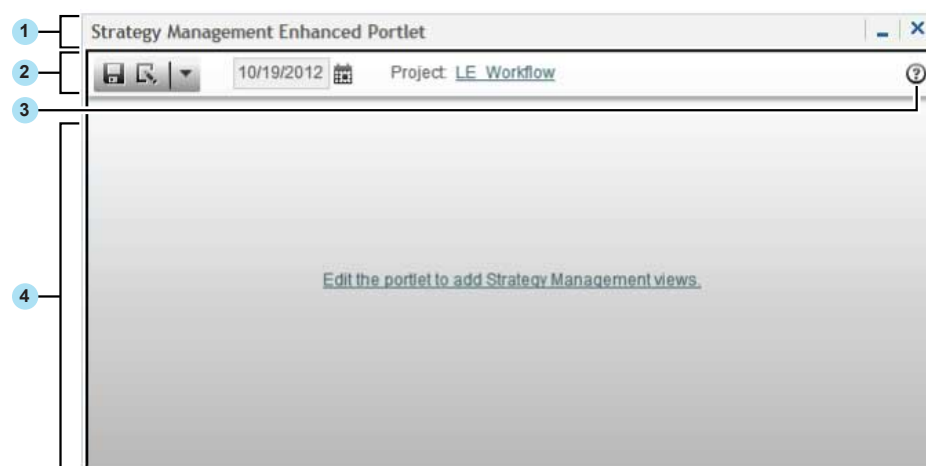
|                                                                                    |            |
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---

## Your First Look at the SAS Strategy Management Enhanced Portlet Interface

When you first create a SAS Strategy Management enhanced portlet, it provides the following interface:

**Figure 26.1** SAS Strategy Management Enhanced Portlet Interface



- 1 Title bar. It displays a customized portlet title and the Maximize (  ) and Restore (  ) buttons.
- 2 Toolbar. For more information, see “The Toolbar” on page 234.
- 3 Help for the SAS Strategy Management enhanced portlet.
- 4 Content area. One or more tiles appear in this area.

---

## The Toolbar

You can perform the following actions on the toolbar:

- Click  to save the layout configuration of the tiles within the portlet.
- Click  to edit the portlet settings. For more information, see [“Edit the SAS Strategy Management Enhanced Portlet” on page 237](#).

*Note:* This button is not available for business users.

- Click  to suggest new elements to include in a project. You can customize whether the portlet accepts element suggestions from business users.
- Click  to save the content of the portlet as a SAS Mobile BI report.
- The toolbar also provides a list of available actions.
- Click  to change the global date. You can enable business users to change the date. In this example, the date feature is enabled.
- A link that opens the project in Strategy Management Builder. You can customize whether the portlet displays this link to business users.

---

## Your First Look at a Tile

A portlet can contain one or more tiles. A tile is like a window. A tile can contain a view. You can display the following SAS Strategy Management views in a tile:

- table
- aggregate
- association
- diagram
- gauge

In the SAS Strategy Management enhanced portlet, a tile can also display the following information:

- a scorecard hierarchy, which is a hierarchical tree that displays all the scorecards in a project
- a trend analysis in which the business user can drag data from other tiles to analyze trends in the data

When you add a tile, you can customize many of its features for use by your business users.

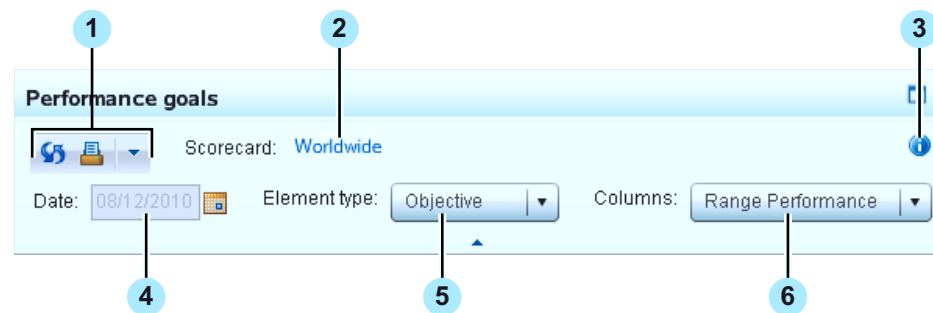
Figure 26.2 Tile Interface Example



- 1 Title bar. The title bar displays a customized tile title and the Maximize (  ) and Restore (  ) buttons.
- 2 The tile control panel. For more information, see “The Tile Control Panel” on page 235.
- 3 Content area. The tile data appears in this area.

## The Tile Control Panel

You can customize whether the tile control panel is open by default. Users can close and open the tile control panel by clicking the tile control panel arrow. Depending on the type of tile, one or more of the following features appear in the tile control panel:



- 1 The tile toolbar. The toolbar provides the Print and Refresh icons. (The trend analysis tile includes additional icons.) You can customize whether the toolbar is available to business users.
- 2 The scorecard name. Click this link to open the scorecard in Strategy Management Builder. You can customize whether the scorecard name link is available to business users.
- 3 Information icon. Click this icon to view a short tip or other information about the tile. This information can include which tiles are synchronized with the scorecard hierarchy and whether the tile uses the global date.

- 4 Date. You can enable business users to change the date. In this example, the date feature is disabled.
- 5 **Element type** list. Business users can use this list to control their view of the tile data. You customize whether this list is available for business users, what selections are available in the list, and which selection is the default.
- 6 **Columns** list. Business users can use this list to control their view of the tile data. You customize whether this list is available for business users, what selections are available in the list, and which selection is the default.



## Chapter 27

# Editing a Strategy Management Enhanced Portlet and Its Tiles

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---

## Edit the SAS Strategy Management Enhanced Portlet

When you edit the SAS Strategy Management enhanced portlet, you can add tiles to display in the portlet and specify global settings that affect the tiles. To edit the SAS Strategy Management enhanced portlet:

1. Click  in the portlet. The Edit Strategy Management Portlet page appears.

**Edit Strategy Management Portlet**

**Identification**

Name:

Description:

Keywords:

Portlet height (pixels):

**Project and Date**

Project:

☐ Display project name

☐ Enable the link that opens Strategy Management

☒ Disable the link that opens Strategy Management

☒ Current date

☐ Relative period:  Type:

☐ Use this date:

☒ Enable users to change the global data

☐ Enable users to suggest elements

**Tiles**

**Available tiles:**

- Table View
- Aggregate View
- Association View
- Trend Analysis
- Gauge View
- Scorecard Hierarchy

**Selected files:**

- Table View
- Aggregate View
- Trend Analysis
- Scorecard Hierarchy

**Default scorecard**

**Scorecards**

- Basketball
  - Basketball Scorecard
    - 1974 Scorecard
    - 1983 Scorecard
    - 2001 Scorecard

2. In the **Identification** section, complete the following steps:

- Edit the portlet name.
- Edit the portlet description. A description can make similar portlets easier to identify.
- Edit the keywords. Keywords can make a portlet search successful. Make sure you develop a list of keywords and use the keywords consistently.
- Specify the height of the portlet, in pixels.

**TIP** If you want the portlet to contain several tiles, be sure to provide enough height to view the tiles easily.

3. In the **Project and Date** section, complete the following steps:

- In the **Project** list, select the project that you want to view in the portlet.  
*Note:* You must specify the project before you can define any tiles.
- To display the name of the project in the portlet toolbar, select **Display project name**. By default, the project name is a link that opens the project in Strategy

Management Builder. To disable this link, select **Disable the link that opens Strategy Management**.

- c. To specify the date to use in the portlet, do one of the following:
  - To specify the current date, select **Current date**.
  - To specify a date relative to the current date, select **Relative period**, type or select a value in the field, and then select a value from the **Type** list.

**TIP** Negative values indicate a date in the past. Positive values indicate a date in the future. For example, if you select **–1** and specify the period type of **Month**, the portlet uses a date that is one month in the past relative to the current date.

- To always use a specified date, select **Use this date**. Then enter a date in the field or click  to choose a date from the calendar.
- d. Select **Enable users to change the global date** to give business users a way to change the global date while they are working in the portlet. The date change does not persist from one session to the next.
  - e. Select **Enable users to suggest elements** to give business users a way to communicate suggestions to you about adding elements to the strategy.

*Note:* When you select this check box, the  button appears in the portlet control panel. This button opens the **Suggest New Elements** list.

*Note:* You must also select **Allow Suggested Elements** in the template that is associated with the project that you are using to create this portlet.

4. In the **Tiles** section, complete the following steps to specify which tiles to add, as well as the properties for each tile that you add.

*Note:* You must specify a project in the **Project and Date** section before you can specify tiles.

- a. Select a tile from the **Available tiles** list, and click  to add the tile to the **Selected tiles** list.

*Note:* To add all tile types to the portlet, click .

*Note:* You can add multiple versions of the same tile type to your portlet except for the scorecard hierarchy tile. You can add only one scorecard hierarchy tile to a portlet.

- b. To change the name of a tile, double-click the tile in the **Selected tiles** list, and enter the new name.
- c. To change the order of a tile, drag the tile up or down to its new location in the **Selected tiles** list.
- d. If you want to delete a tile, select the tile in the **Selected tiles** list, and click .
 

*Note:* To remove all the tiles in the **Selected tiles** list, click .
- e. To edit the properties for a tile, select the tile in the **Selected tiles** list, and select **Edit Tile Properties**. For more information, see the following sections:

| Tile      | Section                                                               |
|-----------|-----------------------------------------------------------------------|
| Table     | <a href="#">“Edit the Table View Tile Properties” on page 241</a>     |
| Aggregate | <a href="#">“Edit the Aggregate View Tile Properties” on page 244</a> |

| Tile                | Section                                                                                                                                                                                                                             |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Association         | <a href="#">“Edit the Association View Tile Properties” on page 246</a>                                                                                                                                                             |
| Diagram             | <a href="#">“Edit the Diagram View Tile Properties” on page 248</a>                                                                                                                                                                 |
| Gauge               | <a href="#">“Edit the Gauge View Tile Properties” on page 250</a>                                                                                                                                                                   |
| Trend analysis      | <a href="#">“Edit the Trend Analysis Tile Properties” on page 253</a>                                                                                                                                                               |
| Scorecard hierarchy | <a href="#">“The Scorecard Hierarchy Tile and Synchronization” on page 241</a><br><i>Note:</i> The scorecard hierarchy tile does not have any properties that can be edited. The <b>Edit Tile Properties</b> button is unavailable. |

- f. From the **Default scorecard** tree, select the scorecard that you want to use as the default.
5. Click **Save** to save the changes to the portlet properties and exit the page. Click **Cancel** to exit the page without saving any changes, including any changes to the tile properties.

You can make additional changes to the SAS Strategy Management enhanced portlet from within the portlet itself. For more information, see [“Configure the Tile Layout in the Enhanced Portlet” on page 255](#).

---

## Edit Tiles for the SAS Strategy Management Enhanced Portlet

### Overview

When you edit tile properties, you can configure the following tile features:

- whether table, aggregate, or association tile data is synchronized with any selections that users make when they are navigating in the scorecard hierarchy tile
- the date that is used by the tile
- the exploration controls that are available for your business user, as well as whether the tile control panel and toolbar are displayed
- which buttons are displayed in the tile data
- other tile-specific features

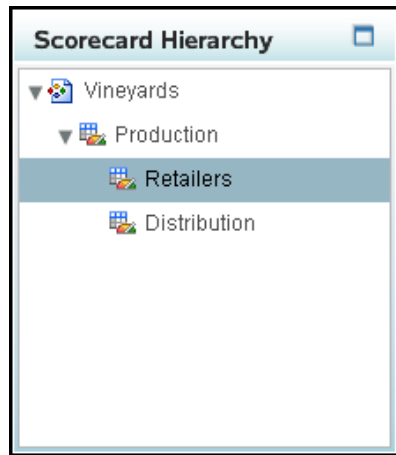
To understand what you can configure and customize, you must understand the features of a tile. For detailed descriptions, see [“Your First Look at a Tile” on page 234](#).

### Global Date and Local Date Options

You can customize whether a tile uses its own local date setting or the global date setting from the portlet. If you set a tile to use the global date setting, all other date settings for that tile are disabled and business users cannot change the date setting when they are exploring the data in that tile.

## The Scorecard Hierarchy Tile and Synchronization

If you add a scorecard hierarchy tile to the SAS Strategy Management portlet, you can customize any table tile, aggregate tile, association tile, or gauge tile to dynamically synchronize its data with the current selection in the scorecard hierarchy tile. For example, suppose you have a table that displays the data for Distribution, but you want to view data for another scorecard. In the following scorecard hierarchy tile, click **Retailers** to automatically display the data for Retailers:



In order for a tile to synchronize with the scorecard hierarchy tile, you must add a scorecard hierarchy tile to the portlet. The scorecard hierarchy tile does not have any properties to edit so the **Edit Tile Properties** button is unavailable. However, you must edit the properties for each tile that you want to be synchronized with the scorecard hierarchy tile. For example, if you want a table tile to synchronize with the scorecard hierarchy, you must edit the table tile properties. In the tile properties, click **Synchronize this tile with the scorecard hierarchy tile**.

*Note:* This option is available only for table tiles, aggregate tiles, association tiles, and gauge tiles.

*Note:* A portlet can include only one scorecard hierarchy tile.

**TIP** You can create two identical tiles with the same data, but then customize only one to synchronize. If you synchronize only one tile, business users have a way to compare data between two scorecards.

## Edit the Table View Tile Properties

*Note:* To edit tile properties, you must edit the Strategy Management enhanced portlet properties. Select the tile to edit in the **Selected tiles** list, and click **Edit Tile Properties**.

**Table View**

**Scorecard**

Scorecards

- Basketball
  - Basketball Scorecard
    - 1974 Scorecard
    - 1983 Scorecard
    - 2001 Scorecard

☒ Synchronize this tile with the scorecard hierarchy tile ?

☒ Display scorecard name

☒ Enable the link that opens Strategy Management

☐ Disable the link that opens Strategy Management

**Data**

☒ Current date

☐ Relative period: 0 Type: Day

☐ Use this date: [Calendar Icon]

☒ Enable users to change the date

☒ Use global data settings ?

**Exploration Controls**

If you want users to explore their data, specify the controls to display in the tile bar and the default settings.

Default element type: Mission

☐ Display element type control

Default column selection: Default (none)

☐ Display column selection control

Define Choices...

**Additional Display Items**

Thresholds: (none)

Other:

- ☐ Trend chart
- ☐ Period
- ☐ Comments
- ☐ Comment alerts

Tile control panel:

- ☐ Display an open tile control panel by default
- ☒ Display the toolbar in the tile control panel

OK Cancel

To edit the table view tile:

- In the **Scorecard** section, specify the applicable options:
  - If you do not want the data in this tile to be synchronized with the scorecard hierarchy tile, select the scorecard that you want to view in this tile from the **Scorecard** tree.
  - If you do want the data in this tile to be synchronized with any tiles that you selected in the scorecard hierarchy tile, select **Synchronize this tile with the scorecard hierarchy tile**. For more information, see [“The Scorecard Hierarchy Tile and Synchronization” on page 241](#).
  - If you want the scorecard name to appear in the tile control panel, select **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, select **Disable the link that opens Strategy Management**.
- In the **Date** section, specify the applicable options:
  - To specify the current date, select **Current date**.
  - To specify a date relative to the current date, select **Relative period**, enter or select a value in the field, and then select a value from the **Type** list.
  - To always use a specified date, select **Use this date**. Then enter a date in the field or click to choose a date from the calendar.
  - To give business users a way to change the date while they are working in the tile, select **Enable users to change the date**. The date change does not persist from one session to the next.
  - If you want the tile to use the date settings that you specified on the Strategy Management portlet Properties page, select **Use global date settings**.

*Note:* If you select this option, all other date settings for this tile are disabled. For more information, see [“Global Date and Local Date Options”](#) on page 240.

3. In the **Exploration Controls** section, you can specify whether lists of selections are available for business users to control their view of the tile data. The lists appear in the tile control panel.

- In the **Default element type** list, select the element type that you want to appear as the default selection in the **Element type** list in the tile control panel.

*Note:* If you do not select the **Display element type control** option, the default element type selection is the only element type that is available for this tile.

- Select **Display element type control** to display the **Element type** list in the tile control panel.
- In the **Default column selection** list, select the column that you want to appear as the default selection in the **Columns** list in the tile control panel.

*Note:* If you do not select the **Display column selection control** option, the default column selection is the only column selection that is available for this tile.

- If you want the **Columns** list to appear in the tile control panel for business users, select **Display column selection control**.
- Click **Define Choices** to open the Define Choices window. Expand the element types to view the columns that are available for you to select. In the tree, you can select the choices that you want the lists to provide to your business user.

4. In the **Additional Display Items** section, specify the applicable options:

- In the **Thresholds** list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or no indicators to appear in the tile content.
- In the **Other** group, select any other indicators that you want to appear in the tile.

| Indicator       | Icon                                                                                | Description                                                                                                                                                                                                                            |
|-----------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trend chart     |  | Opens a noninteractive trend chart view of the data. This option uses the date range that is specified in the project options.<br><i>Note:</i> Do not confuse the noninteractive trend chart with the interactive trend analysis tile. |
| Period          | None                                                                                | Displays the period of time for which the element data was collected.                                                                                                                                                                  |
| Comments action |  | Provides a way for users to make comments about the data.                                                                                                                                                                              |
| Comments alerts |  | If comment alerts are set, indicates that comments are available about the data.                                                                                                                                                       |

- If you want the tile control panel open by default, select **Display an open tile control panel by default**. Business users can collapse the tile control panel if they do not want to view it.

- If you want the toolbar to appear in the tile control panel, select **Display the toolbar in the tile control panel**.

*Note:* If you do not display the toolbar, business users do not have access to these tools, including the ability to print.

5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### Edit the Aggregate View Tile Properties

*Note:* To edit tile properties, you must edit the Strategy Management enhanced portlet properties. Select the tile to edit in the **Selected tiles** list, and click **Edit Tile Properties**.

The screenshot shows the 'Aggregate View' dialog box with the following sections and options:

- Scorecard**
  - Scorecards**
    - Basketball
      - Basketball Scorecard
        - 1974 Scorecard
        - 1983 Scorecard
        - 2001 Scorecard
  - ☒ Synchronize this tile with the scorecard hierarchy tile
  - ☒ Display scorecard name
    - ☒ Enable the link that opens Strategy Management
    - ☐ Disable the link that opens Strategy Management
- Date**
  - ☒ Current date
  - ☐ Relative period: 0 Type: Day
  - ☐ Use this date: [calendar icon]
  - ☒ Enable users to change the date
  - ☒ Use global date settings
- Exploration Controls**
  - Default element type: Mission
  - ☒ Display element type control
  - Default column selection: Default (none)
  - ☒ Display column selection control
  - Define Choices...
- Additional Display Items**
  - Thresholds: (none)
  - Tile control panel:
    - ☐ Display an open tile control panel by default
    - ☒ Display the toolbar in the tile control panel
  - View by:
    - ☒ Metric attribute
    - ☐ Scorecard

Buttons: OK, Cancel

To edit the aggregate view tile:

1. In the **Scorecard** section, specify the applicable options:
  - If you do not want the data in this tile to be synchronized with the scorecard hierarchy tile, select the scorecard that you want to view in this tile from the **Scorecard** tree.
  - If you do want the data in this tile to be synchronized with any tiles that you selected in the scorecard hierarchy tile, select **Synchronize this tile with the**



**scorecard hierarchy tile.** For more information, see [“The Scorecard Hierarchy Tile and Synchronization” on page 241.](#)

- If you want the scorecard name to appear in the tile control panel, select **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, select **Disable the link that opens Strategy Management**.
2. In the **Date** section, specify the applicable options:
- To specify the current date, select **Current date**.
  - To specify a date relative to the current date, select **Relative period**, enter or select a value in the field, and then select a value from the **Type** list.
  - To always use a specified date, select **Use this date**. Then enter a date in the field or click  to choose a date from the calendar.
  - To give business users a way to change the date while they are working in the tile, select **Enable users to change the date**. The date change does not persist from one session to the next.
  - If you want the tile to use the date settings that you specified on the Strategy Management portlet Properties page, select **Use global date settings**.
- Note:* If you select this option, all other date settings for this tile are disabled. For more information, see [“Global Date and Local Date Options” on page 240.](#)
3. In the **Exploration Controls** section, you can specify whether lists of selections are available for business users to control their view of the tile data. The lists appear in the tile control panel.
- In the **Default element type** list, select the element type that you want to appear as the default selection in the **Element type** list in the tile control panel.
- Note:* If you do not select the **Display element type control** option, the default element type selection is the only element type that is available for this tile.
- Select **Display element type control** to display the **Element type** list in the tile control panel.
  - In the **Default column selection** list, select the column that you want to appear as the default selection in the **Columns** list in the tile control panel.
- Note:* If you do not select the **Display column selection control** option, the default column selection is the only column selection that is available for this tile.
- If you want the **Columns** list to appear in the tile control panel for business users, select **Display column selection control**.
  - Click **Define Choices** to open the Define Choices window. Expand the element types to view the columns that are available for you to select. In the tree, you can select the choices that you want the lists to provide to your business user.
4. In the **Additional Display Items** section, specify the applicable options:
- In the **Thresholds** list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or no indicators to appear in the tile content.
  - If you want the tile control panel open by default, select **Display an open tile control panel by default**. Business users can collapse the tile control panel if they do not want to view it.

- If you want the toolbar to appear in the tile control panel, select **Display the toolbar in the tile control panel**.

*Note:* If you do not display the toolbar, business users do not have access to these tools, including the ability to print.

- Select whether the default view of the aggregate data is displayed by metric attribute or scorecard.
5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### Edit the Association View Tile Properties

*Note:* To edit tile properties, you must edit the Strategy Management enhanced portlet properties. Select the tile to edit in the **Selected tiles** list, and click **Edit Tile Properties**.

The screenshot shows the 'Association View' dialog box with the following sections and options:

- Scorecard**
  - Scorecards**
    - Basketball
      - Basketball Scorecard
        - 1974 Scorecard
        - 1983 Scorecard
        - 2001 Scorecard
  - ☒ Synchronize this tile with the scorecard hierarchy tile ?
  - ☒ Display scorecard name
    - ☒ Enable the link that opens Strategy Management
    - ☐ Disable the link that opens Strategy Management
- Date**
  - ☒ Current date
  - ☐ Relative period: 0 Type: Day
  - ☐ Use this date: [calendar icon]
  - ☒ Enable users to change the date
  - ☒ Use global date settings ?

To edit the association view tile:

1. In the **Scorecard** section, specify the applicable options:
  - If you do not want the data in this tile to be synchronized with the scorecard hierarchy tile, select the scorecard that you want to view in this tile from the **Scorecard** tree.

- If you do want the data in this tile to be synchronized with any tiles that you selected in the scorecard hierarchy tile, select **Synchronize this tile with the scorecard hierarchy tile**. For more information, see [“The Scorecard Hierarchy Tile and Synchronization” on page 241](#).
  - If you want the scorecard name to appear in the tile control panel, select **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, select **Disable the link that opens Strategy Management**.
2. In the **Date** section, specify the applicable options:
- To specify the current date, select **Current date**.
  - To specify a date relative to the current date, select **Relative period**, enter or select a value in the field, and then select a value from the **Type** list.
  - To always use a specified date, select **Use this date**. Then enter a date in the field or click  to choose a date from the calendar.
  - To give business users a way to change the date while they are working in the tile, select **Enable users to change the date**. The date change does not persist from one session to the next.
  - If you want the tile to use the date settings that you specified on the Strategy Management portlet Properties page, select **Use global date settings**.
- Note:* If you select this option, all other date settings for this tile are disabled. For more information, see [“Global Date and Local Date Options” on page 240](#).
3. In the **Exploration Controls** section, you can specify whether lists of selections are available for business users to control their view of the tile data. The lists appear in the tile control panel.
- In the **Association** list, select the association that you want to appear as the default selection in the **Association** list in the tile control panel.
  - Click **Display association control** to display the **Association** list in the tile control panel.
  - In the **Default column selection** list, select the column that you want to appear as the default selection in the **Columns** list in the tile control panel.
- Note:* If you do not select the **Display column selection control** option, the default column selection is the only column selection that is available for this tile.
- If you want the **Columns** list to appear in the tile control panel for business users, select **Display column selection control**.
  - Click **Define Choices** to open the Define Choices window. Expand the element types to view the columns that are available for you to select. In the tree, you can select the choices that you want the lists to provide to your business user.
4. In the **Additional Display Items** section, specify the applicable options:
- In the **Thresholds** list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or no indicators to appear in the tile content.
  - In the **Other** group, select any other indicators that you want to appear in the tile.

| Indicator       | Icon                                                                              | Description                                                                                                                                                                                                                            |
|-----------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trend chart     |  | Opens a noninteractive trend chart view of the data. This option uses the date range that is specified in the project options.<br><i>Note:</i> Do not confuse the noninteractive trend chart with the interactive trend analysis tile. |
| Comments action |  | Provides a way for users to make comments about the data.                                                                                                                                                                              |
| Comments alerts |  | If comment alerts are set, indicates that comments are available about the data.                                                                                                                                                       |

- If you want the tile control panel open by default, select **Display an open tile control panel by default**. Business users can collapse the tile control panel if they do not want to view it.
- If you want the toolbar to appear in the tile control panel, select **Display the toolbar in the tile control panel**.

*Note:* If you do not display the toolbar, business users do not have access to these tools, including the ability to print.

5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Edit the Diagram View Tile Properties**

*Note:* To edit tile properties, you must edit the Strategy Management enhanced portlet properties. Select the tile to edit in the **Selected tiles** list, and click **Edit Tile Properties**.

**Diagram View**

**Scorecard**

**Scorecards**

▶ LE\_Workflow

☐ Synchronize this tile with the scorecard hierarchy tile ?

☐ Display scorecard name

☐ Enable the link that opens Strategy Management

☒ Disable the link that opens Strategy Management

☐ Enable users to select the diagram to view

Diagram: [v]

Zoom: 100% [v]

**Date**

☒ Current date

☐ Relative period: 0 [v] Type: Day [v]

☐ Use this date: [v] [calendar icon]

☒ Enable users to change the date

☐ Use global date settings ?

OK Cancel

To edit the Diagram View tile:

1. In the **Scorecard** section, specify the applicable options:
  - If you do not want the data in this tile to be synchronized with the scorecard hierarchy tile, select the scorecard that you want to view in this tile from the **Scorecard** tree.
  - If you do want the data in this tile to be synchronized with any tiles that you selected in the scorecard hierarchy tile, select **Synchronize this tile with the scorecard hierarchy tile**. For more information, see [“The Scorecard Hierarchy Tile and Synchronization” on page 241](#).
  - If you want the scorecard name to appear in the tile control panel, select **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, select **Disable the link that opens Strategy Management**.
2. In the **Date** section, specify the applicable options:
  - To specify the current date, select **Current date**.
  - To specify a date relative to the current date, select **Relative period**, enter or select a value in the field, and then select a value from the **Type** list.
  - To always use a specified date, select **Use this date**. Then enter a date in the field or click [calendar icon] to choose a date from the calendar.
  - To give business users a way to change the date while they are working in the tile, select **Enable users to change the date**. The date change does not persist from one session to the next.

- If you want the tile to use the date settings that you specified on the Strategy Management portlet Properties page, select **Use global date settings**.

*Note:* If you select this option, all other date settings for this tile are disabled. For more information, see [“Global Date and Local Date Options” on page 240](#).

3. In the **Diagram** section, specify the applicable options:
  - To give business users a way to change the diagram while they are working in the tile, select **Enable users to select the diagram to view**. The diagram selection does not persist from one session to the next.
  - In the **Diagram** list, select the diagram that you want to display in the tile.
  - In the **Zoom** list, select the percentage of magnification that you want to use when the diagram appears in the tile.
4. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Edit the Gauge View Tile Properties**

*Note:* To edit tile properties, you must edit the Strategy Management enhanced portlet properties. Select the tile to edit in the **Selected tiles** list, and click **Edit Tile Properties**.

**Gauge View**

**Date**

☐ Current date  
☐ Relative period:  Ty...   
☐ Use this date:   
☒ Enable users to change the date  
☒ Use global date settings

**Element type**

Element type:   
 Group by attribute:   
 Default attribute val...:   
☐ Show only the default attribute val...  
 Threshold filter:

**Gauges**

Gauge type:   
 Size:   
 Display:   
 Primary indicator:   
 Secondary indicator:   
 Skin:

**Additional Display Items**

Specify whether to display the following options:

Thresholds:

Other:

☐ Range values  
☐ Metric values  
☐ Comments  
☐ Trend chart  
☐ Append scorecard name to element name  
☐ Display scorecard name  
☐ Enable the link that opens Strategy Management  
☒ Disable the link that opens Strategy Management  
☐ Display an open tile control panel by default  
☐ Display the toolbar in the tile control panel

**Elements**

☐ Show all elements and synchronize this tile with the scorecard hierarchy tile

| Scorecard | Element Type | Element |
|-----------|--------------|---------|
|           |              |         |
|           |              |         |
|           |              |         |
|           |              |         |
|           |              |         |
|           |              |         |

OK Cancel

To edit the gauge view tile:

- In the **Date** section, specify the applicable options:
  - To specify the current date, select **Current date**.
  - To specify a date relative to the current date, select **Relative period**, enter or select a value in the field, and then select a value from the **Type** list.
  - To always use a specified date, select **Use this date**. Then enter a date in the field or click to choose a date from the calendar.
  - To give business users a way to change the date while they are working in the tile, select **Enable users to change the date**. The date change does not persist from one session to the next.

- If you want the tile to use the date settings that you specified on the Strategy Management portlet Properties page, select **Use global date settings**.

*Note:* If you select this option, all other date settings for this tile are disabled. For more information, see “[Global Date and Local Date Options](#)” on page 240.

2. In the **Element type** section, complete the following steps:

- In the **Element type** list, select the element type that you want the gauge to use.
- (Optional) In the **Group by attribute** list, select the attribute to use for grouping your gauge data.

*Note:* If you have specified an association between the element type that you selected in step 2a and another element type, then the second element type is called an attribute of the first element type. You can choose to display your gauge data by this attribute.

- (Optional) In the **Default attribute value** list, select the default value to use for the attribute that you selected in the previous step.

*Note:* The attribute that you selected in step 2b is an element type. The values in the **Default attribute value** list are elements that are defined by this element type.

- (Optional) Click **Show only the default attribute value**.
- In the **Threshold filter** list, specify how you want to filter the thresholds.

3. In the **Gauges** section, complete the following steps:

- In the **Gauge type** list, select the type of gauge that you want to display in the tile.

*Note:* The options that are available in this section vary depending on the gauge type that you selected.

- In the **Size** list, select whether you want the gauge to be small, medium, or large in size.

- In the **Display** list, further refine how you want the gauges to appear in the tile.

*Note:* The available selections vary depending on the gauge type that you selected. For example, for most gauge types, you can select whether the gauges appear in vertical or horizontal layout. However, for speedometers, this selection controls whether the speedometer is a quarter circle, half circle, three-quarter circle, or full circle.

- In the **Primary indicator** list, select the element that you want to display as the primary indicator.

*Note:* The primary and secondary indicators must match the range definitions that you set when you created a range in Strategy Management Builder.

- In the **Secondary indicator** list, select the element that you want to display as the secondary indicator.
- In the **Skin** list, select the skin or display theme that you want the gauge to use.

4. In the **Additional Display Items** section, specify the applicable options:

- In the **Thresholds** list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or no indicators to appear in the tile content.



- If you want the gauge to display the lower and upper range values of the gauge, select **Range values**.

*Note:* You define these values in Strategy Management Builder when you define the range.

- If you want the primary indicator value to appear with the gauge, select **Metric values**.
- If you want users to view comments and make comments about the gauge, select **Comments**.
- If you want to provide a noninteractive trend chart view of the data, select **Trend chart**. This option uses the date range that is specified in the project options.

*Note:* Do not confuse the noninteractive trend chart with the interactive trend analysis tile.

- If you want the scorecard and element names to be appended in the gauge, select **Append scorecard name to element name**.
- If you want the tile control panel to be open by default, select **Display an open tile control panel by default**. The user can collapse the tile control panel if they do not want to view it.
- If you want the tile toolbar to appear in the tile, click **Display the toolbar in the tile control panel**.

*Note:* If you do not display the toolbar, business users do not have access to these tools, including the ability to print.

- If you want the scorecard name to appear in the tile control panel, select **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in Strategy Management Builder. To disable this link, select **Disable the link that opens Strategy Management**.

5. In the **Elements** section, make the applicable selections:

- If you want all elements to appear in the tile, and you want the tile to synchronize data to synchronize with the scorecard hierarchy tile, select **Show all elements and synchronize this tile with the scorecard hierarchy tile**.
- If you want only some elements to appear in the tile, click **Select Elements**. In the Select Elements window, make your selections and click **OK**.

To remove an element, select the check box in the element row and click **Remove Selected Elements**. To remove all elements from the table, click the check box in the table heading.

6. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

### **Edit the Trend Analysis Tile Properties**

*Note:* To edit tile properties, you must edit the Strategy Management enhanced portlet properties. Select the tile to edit in the **Selected tiles** list, and click **Edit Tile Properties**.

**Trend Analysis**

**Date Range**

Start date: 09/06/2010 End date: 09/06/2011

☒ Enable users to change the date

**Additional Display Items**

Tile control panel: ☐ Display an open tile control panel by default

☐ Display the toolbar in the tile control panel

**Global Options**

☐ Grid lines

☒ Display legend

☒ Across ☐ Down

Location: Upper right

**Graph Options**

Graph type: Line

Style: Curve

Dash type: Solid

☐ Break line drawing for missing data values in line graphs

Color: [Black]

☒ Show markers

Marker: Asterisk

Line weight: 1

☐ Show data labels

☐ Show data tips

OK Cancel

To edit the trend analysis tile:

1. In the **Date Range** section, specify the start date and end date of the trend.
  - a. To specify the start date, type a date in the **Start date** field or click to choose a date from the calendar.
  - b. To specify the end date, type a date in the **End date** field or click to choose a date from the calendar.
  - c. (Optional) To give business users a way to change the date while they are working in the tile, select **Enable users to change the date**. The date change does not persist from one session to the next.
2. In the **Additional Display Items** section, specify the applicable options:
  - If you want the tile control panel to be open by default, select **Display an open tile control panel by default**. The user can collapse the tile control panel if they do not want to view it.
  - If you want the tile toolbar to appear in the tile, select **Display the toolbar in the tile control panel**.

*Note:* If you do not display the toolbar, business users do not have access to these tools, including the ability to print.

3. In the **Graph Options** section, specify how you want the graph to be drawn:
  - a. In the **Graph type** list, select the type of graph that you want to display in the trend analysis. Available selections are **Line**, **Band**, **Bar**, and **Scatter**.
  - b. Select the applicable options for the graph type that you chose. Options vary depending on the graph type that you selected.

| Graph Type | Available Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All types  | <ul style="list-style-type: none"> <li>Click the <b>Color</b> icon to select the color of the graph type.</li> <li>If you want each data value to be labeled in the graph, select <b>Show data labels</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Line       | <ul style="list-style-type: none"> <li>In the <b>Style</b> list, select the style of line that you want to use.</li> <li>In the <b>Dash type</b> list, select the type of dash that you want to use to form the line.</li> <li>If you want the line that is drawn in the graph to break each time a data value is missing, select <b>Break line drawing for missing data values in line graphs</b>.</li> <li>In the <b>Line weight</b> list, select the line thickness to use for the line graph.</li> <li>If you want data tips to appear in the line graph, select <b>Show data tips</b>.</li> <li>If you want markers to appear in the graph, select <b>Show markers</b>. You can select the type of marker that you want the graph to use from the <b>Marker</b> list.</li> </ul> |
| Scatter    | In the <b>Marker</b> list, select the type of marker that you want the graph to use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

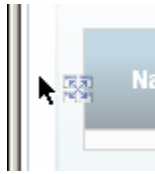
4. In the **Global Options** section, specify the applicable options:
  - If you want grid lines to appear in the trend analysis, select **Grid lines**.
  - If you want to display the legend in the trend analysis, select **Display legend**. When you choose to display the legend, you can also specify whether the legend appears across the width of the tile or is displayed along the height of the tile. In the **Location** list, select the location in the tile to display the legend.
5. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

---

## Configure the Tile Layout in the Enhanced Portlet

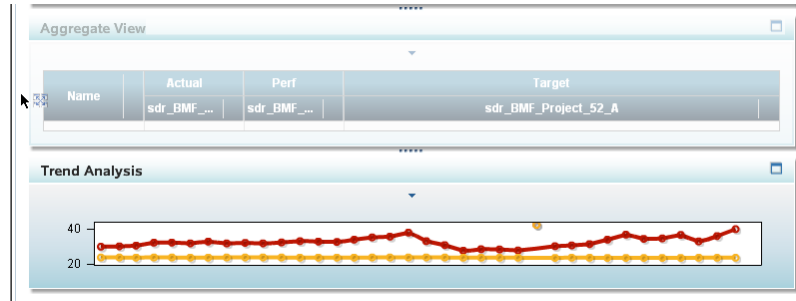
After you create the Strategy Management enhanced portlet and its tiles, you can refine the tile layout in the following ways:

- Resize a tile. Hover on the tile border to display handles. Click a handle and drag to resize the tile.
- Rearrange the tiles in columns or rows. Click the title bar of a tile and drag it within the portlet. A movement icon appears with the mouse pointer, which indicates that you are dragging a tile within the portlet. The following partial display shows the mouse pointer and the accompanying movement icon:

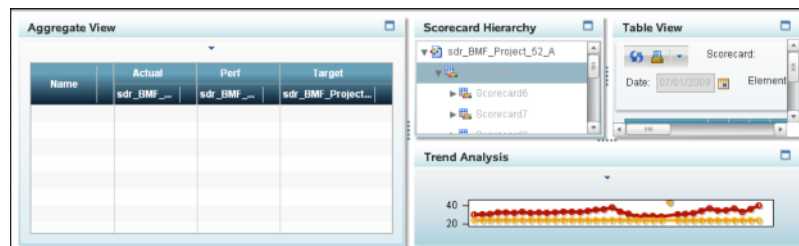


As you drag the tile, gray boxes guide you to rows and columns into which you can drop the tile. When you drop the tile, the other tiles in the portlet automatically accommodate the dropped tile.

For example, if you want to move a tile to create a column on the left side of the portlet, drag the tile left border of the portlet.



Drop the tile near the border, with the mouse pointer hovering within the tile that is currently located in that area. The affected tiles are rearranged to create a column.



**TIP** If you drag the tile too close to the portlet border or outside the border, the movement icon disappears, which indicates that you cannot drop the tile in that location. If you drag the tile into the portlet toolbar, an X in a red circle appears on the movement icon.

- Resize a column. Hover between two columns to display handles. Resize the column width for optimal display of strategy content.
- Maximize a tile. Click the Maximize button on the title bar. The tile is sized to be as large as possible to fill the portlet, and the other tiles disappear. To return all of the tiles to their previous sizes and locations, click the Restore button in the tile that you maximized.

When your tile layout is complete, click  to save the layout configuration. The configured layout is used the next time the portlet is viewed.

## Delete a Tile

To delete a tile in the SAS Strategy Management enhanced portlet:

1. Click  in the portlet. The Edit Strategy Management Portlet page appears.

2. In the **Tiles** section, select the tile to delete in the **Selected tiles** list and click .

*Note:* To remove all the tiles in the **Selected tiles** list, click .

3. Click **Save** to save the changes to the portlet properties and exit the page.



## Chapter 28

# Editing Classic-Style Portlets

---

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---

## Overview

The Strategy Management enhanced portlet provides tiles that have the same functionality as the classic-style portlets described in this section. The tiles provide enhanced functionality and interactive features for business users. For more information about the enhanced portlet, its tiles, and their enhanced features, see [Chapter 27](#), “Editing a Strategy Management Enhanced Portlet and Its Tiles,” on page 237.

*Note:* For information about editing the data-entry portlet, see “Edit a Performance Data-Entry Portlet” on page 305.

---

## Edit a Performance Table Portlet

To edit the properties of a Performance Table portlet, complete the following steps:

1. In the portlet, click . The Edit Performance Table Portlet page appears.

Edit Performance Table Portlet • Table portlet
sas

Define the properties of a Performance Table portlet.  
» Read more...

General

\* Portlet name: Table portlet  
Description:  
Keywords: ☐ Allow Suggested Elements

View Selection

Template: LE\_BMF54template  
Project: LE\_BMF54project  
Scorecard:

LE\_BMF54project

Parent1

child\_a
child\_b

Parent2

Element type: Measures  
Column selection: All Metric Attributes

Other Options

Rows and Columns

Specify number of rows and columns.  
Rows: 10 (min 1 - max 100)  
Columns: 5 (min 1 - max 20)

Date

Select the date.  
☒ Current date  
☐ Relative period: (Example: 1, -1)  
Use relative period type:  
☐ Always show this date:

Portlet Height

Specify the vertical size of the portlet.  
Height: 250 (100 to 1500 pixels)

Icons

Select those icons you want to display.  
Threshold icon: None  
☒ Trend Analysis  
☒ Period  
☒ Comments  
☒ Comment Alert

Project and Scorecard Link

☒ Display project name  
☒ Enable the link that opens Strategy Management  
☐ Disable the link that opens Strategy Management  
☒ Display scorecard name  
☒ Enable the link that opens Strategy Management  
☐ Disable the link that opens Strategy Management

Save Cancel

2. In the **General** section, complete the following steps:
  - a. Edit the portlet name, description, or keywords.
  - b. Click **Allow Suggested Elements** to give business users a way to communicate to you any suggestions about adding elements to the strategy. For information about this setting, see [“Create a Template” on page 42](#).
3. In the **View Selection** section, complete the following steps to specify the parameters that define the table to display:
  - a. From the **Template** list, select a template.
  - b. From the **Project** list, select a project.



- c. From the **Scorecard** list, select a scorecard or a project.
  - d. From the **Element type** list, select an element type.
  - e. From the **Column selection** list, select a column selection.
4. In the **Other Options** section, complete the following steps:
    - a. To specify the number of rows and columns to display in the portlet, in the **Rows and Columns** section, type values in the **Rows** field and the **Columns** field
    - b. To specify the date, in the **Date** section, complete one of the following steps:
      - To specify the current date, click **Current date**.
      - To specify a date relative to the current date, click **Relative period**, type a value in the field, and then select a value from the **Use relative period type** list.
      - To always show a specified date, click **Always show this date**. Then type a date in the field or click  to choose a date from the calendar.
  5. In the **Icons** section, complete the following steps to specify which threshold icons appear in the aggregate table:
    - a. Select an icon from the **Threshold icon** list.
    - b. (Optional) Select one or more additional icon to display.

*Note:* Selections vary depending on the portlet type.

| Icon           | Description                                                                                                                                                                                                                                       |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trend analysis | <p>Opens a noninteractive trend chart view of the data. This option uses the date range that is specified in the project options.</p> <p><i>Note:</i> Do not confuse the noninteractive trend chart with the interactive trend analysis tile.</p> |
| Comment        | Provides a way for users to make comments about the data.                                                                                                                                                                                         |
| Comment alert  | If comment alerts are set, indicates that comments are available about the data.                                                                                                                                                                  |
| Period         | Displays the period of time for which the element data was collected.                                                                                                                                                                             |

6. To specify whether to link to the affected project or scorecard, in the **Project and Scorecard Link** section, complete the following steps:
  - To display the name of the affected project, click **Display project name**. By default, the project name is a link that opens the project in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
  - To display the name of the affected scorecard, click **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
7. In the **Portlet Height** section, enter the height that you want to use for the portlet.

**TIP** The Firefox web browser cannot automatically resize the height of the portlet. Make sure that you specify a height that accommodates the height of the content that you want to display in this portlet.

8. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

---

## Edit a Performance Aggregate Table Portlet

To edit the properties of a Performance Aggregate Table portlet, complete the following steps:

1. In the portlet, click . The Edit Performance Aggregate Table Portlet page appears.

Edit Performance Aggregate Table Portlet
Aggregate portlet
sas

Define the properties of a Performance Aggregate Table portlet.  
[» Read more...](#)

General

\*Portlet name:   
Description:   
Keywords:  ☐ Allow Suggested Elements

View Selection

Template:   
Project:   
Scorecard: 

MT22Oct12

DE Test

Parent1

Child1

Child2

Scorecard - 1

STM Fns

Element type:   
Column selection:

Other Options

Rows and Columns

Specify number of rows and columns.  
Rows:  (min 1 - max 100)  
Columns:  (min 1 - max 20)

Date

Select the date.  
☒ Current date  
☐ Relative period:  (Example: 1, -1)  
Use relative period type:   
☐ Always show this date:

Portlet Height

Specify the vertical size of the portlet.  
Height:  (100 to 1500 pixels)

View By

Determine how you want to view the aggregate table.  
☐ View by scorecard  
☒ View by metric attributes

Thresholds

Select those threshold icons you want to display in the aggregate table.  
Threshold icon:

Project and Scorecard Link

☒ Display project name  
☒ Enable the link that opens Strategy Management  
☐ Disable the link that opens Strategy Management  
☒ Display scorecard name  
☒ Enable the link that opens Strategy Management  
☐ Disable the link that opens Strategy Management

2. In the **General** section, complete the following steps:
  - a. Edit the portlet name, description, or keywords.
  - b. Click **Allow Suggested Elements** to give business users a way to communicate to you any suggestions about adding elements to the strategy. For information about this setting, see [“Create a Template” on page 42](#).
3. In the **View Selection** section, complete the following steps to specify the parameters that define the information to display in the aggregate table:
  - a. From the **Template** list, select a template.

- b. From the **Project** list, select a project.
- c. From the **Scorecard** list, select a scorecard.

*Note:* You must select a scorecard that contains child scorecards.

- d. From the **Element type** list, select an element type.
  - e. From the **Column selection** list, select a column selection.
4. In the **Other** section, complete the following steps:
    - a. To specify the number of rows and columns to display in the portlet, in the **Rows and Columns** section, type values in the **Rows** field and the **Columns** field
    - b. To specify the date, in the **Date** section, complete one of the following steps:
      - To specify the current date, click **Current date**.
      - To specify a date relative to the current date, click **Relative period**, type a value in the field, and then select a value from the **Use relative period type** list.
      - To always show a specified date, click **Always show this date**. Then type a date in the field or click  to choose a date from the calendar.
    - c. To specify how to view the aggregate table, in the **View By** section, complete one of the following steps:
      - To display the scorecards as the column headings and the metric attributes as the rows, select **View by scorecard**.
      - To display the metric attributes as the columns headings and the scorecards as the rows, select **View by metric attributes**.
    - d. To specify which threshold icons appear in the aggregate table, in the **Threshold** section, select the icon from the **Threshold icon** list.
  5. To specify whether to link to the affected project or scorecard, in the **Project and Scorecard Link** section, complete the following steps:
    - To display the name of the affected project, click **Display project name**. By default, the project name is a link that opens the project in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
    - To display the name of the affected scorecard, click **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
  6. In the **Portlet Height** section, enter the height that you want to use for the portlet.
 

**TIP** The Firefox web browser cannot automatically resize the height of the portlet. Make sure that you specify a height that accommodates the height of the content that you want to display in this portlet.
  7. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

## Edit a Performance Association Portlet

To edit the properties of a Performance Association portlet, complete the following steps:

1. In the portlet, click . The Edit Performance Association Portlet page appears.

Edit Performance Association Portlet • Association portlet
sas

Define the properties of a Performance Association portlet.  
[» Read more...](#)

General

\* Portlet name: Association portlet  
Description:  
Keywords: ☐ Allow Suggested Elements

View Selection

Template: LE\_BMF54template  
Project: LE\_BMF54project  
Scorecard:

LE\_BMF54project

Parent1

child\_a
child\_b

Parent2

Association name: Persp-->Meas  
Column selection: All Metric Attributes

Other Options

Date

Select the date.  
☒ Current date  
☐ Relative period:  (Example: 1, -1)  
Use relative period type:   
☐ Always show this date:

Icons

Select those icons you want to display.  
Threshold icon:   
☒ Trend Analysis  
☒ Comments  
☒ Comment Alert

Project and Scorecard Link

☒ Display project name  
☒ Enable the link that opens Strategy Management  
☐ Disable the link that opens Strategy Management  
☒ Display scorecard name  
☒ Enable the link that opens Strategy Management  
☐ Disable the link that opens Strategy Management

Portlet Height

Specify the vertical size of the portlet.  
Height:  300 (100 to 1500 pixels)

Save Cancel

2. In the **General** section, complete the following steps:

- a. Edit the portlet name, description, or keywords.
  - b. Click **Allow Suggested Elements** to give business users a way to communicate to you any suggestions about adding elements to the strategy. For information about this setting, see [“Create a Template” on page 42](#).
3. In the **View Selection** section, complete the following steps to specify the parameters that define the table that contains associations to display:
- a. From the **Template** list, select a template.
  - b. From the **Project** list, select a project.
  - c. From the **Scorecard** list, select a scorecard.
  - d. From the **Association name** list, select an association.
- Note:* Associations are not available at the project level.
- e. From the **Column selection** list, select a column selection.
4. In the **Icons** section, complete the following steps to specify which threshold icons appear in the aggregate table:
- a. Select an icon from the **Threshold icon** list.
  - b. (Optional) Select one or more additional icon to display.
- Note:* Selections vary depending on the portlet type.

| Icon           | Description                                                                                                                                                                                                                                |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trend analysis | Opens a noninteractive trend chart view of the data. This option uses the date range that is specified in the project options.<br><br><i>Note:</i> Do not confuse the noninteractive trend chart with the interactive trend analysis tile. |
| Comment        | Provides a way for users to make comments about the data.                                                                                                                                                                                  |
| Comment alert  | If comment alerts are set, indicates that comments are available about the data.                                                                                                                                                           |
| Period         | Displays the period of time for which the element data was collected.                                                                                                                                                                      |

5. To specify the date, in the **Date** section, complete one of the following steps:
- To specify the current date, click **Current date**.
  - To specify a date relative to the current date, click **Relative period**, type a value in the field, and then select a value from the **Use relative period type** list.
  - To always show a specified date, click **Always show this date**. Then type a date in the field or click  to choose a date from the calendar.
6. To specify whether to link to the affected project or scorecard, in the **Project and Scorecard Link** section, complete the following steps:
- To display the name of the affected project, click **Display project name**. By default, the project name is a link that opens the project in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.

- To display the name of the affected scorecard, click **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
7. In the **Portlet Height** section, enter the height that you want to use for the portlet.  
**TIP** The Firefox web browser cannot automatically resize the height of the portlet. Make sure that you specify a height that accommodates the height of the content that you want to display in this portlet.
  8. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

---

## Edit a Performance Dashboard Portlet

To edit the properties of a Performance Dashboard portlet, complete the following steps:

1. In the portlet, click . The Edit Performance Dashboard Portlet page appears. The size and style for metric attributes and element names, whether to append scorecard names to element names, and whether to display metric attributes are set on this page.

Edit Performance Dashboard Portlet • dashboard

Define the properties of a Performance Dashboard portlet.  
[» Read more...](#)

General

\*Portlet name:

Description:

Keywords: 
☐ Allow Suggested Elements

View Selection

Template:

Element type:

Items to display in portlet:

| Name                                             | Project | Scorecard |
|--------------------------------------------------|---------|-----------|
| <div> <div>Add...</div> <div>Remove</div> </div> |         |           |

Element Filter

Show:

Graph Display Options

Graph Type

Specify how you want to display the information.

☒ Dial
☐ Slider
☐ Stoplight
☐ Speedometer
☐ Bullet Bar

Size:

Rows and Columns

Specify number of rows and columns.

Rows:  (min 1 - max 100)
Columns:  (min 1 - max 20)

Indicators

Select the metric attributes that display as indicators.

Primary indicator: 
☐ Show secondary indicator:

Date

Select the date.

☒ Current date
☐ Relative period:  (Example: 1, -1)
☐ Always show this date:

Use relative period type:

Portlet Height

Specify the vertical size of the portlet.

Height:  (100 to 1500 pixels)

Text

Element name display options:

Text size: 
☐ Bold
☐ Append scorecard name to element name

Metric attribute display options:

☒ Display metric attribute
☐ Display range values

Text size: 
☒ Bold

Icons

Select those icons you want to display.

Threshold icon: 
☐ Trend Analysis
☐ Comments

Language

Select the language you want to display.

☒ Use the default project and template languages
☐ Use this language:

Save

Cancel

2. In the **General** section, complete the following steps:

- Edit the portlet name, description, or keywords.
- Click **Allow Suggested Elements** to give business users a way to communicate to you any suggestions about adding elements to the strategy. For information about this setting, see [“Create a Template” on page 42](#).



3. You can display many scorecard elements from multiple projects within the same template. In the **View Selection** section, complete the following steps to select a template and element type:
  - a. Click **Add**. The Add Items to Portlet page appears.
  - b. In the **Project name** list, select a project. The list contains all of the projects that are associated with the selected template.
  - c. Select the scorecard that contains the elements that you want to add.
  - d. Select the check box for each element to be displayed in the portlet.
  - e. Click **Save**. The Edit Performance Dashboard Portlet page appears. The elements that you have selected are displayed in the **Items to display in portlet** table.

To remove an item from the table, select the item check box and click **Remove**. To remove all of the items from the table, select the check box at the top of the column and click **Remove**. If you select elements that have a different element type, all elements of the previous element type are removed from the Performance Dashboard portlet.

4. In the **Element Filter** section, you can set a filter that displays elements that have or have not met global or personal threshold conditions. For more information about setting thresholds, see [“Set a Global or Personal Threshold” on page 105](#).  
To specify the threshold condition, select a filter from the **Show** list.
5. In the **Graph Type** section, select the type of graph to display and its size. Available graph types are dials, sliders, or stoplights.
6. To specify the number of rows and columns to display in the portlet, in the **Rows and Columns** section, type values in the **Rows** field and the **Columns** field
7. In the **Indicators** section, complete the following steps to change the metric attributes that you use as indicators:
  - a. Select an indicator from the **Primary indicator** list.
  - b. If you want to display a secondary indicator, click **Show secondary indicator** and select an indicator from the list.

*Note:*

- Displaying a secondary indicator is useful only if the secondary indicator is on the same scale as the primary indicator.
  - Stoplights do not display secondary indicators.
8. To specify the date, in the **Date** section, complete one of the following steps:
    - To specify the current date, click **Current date**.
    - To specify a date relative to the current date, click **Relative period**, type a value in the field, and then select a value from the **Use relative period type** list.
    - To always show a specified date, click **Always show this date**. Then type a date in the field or click  to choose a date from the calendar.
  9. In the **Text** section, complete the following steps to specify how text is displayed:
    - a. From the **Text size** list, select a text size for the element name.
    - b. (Optional) Click **Bold** to display the element name as bold text.
    - c. (Optional) Click **Append scorecard name to element name** to append the scorecard name to the element name.

- d. (Optional) To display the metric attribute or range values, click **Display metric attribute** or **Display range values**.
  - e. From the **Text size** list, select a text size for the metric attribute.
  - f. (Optional) Click **Bold** to display the element name as bold text.
10. In the **Icons** section, complete the following steps to specify which threshold icons appear in the aggregate table:
- a. Select an icon from the **Threshold icon** list.
  - b. (Optional) Select one or more additional icon to display.

*Note:* Selections vary depending on the portlet type.

| Icon           | Description                                                                                                                                                                                                                                |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Trend analysis | Opens a noninteractive trend chart view of the data. This option uses the date range that is specified in the project options.<br><br><i>Note:</i> Do not confuse the noninteractive trend chart with the interactive trend analysis tile. |
| Comment        | Provides a way for users to make comments about the data.                                                                                                                                                                                  |
| Comment alert  | If comment alerts are set, indicates that comments are available about the data.                                                                                                                                                           |
| Period         | Displays the period of time for which the element data was collected.                                                                                                                                                                      |

- 11. In the **Language** section, select to use a specific language or the default language. For more information, see [“Working with Language Settings” on page 52](#).
- 12. In the **Portlet Height** section, enter the height that you want to use for the portlet.
 

**TIP** The Firefox web browser cannot automatically resize the height of the portlet. Make sure that you specify a height that accommodates the height of the content that you want to display in this portlet.
- 13. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

---

## Edit a Performance Diagram Portlet

To edit the properties of a Performance Diagram portlet, complete the following steps:

- 1. In the portlet, click . The Edit Performance Diagram Portlet page appears.

**Edit Performance Diagram Portlet - Diagram portlet**

**General**

Portlet name:

Description:

Keywords:  ☐ Allow Suggested Elements

**View Selection**

Template:

Project:

Scorecard:

Diagram:

**Other Options**

**Date**

Select the date.

☒ Current date

☐ Relative period:  (Example: 1, -1)

Use relative period type:

☐ Always show this date:

**Diagram Height**

Specify the vertical size of the diagram viewing area.

Height:  (100 to 1500 pixels)

**Project, Scorecard and Diagram Link**

☒ Display project name

☒ Enable the link that opens Strategy Management

☐ Disable the link that opens Strategy Management

☒ Display scorecard name

☒ Enable the link that opens Strategy Management

☐ Disable the link that opens Strategy Management

☒ Display diagram name

☒ Enable the link that opens Strategy Management

☐ Disable the link that opens Strategy Management

2. In the **General** section, complete the following steps:
  - a. Edit the portlet name, description, or keywords.
  - b. Click **Allow Suggested Elements** to give business users a way to communicate to you any suggestions about adding elements to the strategy. For information about this setting, see [“Create a Template” on page 42](#).
3. In the **View Selection** section, complete the following steps to specify the diagram to display in the portlet:
  - a. From the **Template** list, select a template.
  - b. From the **Project** list, select a project.
  - c. From the **Scorecard** list, select a scorecard or a project.
  - d. From the **Diagram** list, select a diagram.
4. In the **Other Options** section, complete the following steps:
  - a. To specify the date, in the **Date** section, complete one of the following steps:
    - To specify the current date, click **Current date**.

- To specify a date relative to the current date, click **Relative period**, type a value in the field, and then select a value from the **Use relative period type** list.
  - To always show a specified date, click **Always show this date**. Then type a date in the field or click  to choose a date from the calendar.
- b. To specify the diagram height, type the height in the **Height** field.
5. To specify whether to link to the affected project, scorecard, or diagram, in the **Project, Scorecard and Diagram Link** section, complete the following steps:
- To display the name of the affected project, click **Display project name**. By default, the project name is a link that opens the project in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
  - To display the name of the affected scorecard, click **Display scorecard name**. By default, the scorecard name is a link that opens the scorecard in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
  - To display the name of the affected diagram, click **Display diagram name**. By default, the diagram name is a link that opens the diagram in the Strategy Management Builder. To disable this link, click **Disable the link that opens Strategy Management**.
6. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

## Part 5

---

# Viewing and Navigating Content in Portlets

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### *Chapter 30*

**Navigating and Viewing the Strategy Management  
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## Chapter 29

# Access Your Strategy Management Portlets

---

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---

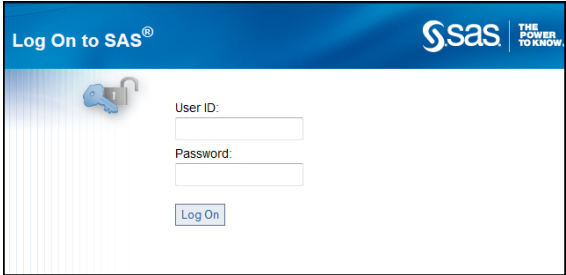
## Log On to the SAS Information Delivery Portal

To access your SAS Strategy Management portlets, complete the following steps:

1. Open your browser and type the web address for the SAS Information Delivery Portal.

*Note:* To obtain the web address, contact your portal administrator.

The Log On page appears.



2. Enter your user ID and password.
3. Click **Log On**. Your personal portal appears. Your portal might have multiple pages. Click the page tabs to view the pages in your portal. Each page can contain one or more portlets, including SAS Strategy Management portlets.

---

## Log Off from the SAS Information Delivery Portal

To log off from your SAS Strategy Management portlets, click **Log Off** in the upper right corner of the user interface.

*Note:* If your session is inactive longer than the SAS Information Delivery Portal time-out value, you are automatically logged off.





## Chapter 30

# Navigating and Viewing the Strategy Management Enhanced Portlet and Its Tiles

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## Your First Look at the SAS Strategy Management Enhanced Portlet

The SAS Strategy Management enhanced portlet appears on your portal page.

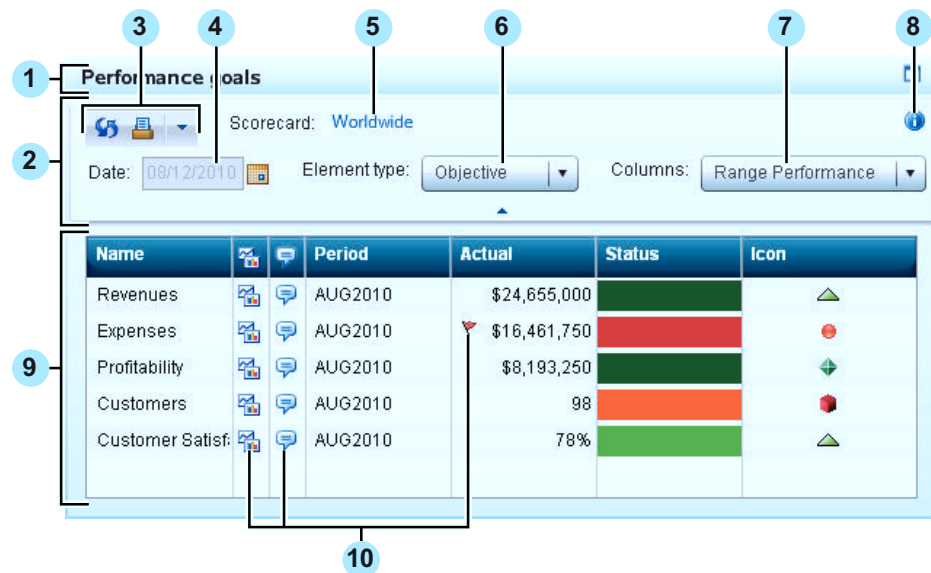
**Figure 30.1** SAS Strategy Management Enhanced Portlet



- 1 Title bar. Click the X to remove the portlet from the page or click the Minimize button to minimize the portlet.
- 2 Toolbar. The portlet toolbar provides the and buttons. For more information, see “[Suggest a New Element to Add to the Strategy](#)” on page 282.  
  
The toolbar also provides the Help icon. Click to view the *SAS Strategy Management: Enhanced Portlet Quick Start Guide*.
- 3 Portlet content area

A SAS Strategy Management portlet can contain one or more tiles. A scorecard modeler can customize the interface of each tile. The following example describes the available features for a tile. However, due to customization, your tiles might not have all of these features.

Figure 30.2 Tile Interface Example



- 1 The tile title bar provides the Maximize (  ) and Restore (  ) buttons.
- 2 The tile control panel. For more information, see [“Open and Close the Tile Control Panel” on page 281](#).
- 3 The tile toolbar. Due to customization, the tile might not display the toolbar.
- 4 Date. For more information, see [“Change the Date” on page 282](#).
- 5 The scorecard name. For more information, see [“View the Scorecard in Strategy Management Builder” on page 283](#).
- 6 **Element type** list. For more information, see [“Change the Element Type” on page 283](#).
- 7 **Columns** list. For more information, see [“Change the Column Selection” on page 283](#).
- 8 Information icon. Click this icon to view a short tip or other information about the tile. This information can include which tiles are synchronized with the scorecard hierarchy and whether the tile uses global date.
- 9 Content area. The tile data appears in this area.
- 10 Icons. Depending on how the tile is customized, one or more of the following icons might be available:

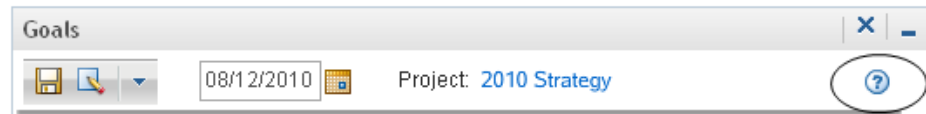
- Trend chart . For more information, see [“Display a Trend Chart” on page 287](#).

*Note:* Do not confuse the noninteractive trend chart with the interactive analysis tile.

- Threshold (either global  or personal ). Click this icon to view the threshold conditions for an element. For more information, see [“View Threshold Conditions” on page 285](#).
- Comments action . Click this icon to make comments about the information. For more information, see [“View and Create Comments” on page 285](#).
- Comment alerts . This icon indicates that comments are available.

## Access Help

The toolbar provides the Help icon .

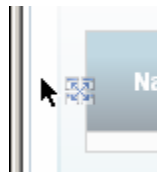


Click  to view the *SAS Strategy Management: Enhanced Portlet Quick Start Guide*.

## Change the Layout of the Tiles

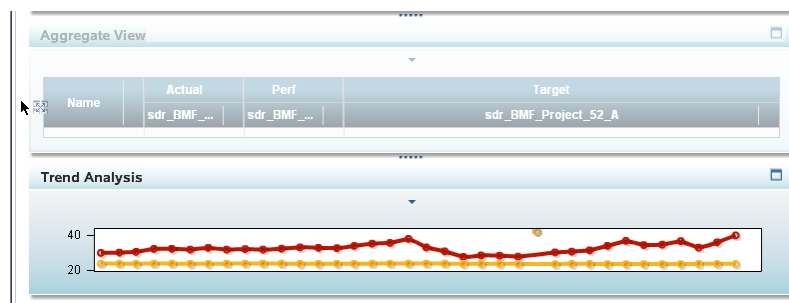
When you view a SAS Strategy Management enhanced portlet and its tiles, you can change their layout in the following ways:

- Resize a tile. Hover on the tile border to display handles. Click a handle and drag to resize the tile.
- Rearrange the tiles in columns or rows. Click the title bar of a tile and drag it within the portlet. A movement icon appears with the mouse pointer, which indicates that you are dragging a tile within the portlet. The following partial display shows the mouse pointer and the accompanying movement icon:

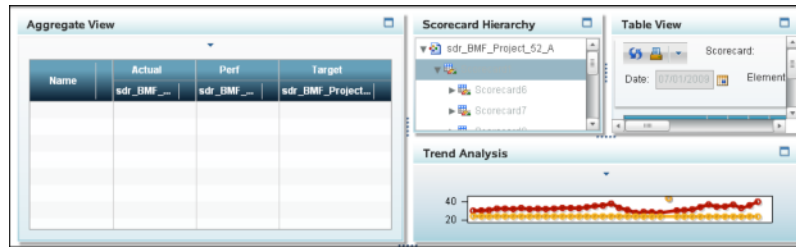


As you drag the tile, gray boxes guide you to rows and columns into which you can drop the tile. When you drop the tile, the other tiles in the portlet automatically accommodate the dropped tile.

For example, if you want to move a tile to create a column on the left side of the portlet, drag the tile left border of the portlet.



Drop the tile near the border, with the mouse pointer hovering within the tile that is currently located in that area. The affected tiles are rearranged to create a column.



**TIP** If you drag the tile too close to the portlet border or outside the border, the movement icon disappears, which indicates that you cannot drop the tile in that location. If you drag the tile into the portlet toolbar, an X in a red circle appears on the movement icon.

- Resize a column. Hover between two columns to display handles. Resize the column width for optimal display of strategy content.
- Maximize a tile. Click the Maximize button on the title bar. The tile is sized to be as large as possible to fill the portlet, and the other tiles disappear. To return all of the tiles to their previous sizes and locations, click the Restore button in the tile that you maximized.

When your tile layout is complete, click  to save the layout configuration. The configured layout is used the next time the portlet is viewed.

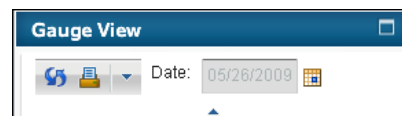
---

## Open and Close the Tile Control Panel

To close the tile control bar, click . The tile control bar closes.



To open the tile control bar, click . The tile control bar opens.




---

## Print a Tile

*Note:* Due to customization, a tile might not display a toolbar. In this case, the **Print** button is not available.

To print a tile:

1. Click  in the tile toolbar. The Print Tile window appears.
2. (Optional) Type the header text to use on the printed page.
3. (Optional) Adjust the margin settings.
4. If you do not want to print the tile control bar and its buttons and controls, select **Do not print tile control bar**.

5. If you want to print information identifying the scorecard, select **Print the scorecard header information**.
6. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

---

## Reset Tile Data

To reset the tile data to its initial setting when you opened the portlet, click  in the tile toolbar.

*Note:* Due to customization, a tile might not display a toolbar. In this case, the  button is not available. To refresh your data, click your web browser **Refresh** button.

---

## Suggest a New Element to Add to the Strategy

*Note:* Due to customization, a tile might not display a toolbar. In this case, the  button is not available. Also, the tile might be customized to not accept element suggestions.

You can suggest that new elements be added to the strategy. Your suggestions are implemented by the scorecard modeler. To suggest that one or more new elements be added to a strategy:

1. In the tile toolbar, click .
2. In the **Suggest New Elements** list, type a name. A description is optional.
3. Select the scorecards in which to include the element.
4. Select the type of period, the start period, and the end period.
5. Click . A new row is added to the table.
6. To suggest more elements, repeat steps 2 through 5.

---

## Change the Date

Depending on how your portlet and tiles are customized, you can change the date for the portlet or the tile. The portlet date setting is called the *global date setting*. The tile date setting is called the *local date setting*. If a tile has its own **Date** field, the tile, or local, date setting is independent of the global date setting. Tiles that do not have their own date setting use the global date setting.

- To change the global date setting, type a date in the **Date** field or click  in the portlet toolbar. Any tiles that use the global date setting update their data to reflect the new date. Tiles that have their own local date setting do not change.
- To change the local date setting that a tile uses, type a date in the **Date** field or click  in the tile control bar. The data for only that tile is updated to reflect the new date.

*Note:* The date selections do not persist after you close the portal session.

*Note:* Due to customization, the **Date** field might not be enabled in the portlet or in a tile.

---

## Change the Element Type

To change the element type selection, click the **Element type** list to make a new selection.

*Note:* Due to customization, the **Element type** list might not be available.

---

## Change the Column Selection

To change the column selection, click the **Column** list to make a new selection.

*Note:* Due to customization, the **Column** list might not be available.

---

## Change the Association

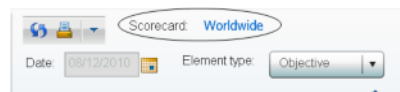
To change the association in an association tile, click the **Association** list to make a new selection.

*Note:* Due to customization, the **Association** list might not be available.

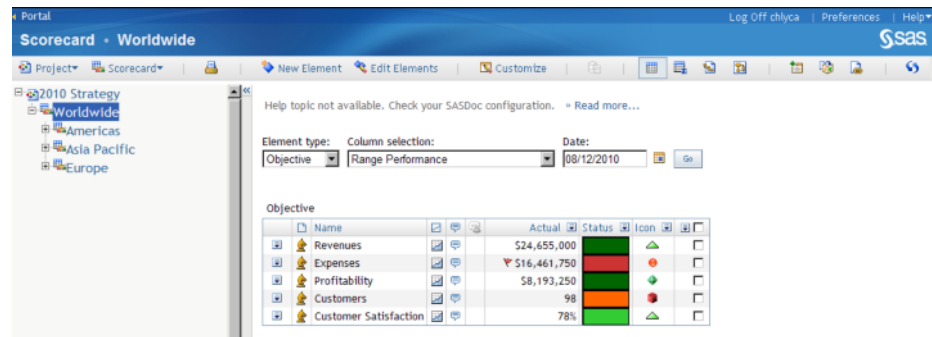
---

## View the Scorecard in Strategy Management Builder

The tile control bar provides a link to the scorecard.



When you click the scorecard name in the tile control bar, the scorecard opens in Strategy Management Builder.



To return to the portal and your portlet view, click **Portal** in the upper left corner of Strategy Management Builder.

*Note:* Due to customization, the scorecard name link might not be available.

---

## Sort Columns

When a tile displays its data in columns, you can click the column headings to sort the data.

---

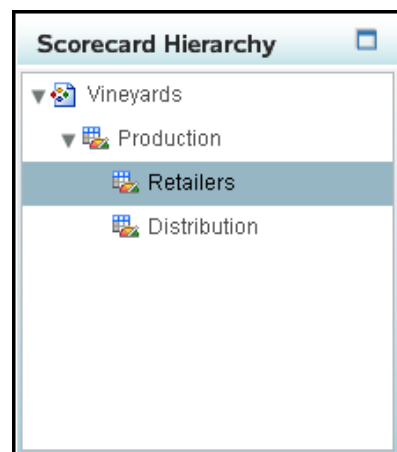
## Rearrange Columns

You can change the order of the columns in a table. Click a column heading, drag the column to the new location, and then drop the column.

---

## Synchronize Tile Data with the Scorecard Hierarchy Tile

The scorecard hierarchy tile provides a way to dynamically change the scorecard data in one or more tiles. This feature is called *synchronization*.





For example, suppose a table tile displays data for Distribution. If you click **Retailers** in the scorecard hierarchy tile, the table tile displays data for Retailers.

If a portlet contains a scorecard hierarchy tile, remember the following considerations:

- You can synchronize only table tiles, aggregate tiles, association tiles, and gauge tiles with the scorecard hierarchy tile. Synchronization does not affect analysis tiles.
- Synchronization is a customizable feature. A tile might not be customized to synchronize its data with the scorecard hierarchy tile.

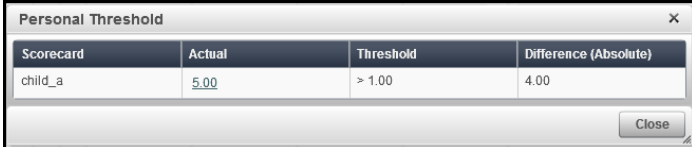
---

## View Threshold Conditions

*Note:* Due to customization, threshold icons might not be available.

If a global  or personal  threshold is set and the threshold conditions are met or exceeded, the applicable threshold icon appears in the tile data.

- To view the threshold conditions for an element, click the threshold icon. The Threshold window appears.



| Scorecard | Actual | Threshold | Difference (Absolute) |
|-----------|--------|-----------|-----------------------|
| child_a   | 5.00   | > 1.00    | 4.00                  |

- If the scorecard in which the threshold flag is set is available in a scorecard tile, you can click the scorecard name to view the scorecard in the tile.
- The threshold flag is set on a specific metric attribute. A defined link can be assigned to a metric attribute. If the metric attribute has a defined link, you can click the metric attribute in the Threshold window and the link opens.
- To close the Threshold window, click **Close**.

*Note:* Thresholds can also generate alerts. You can receive alerts as individual e-mail, as a compiled digest of alerts in an e-mail, as Short Message Service (SMS) text messages, or in a shared alert portlet on a portal page.

---

## View and Create Comments

*Note:* Due to customization, the comment feature and comment alerts might not be available.

*Note:* You cannot delete comments. If a comment requires deleting, contact your SAS administrator.

If the  icon appears in the tile content, you can make a comment about that data. When a new comment or a reply is posted, a comment alert  icon appears with the affected data.

To make a comment:

1. In the applicable row, click . The Comments window appears.

| Name         |                                                                                   | Period  | Status | Actual                                                                                | Target |
|--------------|-----------------------------------------------------------------------------------|---------|--------|---------------------------------------------------------------------------------------|--------|
| Sales        |  | Oct2012 |        |  5 | 74     |
| Other income |  |         |        |                                                                                       | 51     |
| Productivity |  |         |        |                                                                                       | 36     |
| Profit       |  |         |        |                                                                                       | 30     |
| Expenses     |  |         |        |                                                                                       | 95     |
| Training     |  |         |        |                                                                                       | 38     |

- If this element has existing comments, the comments appear in this window. By default, only one line of the comment is displayed. Double-click the comment to expand the entire comment. To collapse the comment, double-click it again.
- If a topic contains many comments, **Show All Comments** appears below the topic name. Click **Show All Comments** to display all of the comments in the topic. To collapse the view, click **Minimize View**.
- If a comment belongs to you, you can click  to edit the comment.

2. To make a comment about a new topic, enter the name of the topic in the field above the comments. The comment field appears below topic field.
3. Enter your comment in the comment field.
4. (Optional) Click  to attach a file to the comment. Select one or more files to attach and click **Open**. The attachment appears below the comment.

*Note:* To delete the attachment from the comment, click  next to the attachment.

5. Click **Post** to save and post your comment. When you post a comment, it is added to a topic thread of comments about that element. After you post a comment, other users can reply to it. Their comments are also added to the topic thread of comments.

## Reply to a Comment

*Note:* Due to customization, the comment feature might not be available.

*Note:* You cannot delete comments. If a comment requires deleting, contact your SAS administrator.

To reply to a comment:

1. In the applicable row, click .
2. In the Comments window, expand the topic thread of comments.
3. Enter your reply in the comment field at the bottom of the thread.
4. (Optional) Click  to attach a file to the comment. Select one or more files to attach and click **Open**. The attachment appears below the comment.  
*Note:* To delete the attachment from the comment, click  next to the attachment.
5. Click **Post** to save and post your reply. The reply is added to the thread of comments.

---

## Search Comments

*Note:* Due to customization, the comment feature might not be available.

*Note:* You cannot delete comments. If a comment requires deleting, contact your SAS administrator.

To search comments:

1. In the Comments window, type one or more characters in the **Search** field.
2. Click . Any comments that include the search string appear in a results list.
3. To view the Comments window again, click the **X** in the **Search** field.

---

## Display a Trend Chart

*Note:* Due to customization, trend charts might not be available.

The trend chart is a noninteractive chart of historical trend data. The data that is displayed in the chart is specified by your scorecard modeler. The trend chart icon  appears in a tile when this view is available in a tile.

- To view the trend chart, click .
- To close trend charts, click **Close**.

---

## Select Data for a Trend Analysis

To select data for a trend analysis, click an element and drag it onto the trend analysis tile. You can select data in a table view tile, aggregate view tile, association view tile, or gauge view tile for use in a trend analysis.

---

## Remove Data from a Trend Analysis

To remove an element from a trend analysis, in the tile control bar, click .

*Note:* Due to customization, a tile might not display a toolbar.

In the Graph Properties window, the top section lists the elements in the trend analysis. Click  next to the element that you want to remove from the trend analysis.

---

## Reset the Data

To reset the data to its initial setting, click  in the tile toolbar.

*Note:* Due to customization, a tile might not display a toolbar.

---

## Save the Trend Analysis as an Image

- To save the trend analysis using the image format PNG:
1. Click  in the tile toolbar.  
*Note:* Due to customization, a tile might not display a toolbar.
  2. A **Save** list appears. Navigate to the location where you want to save the file.
  3. Type a name in the **File name** field.
  4. Click **Save**.

---

## Change Trend Analysis Property Settings

- To change the style setting in a trend analysis tile:
1. In the tile control bar, click . The Graph Properties window appears.  
*Note:* Due to customization, a tile might not display a toolbar.
  2. In the list at the top of the window, click the value that you want to edit. Any changes that you make are applied to this value.  
*Note:* You can also delete the value by clicking .
  3. In the **Graph Options** section, specify how you want the graph to be drawn:
    - a. In the **Graph type** list, select the type of graph that you want to display in the trend analysis. Available selections are **Line**, **Band**, **Bar**, and **Scatter**.
    - b. Select the applicable options for the graph type that you chose. Options vary depending on the graph type that you selected.

| Graph Type | Available Options                                                                                                                                                                                               |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All types  | <ul style="list-style-type: none"><li>• Click the Color icon to select the color of the graph type.</li><li>• If you want each data value to be labeled in the graph, select <b>Show data labels</b>.</li></ul> |

---

| Graph Type | Available Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line       | <ul style="list-style-type: none"> <li>In the <b>Style</b> list, select the style of line that you want to use.</li> <li>In the <b>Dash type</b> list, select the type of dash that you want to use to form the line.</li> <li>If you want the line that is drawn in the graph to break each time a data value is missing, select <b>Break line drawing for missing data values in line graphs</b>.</li> <li>In the <b>Line weight</b> list, select the line thickness to use for the line graph.</li> <li>If you want data tips to appear in the line graph, select <b>Show data tips</b>.</li> <li>If you want markers to appear in the graph, select <b>Show markers</b>. You can select the type of marker that you want the graph to use from the <b>Marker</b> list.</li> </ul> |
| Scatter    | In the <b>Marker</b> list, select the type of marker that you want the graph to use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

- In the **Global Options** section, specify the applicable options:
  - If you want grid lines to appear in the trend analysis, select **Grid lines**.
  - If you want to display the legend in the trend analysis, select **Display legend**. When you choose to display the legend, you can also specify whether the legend appears across the width of the tile or is displayed along the height of the tile. In the **Location** list, select the location in the tile to display the legend.
- Click **Apply** to save and apply the new settings.
 

*Note:* If you do not click **Apply**, the settings are not saved.
- Edit the properties for another value or click **Close** to exit.

---

## View and Filter Gauges

In a gauge tile, every element is represented as a gauge. In the tile control bar, you can filter the gauges by their relationship to each other as defined by associations. From the **Supported perspective** list, select an association.

---

## View Information Provided for a Gauge

If the element name of a gauge is linked, you can click the link to view information provided for that element.

---

## View Details about an Element in a Diagram

To view element details in a diagram, expand the **Element Details** pane to the right of the diagram. Then, click an element in the diagram. The details for the element appear in the **Element Details** pane.

---

## Change the Diagram to View

*Note:* Due to customization, the **Diagram** list might not provide other selections.

To view another diagram, select a new diagram from the **Diagram** list.

---

## Reset the Zoom for a Diagram

To reset the zoom for a diagram, select the **Reset Zoom** check box.

---

## Save the Portlet as a SAS Mobile BI Report

You can save the content of the Strategy Management enhanced portlet and its tiles as a SAS Mobile BI report. A SAS Mobile BI report can be viewed by using a mobile device such as an iPad or an Android tablet. The SAS Mobile BI app must be installed on the tablet. For information about this app, see the SAS Mobile BI product page at <http://support.sas.com/software/products/mobilebi/index.html>.

*Note:* Some features of the content in the tiles might not display the same way on a tablet. Some features can also appear differently on different types of tablets.

To save the portlet content as a SAS Mobile BI report:

1. Click  in the portlet toolbar.
2. In the Create Mobile Report window, in the **Name** field, enter a name for the report.
3. In the **Description** field, enter a description for the report.

**TIP** The SAS Mobile BI app displays the description as part of the subscription information for the report. A thoughtfully written description can help users decide whether to subscribe to the report.

4. Navigate to the location where you want to save the report.
5. Click **Yes** to save the report.

## Chapter 31

# Navigating and Viewing Classic-Style Portlets

---

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---

## Overview

Depending on how a portlet is customized, the following options might be available in classic-style portlets.

---

## Link to Other Documents, Web Addresses, or Views

Values in tables or diagrams can be customized to provide a link to documents, web addresses, or other views. Click the link to display the information.

---

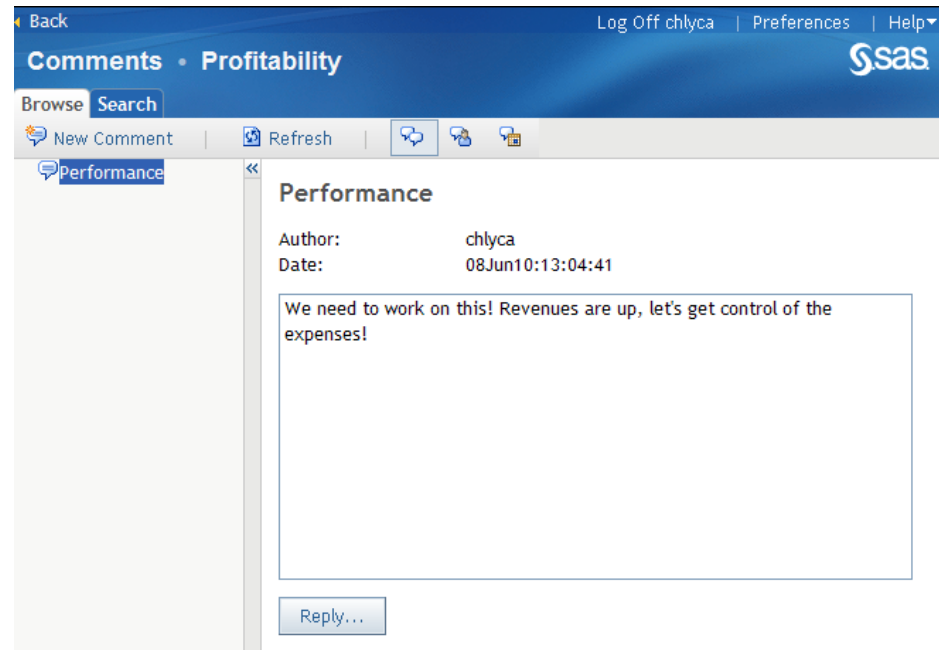
## View a Trend Analysis

If the  icon appears in a view, you can click the icon to display the Trend Analysis page in the SAS Strategy Management Builder. For more information about the Trend Analysis page, see [Chapter 22, “Creating and Editing Trend Analysis Views,”](#) on page 211.

*Note:* This option is supported in the table, association, and dashboard views. However, the Trend Analysis icon might not be available in a view. The scorecard modeler specifies whether to display these icons when customizing the view.

## Viewing and Making Comments

If the  icon appears in a view, you can click the icon to open the Comment Manager page.



On this page you can:

- View comments about the data.
- Make comments about the data.
- Respond to comments about the data.

To learn more about the Comment Manager, click **Help** ⇒ **Help on This Page** to display the Comment Manager help.

*Note:* This option is supported in the table, association, and dashboard views. However, the icon might not be available in a view. The scorecard modeler specifies whether to display these icons when customizing the view.

## View Threshold Data

If the  or  icons appear in a view, you can click the icon to open the Threshold Condition page.

*Note:* This option is supported in the table, aggregate, association, and dashboard views. However, the threshold icons might not be available in a view. The scorecard modeler specifies whether to display these icons when customizing the view.



---

## View Underlying Data (Dashboard View Only)

If the element contains data for the specified time period, a graph is displayed in the Performance Dashboard Portlet for each element that is specified in the portlet properties. Click on the link in each graph to view the underlying data table.

*Note:* If the range for the element contains fewer than two intervals, a graph for the element is not displayed.



## Part 6

---

# Entering Data into Projects

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## Chapter 32

# Overview of Data Entry Methods

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## Data-Entry Methods

SAS Strategy Management provides different ways to enter data depending on the quantity of data that you want to enter.

- When your organization needs to manually enter data or your data-entry process requires workflow control, create a data-entry form in SAS Strategy Management Builder and display the form in the data-entry portlet. By entering data in this way, you can control the workflow of the data-entry process. For more information, see [Chapter 33, “Creating and Managing Forms,” on page 299](#). For information about entering and approving data, see [Chapter 34, “Entering Data Manually,” on page 307](#).
- To create data in SAS Strategy Management by using Microsoft Excel spreadsheets or SAS data sets, use the Import wizard. For information, see [Chapter 35, “Importing Data into a Strategy Management Project,” on page 311](#).
- To enter an existing project and its data, export and import a SAS package from one SAS Strategy Management installation to another. You can use this method to copy a project, migrate a project, or back up a project. For more information, see the *SAS Strategy Management: System Administration Guide*.



## Chapter 33

# Creating and Managing Forms

---

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---

## Forms and Workflow

### *Designing Forms*

You can create a form in which data-entry users enter data into a SAS Strategy Management project. Users access the form by using a data-entry portlet on a portal page. Forms are a useful way to enter data that does not exist in your SAS Strategy Management project.

### *Designing the Workflow of a Form*

Specifying a workflow for a data-entry form is a way to guarantee that the data that is entered is accurate *before* the data is published to the production system.

The workflow of a form affects two groups of users: data-entry users and approvers. In the workflow, the form is assigned to a *data-entry user* who is responsible for entering some or all of the data into the form. You can specify one or more data-entry users to enter data.

After the data is entered and the data-entry user submits the form, the data can be approved. In the workflow, you specify an *approver* who is responsible for reviewing and approving the data that was entered into the form. You can specify one or more approvers. You can also specify the order in which approvers must approve the form.

When you specify a workflow, you get the following benefits:

- Collaboration is ensured when everyone agrees on the submitted data.
- Mistakes are reduced before the data is generally available.
- Consistent business processes are enforced.
- Efficiency and productivity can be improved by automating and tracking the process within the SAS Strategy Management software.

## Prerequisites

Before you create a data-entry form, consider the following prerequisites:

- You can design a form such that the value that is entered into a cell is evaluated by a rule. You can define a rule and then associate the rule with metric attributes. You select the metric attribute when you create the column selection. For more information, see [Chapter 10, “Defining Rules,” on page 111](#).
- When you create a data-entry form, you specify a column selection to use in that form. Before you can specify the column selection, you must create it. For more information, see [“Create a Column Selection for Use in a Data-Entry Form” on page 134](#).
- You can specify that a link be available in a form. Before you can specify the link, you must create the link definition. For more information, see [“Managing Link Definitions” on page 71](#).
- For information about the user roles and capabilities required for creating a form, entering data, and approving data, see the *SAS Strategy Management: System Administration Guide*.
- For information about customizing the workflow, see the *SAS Strategy Management: System Administration Guide*.

---

## Create a Form and Workflow

On the Project page, complete the following steps:

1. Select **Project** ⇒ **Manage Forms**. The Manage Forms page appears.
2. Click . The **Properties** section appears below the **Forms** list.
3. On the **Identification** tab, complete the following steps:
  - a. In the **Name** field, enter a unique name for the form.
  - b. (Optional) In the **Description** field, enter an optional description of the form.
  - c. (Optional) From the **Link** list, select a link that will appear at the top of the form in the portlet. The link that you select is associated with the form.

*Note:* For more information, see [“Managing Link Definitions” on page 71](#).



**TIP** You can click **Save** at any time in the **Properties** section. Doing so saves a draft of the form. The draft appears in the **Forms** list above the **Properties** section. The draft contains the selections that you made before you clicked **Save**. If you continue working in the **Properties** section but do not click **Save**, any subsequent settings can be lost.

4. Click the **Elements** tab. To select the elements for which you want to collect data, complete the following steps:
  - a. From the **Element type** list, select the element type.  
*Note:* A form can have only one element type.
  - b. In the **Elements** tree, expand the tree and select one or more elements for which you want to collect data. To select all of the elements in a scorecard, click the check box next to the scorecard.
5. Click the **Columns** tab.

Column selections are collections of predefined columns to use in the form. Read-Write and Read-Only controls for each column are also defined in column selections. For more information, see [“Create a Column Selection for Use in a Data-Entry Form” on page 134](#).

**TIP** When columns are Read-Only, data-entry users cannot enter data in the cells. Read-Only columns are useful when a user needs to see historical or forecasted values or needs some information for data entry, but should not need to change the values.

To specify column selections for inclusion in the form:

- a. From the **Column selection** list, select the column selection that you want to use in the form.
  - b. View the **Preview** table to make sure that your selection is correct for the form.
6. Click the **Workflow** tab.
    - a. In the **Workflow** section, specify whether you want a workflow and how you want the workflow to repeat.
      - By default, a form does not have a workflow. To specify a workflow, clear the **No workflow required** check box.
      - To specify that a workflow repeat, click **Repeat this workflow each time the workflow is completed**.
    - b. In the **Data-Entry Users** section, specify the behavior of the form for those users who are assigned to enter data into the form in the workflow.
      - To notify the users that a form is available for work, click **Send notification that a form is available**.

*Note:* If you want a user to receive e-mail notifications, the user name must have e-mail enabled. This user name setting must be set in SAS Management Console. Also, these users must be members of the SAS Strategy Management Users Group and the SAS Strategy Management Data Entry Group.

- From the **Data-Entry User** list, select a user and click **Add**. The selected user is added to the **Data-Entry User** table below the list.

If you want to remove a user, click the **X** next to the user in the table.

- Specify whether one or all of the users must submit the form for the workflow to proceed. If one user is sufficient, click **Any user can submit the form**. Otherwise, click **All users must submit the form**.
- c. In the **Approvers** section, specify the behavior of the form for those users that approve the form in the workflow.
- Specify whether one or all of the users must approve the form. If one user is sufficient, click **Any approver can approve the form**. Otherwise, click **Each approver must approve the form in the assigned order**.
  - To notify the approvers that a form is available, click **Send notification that a form is available for approval**.

*Note:* If you want a user to receive e-mail notifications, the user name must have e-mail enabled. This user name setting must be set in SAS Management Console. Also, these users must be members of the SAS Strategy Management Users Group and the SAS Strategy Management Data Entry Approver Group.

- From the **Approvers** list, select a user and click **Add**. The selected user is added to the **Approvers** table below the list.

If you want to remove a user, click the **X** next to the user in the table.

**TIP** Make sure that you add users to the table in your required order. You cannot reorder the users within the table without removing and adding the users again.

7. Click **Save** to save your selections. The draft of the form appears in the **Forms** list above the **Properties** section. Click **Cancel** to exit the **Properties** section without saving your selections.

*Note:* If you click the column headings in the **Forms** list to sort items in the list, the feature does not sort the items correctly in languages other than English.

---

## Edit or View the Properties of a Form

*Note:* If  is the only button available on the toolbar, the role and capability settings that are associated with your user name are limited to viewing only. If you require expanded access to SAS Strategy Management, contact your SAS Strategy Management administrator.

To edit the properties of a form, complete the following steps on the Manage Forms page:

1. Double-click the form that you want to edit. The **Properties** section appears below the **Forms** list.
2. Change the applicable settings in the form as described in [“Create a Form and Workflow” on page 300](#).
3. Click **Save** to save your selections. Click **Cancel** to exit the **Properties** section without saving your selections.

---

## Copy a Form

To copy a form, complete the following steps on the Manage Forms page:

1. Select the form that you want to copy and click .  
The copied form appears in the list. A number is appended to the form's name.
2. To edit the copied form, double-click its name. The **Properties** section appears below the **Forms** list.
3. Change the applicable settings in the form as described in [“Create a Form and Workflow” on page 300](#).
4. Click **Save** to save your selections. Click **Cancel** to exit the **Properties** section without saving your selections.

---

## Delete a Form

To delete a form, complete the following steps on the Manage Forms page:

1. Select the form that you want to delete and click .  
*Note:* If you want to delete multiple forms at once, use the Shift key or the Ctrl key when you click your selections.
2. A confirmation message appears. Click **Yes** to delete the form.

---

## Start a Workflow

After you create a data-entry form and define its workflow, you can start the workflow process for the form.

To start the workflow for a form, complete the following steps on the Manage Forms page:

1. Select the form that contains the workflow that you want to start and click .
2. A confirmation message appears. Click **Start** to start the workflow. The status for the form changes to *Awaiting data entry*.

For the workflow to continue, the users that you specified as data-entry users must enter the applicable data into the form and then submit their changes.

---

## Set the Workflow to Stop After the Cycle Completes

You can set a data-entry form to stop its workflow cycle after the form has been submitted and approved by all of the applicable users.

To set the workflow to stop at the end of a cycle, complete the following steps on the Manage Forms page:

1. Select the form that contains the workflow that you want to stop and click .
2. A confirmation message appears. Click **Stop**. When the form has been submitted and approved by all of the applicable users, the workflow stops.

You must click  to start the form's workflow again.

---

## Immediately Stop the Workflow and Delete All Work

You can stop the workflow of a data-entry form immediately. All of the data that has been entered and submitted, as well as any approvals, are deleted.

**CAUTION:**

**You cannot undo an immediate workflow stoppage.** All of the work that has been submitted or approved in the workflow is permanently deleted.

To immediately stop the workflow, complete the following steps on the Manage Forms page:

1. Select the form that contains the workflow that you want to stop and click .
2. A confirmation message appears. Click **Stop**. The workflow stops and the status for the form changes to `Workflow not started`.

You must click  to start the form's workflow again.

---

## Create a Performance Data-Entry Portlet

You can create a data-entry portlet and add it to a portal page.

To create a data-entry portlet:

1. Navigate to the Information Delivery Portal page to which you want to add a portlet.
2. Click **Options** ⇒ **Edit Page Content**. The Edit Page Content page appears.

3. Click **Add Portlets**. The Add Portlets to Page page appears.
4. From the **Portlet type** list, select **Performance Data Entry**.
5. Enter the name, description, and keywords, if any.
6. Click **Add**.
7. Click **Done**.
8. On the Edit Page Content page, click **OK**. The new portlet appears on the page.

Edit the portlet to specify the project and form to use in the portlet. For information about editing a portlet after it is created, see [“Edit a Performance Data-Entry Portlet” on page 305](#).

---

## Edit a Performance Data-Entry Portlet

To edit the properties of a Performance Data-Entry portlet:

1. In the portlet, click . The Edit Performance Data-Entry Portlet page appears.
2. On the **General** tab, enter the portlet name, description, and keywords.
3. From the **Project** list, select a project.
4. Click **Display project name** if you want the name displayed in the form.
5. From the **Data-Entry Form** list, select a form.

*Note:* You must first create the form in Strategy Management Builder. For more information, see [Chapter 33, “Creating and Managing Forms,” on page 299](#).

6. In the **Portlet height** field, enter the height to use for the portlet, in pixels.
7. If you want to enable the SAS Information Delivery Portal administrator to view the portlet and its form, click **Use this portlet as a data-entry portlet for the Portal Administrator**.

*Note:* Because of the way security is implemented, the portal administrator might not have the required access permissions to view the portlet. If the administrator must be able to view the portlet and form, make this selection.

8. Click the **Date** tab.
9. To specify the date that the form uses when opened, complete one of the following steps:
  - To specify the current date, click **Current date**.
  - To specify a date relative to the current date, click **Relative period**, enter a value in the field, and then select a value from the **Period type** list.
  - To always show a specified date, click **Always show this date**. Then, enter a date in the field or click the list box arrow to choose a date from the calendar.
10. To give data-entry form users a way to change the date while they are working in the form, click **Enable users to change the date**. The data change does not persist from one session to the next.
11. To restrict the dates that the data-entry user can navigate, click **Restrict the dates available in the form** and then make your selections in the **Start** and **End** fields.

**TIP** By default, the dates are restricted by the start and end dates of the project.
12. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

## Chapter 34

# Entering Data Manually

---

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---

## Data-Entry Form Considerations

When you are using a data-entry portlet, remember the following considerations:

- It is possible to have multiple data-entry portlets on a portlet page.
- The same data entry form can appear in multiple portlets on a portal page.
- Data entered in one instance of the portlet might not be immediately reflected in another instance of the portlet.

---

## Enter Data in a Form without a Workflow

You can use the data-entry portlet to enter scorecard data for a date or for period of time.

To enter data in a data-entry portlet:

1. Access the portal page that includes the data-entry portlet.
2. In the **Date** field, select the date for which you want to enter data.  
*Note:* Due to customization, this field might not be enabled.
3. From the **Period type** list, select the period type for which you want to enter data.
4. From the **Scorecard** list, select the scorecard for which you want to enter data.
5. Click  to enter comments about the form. For more information about making comments, see the SAS Information Delivery Portal help.
6. Enter values in the cells in the form. When you enter data, remember the following considerations:

- The column headings indicate whether its cells are text or numeric.
  - When you click in a Read-Only cell, the cell appears gray.
  - Percentages, commas, inline formulas, currency, or any other notation are not supported in data-entry forms.
7. To save the data entered into a form, click **Submit**.

---

## Enter Data in a Form with a Defined Workflow

If a form has a defined workflow, all of the affected data-entry users must enter and submit the data in the form. To enter data:

1. Access the portal page that includes the data-entry portlet.
2. In the **Date** field, select the date for which you want to enter data.  
*Note:* Due to customization, this field might not be enabled.
3. From the **Period type** list, select the period type for which you want to enter data.
4. From the **Scorecard** list, select the scorecard for which you want to enter data.
5. Enter values in the fields in the data-entry table.
6. If you want to enter comments about the form, click . For more information about making comments, see the SAS Information Delivery Portal help.
7. If you want to clear the form of any unsaved changes, click **Discard Changes**.
8. To save the data entered into a form, click **Save**. You can return to the form and make further updates.
9. When your work in the form is complete, click **Submit**.

*Note:* You can no longer access the form after you submit it. To access the form again, the workflow must start again.

---

## Approve Data

If a form has a defined workflow, the form is submitted by the data-entry users after all of the data is entered. Then, the workflow starts the approval process. Depending on how the workflow is defined, one or more approvers must review and approve the data. Also, approvers might have to approve the data in a specified order.

To approve data that was entered by one or more data-entry users:

1. Access the portal page that includes the data-entry portlet.
2. If you want to approve the data that was submitted only by a specific data-entry user, make sure that the user is selected in the **Submitter** list.

Otherwise, if you want to approve the data that was submitted by *all* of the data-entry users, make sure that **(all)** is selected in the **Submitter** list.

3. Click **Approve**.



4. A confirmation message appears. Click **Approve** again. The data is stored in the system and is available for viewing.

If the form has completed the specified workflow process, the following message appears: The form has completed the approval process. The form does not require any further actions.

If the form has not completed the specified workflow process, the following message appears: The form is partially approved. Other approvers must complete the approval process. You have completed your actions for this form.

---

## Reject Data

To reject data that was entered by one or more data-entry users:

1. Access the portal page that includes the data-entry portlet.
2. If you want to reject the data that was submitted only by a specific data-entry user, make sure that the user is selected in the **Submitter** list.

Otherwise, if you want to reject the data that was submitted by *all* of the data-entry users, make sure that **(all)** is selected in the **Submitter** list.

3. Click **Reject**.
4. A confirmation message appears. You can enter comments to the data-entry user in the text field.
5. Click **Reject**. The form is made available to the affected user so that the user can make corrections.



## Chapter 35

# Importing Data into a Strategy Management Project

---

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---

## Importing Data by Using the Import Wizard

### Overview

SAS Strategy Management provides an Import wizard that you can use to import data into a SAS Strategy Management project. The project and its template must already exist in SAS Strategy Management. You can define the project by using either Strategy Management Builder or the Batch Maintenance Facility (BMF). After you define the project, you can define how to import your data by using the Import wizard. You can import a scorecard hierarchy, but you cannot import content for the scorecards. Alternatively, you can import content into a pre-existing scorecard hierarchy. In the wizard, you select the source data file to use. Then, you specify how the columns of data in the source file map to the new hierarchy or to columns in SAS Strategy Management scorecards.

For more information about Strategy Management Builder, see “Part 2. Describing and Building Your Strategy” in this User’s Guide. For more information about the BMF, see the *SAS Strategy Management: System Administration Guide*.

## Types of Imports

You can import data in one of two ways:

- use a hierarchy configuration that creates the scorecard hierarchies only  
When you run the hierarchy configuration, the hierarchy that is specified in the source data file is imported into the SAS Strategy Management project as scorecards. You can populate the scorecard hierarchy by using the content configuration or the Batch Maintenance Facility.
- use a content configuration that creates element data and cell data for the scorecards  
The content configuration requires that a scorecard hierarchy already exist in the project. The hierarchy might contain other data as well. When you run the content configuration, the data in the source data file is imported into the SAS Strategy Management scorecards as element and cell data, or as project-level elements.

## Supported Source Data Files

You can import data from the following types of source files:

- SAS data sets
- Microsoft Excel files

These data source files must be either registered or unregistered.

| Type         | Description                                                                                                                                                                                                                                                                        | Data Supported                           |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Unregistered | Indicates that the file is located on a file system that is accessible to the middle tier. For more information, see “ <a href="#">Local Microsoft Excel Files and Shared Directories</a> ” on page 313.                                                                           | Excel spreadsheet files                  |
| Registered   | Indicates that the file is registered in the SAS Metadata Repository. To register a file, contact your SAS Strategy Management administrator. For more information, see “ <a href="#">Registering Files</a> ” in the <i>SAS Strategy Management: System Administration Guide</i> . | Excel spreadsheet files<br>SAS data sets |

Remember the following limitations when you use Excel spreadsheet files:

- Excel files from version 2007 or later are supported.
- SAS Strategy Management cannot read an Excel spreadsheet if that spreadsheet is currently open in Excel. Excel locks the file when the file is open.
- You cannot register or read an Excel spreadsheet that is located on a server that is running UNIX. Excel spreadsheets use a data structure that is specific to Microsoft. The Import wizard uses Microsoft technology to read the spreadsheet. This

technology does not currently exist on UNIX. However, you can register and read SAS data sets that are located on servers that are running UNIX.

- SAS Strategy Management cannot read Excel spreadsheets that are located on a different network domain than the domain where the middle tier is located. This limitation applies to registered and unregistered spreadsheets.

---

## Registering Source Data Files

To import data that is located in SAS data sets, the data sets must be registered. Excel files can be registered also. Contact your SAS system administrator to determine whether a SAS data set or Excel spreadsheet is registered. For more information, see “Registering Files” in the *SAS Strategy Management: System Administration Guide*.

---

## Local Microsoft Excel Files and Shared Directories

If you want to use unregistered Excel spreadsheet files, the files must be located where the middle-tier server can access them. That is, the files must be local and must be in a shared directory.

The spreadsheet file location must meet the following criteria:

- The file must be on a Windows system (not UNIX).
- The file must be in a directory whose permissions grant Read access to the Java Virtual Machine on the middle-tier server.

*Note:* Your system administrator can confirm that these permissions are set.

- The file must be on the same network domain as the middle-tier server.

Typically, the file system of the middle-tier server satisfies these requirements. If you locate the spreadsheet file on a different file server, you must provide the full Universal Naming Convention (UNC) file path to the spreadsheet file when you specify your local Excel source data.

---

## Source Data Organization

### Overview

In order to successfully import your data into SAS Strategy Management, the data must meet certain criteria.

SAS data sets and Excel spreadsheets store data in different ways:

- SAS organizes data into variables and stores the variable as either character or numeric data only.
- Excel organizes data into cells that you can format by using a variety of data types. To see these data types, right-click in a cell and select **Format cells**.

You can express any item as a character string in both SAS and Excel data. In SAS, you can store the numeric value 64.35 as the character value **64.35** in a SAS data set:

```
data temp;
input value $8;
cards;
64.35
;
```

In Excel, you can create a worksheet, type **64.35** in a cell, and then format the cell as character data by using the General cell format provided by Excel. Both of these formatting techniques affect how SAS Strategy Management imports the data.

The two formatting techniques especially affect date values. The following sections describe both data file types, SAS and Excel, and what to consider when you create them.

### **Data-Column Naming Requirements for Excel Files**

The Import wizard views the input data as a table (a series of rows and columns of values). The rows are referred to by number. The first row of data values is row 1. Each column has a name. SAS software and Excel assign names differently:

- SAS software automatically bases the name of each column on the name of the variable with which the column is associated.
- Excel automatically uses ascending letters of the alphabet to name each column.

The Import wizard cannot use the Excel method of naming columns. For Excel files, you must create column names in row 1.

#### **CAUTION:**

**If you omit this change, the Import wizard uses the first row of data as the column names.**

When the Import wizard displays the data columns in the **Preview** fields or lists, you might notice that the column names differ from the actual text values that you specified. For example, if you used the underscore character, it is converted to a blank. This type of change does not affect the way the Import wizard processes the column names.

### **Date Representation Considerations**

#### **Overview**

By default, the Import wizard expects date values to be stored as numeric values in SAS data sets and as date-formatted cells in Excel. When you select **Use as defined in source**, you accept this default way that the Import wizard expects SAS and Excel to create date values. The **Use as defined in source** check box is located in the **Source date format** list in the Import wizard.

#### **Numeric Dates in SAS**

The following code is an example of a SAS program:

```
data dsets.measuresdates;
input sccode $ element $ startperiod : mmddyy8. endperiod : mmddyy8. value period : mmddyy8.;
cards;
code1   element1   11-01-11 11-30-11 36.3 11-01-11
code2   element2   12-01-11 12-31-11 43.2 12-01-11
;
```

The variables **startperiod**, **endperiod**, and **period** are numeric variables. The SAS informat **mmddyy8.** is associated with each them. If you run this program and invoke the PRINT procedure on the results, you receive the following output:

The SAS System

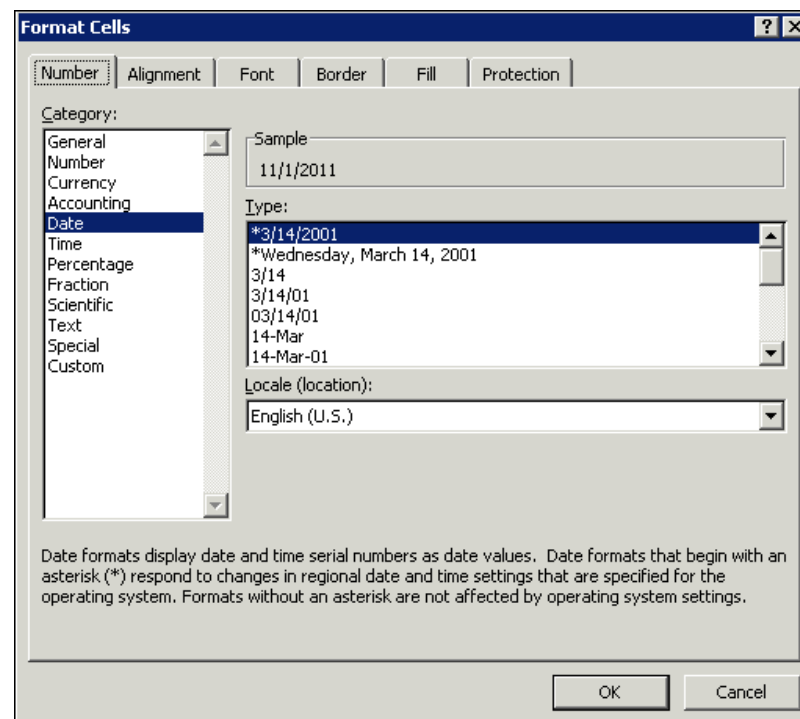
| Obs | sccode | element | startperiod | endperiod | value | period |
|-----|--------|---------|-------------|-----------|-------|--------|
| 1   | code1  |         | 18932       | 18961     | 36.3  | 18932  |
| 2   | code2  |         | 18962       | 18992     | 43.2  | 18962  |

The date value 11-01-11 appears as the numeric value 18932. This is the date value when SAS stores it as a numeric value.

### Date-Formatted Cells in Excel

In an Excel spreadsheet, you can type a date value in the first cell, and then right-click the cell and select **Format Cells**. The following figure shows that Excel has applied a date format to the value by default.

*Note:* You can also manually specify **Date** in this window.



### Dates as Character Values in SAS and Excel

The following SAS program reads the date value as a character string:

```
data dssets.measuresdates;
input sccode $ element $ startperiod $ endperiod $ value period $;
cards;
code1 element1 11-01-11 11-30-11 36.3 11-01-11
code2 element2 12-01-11 12-31-11 43.2 12-01-11
;
```

The variables **startperiod**, **endperiod**, and **period** are character variables. If you run this program and invoke the PRINT procedure on the results, you receive the following output:

The SAS System

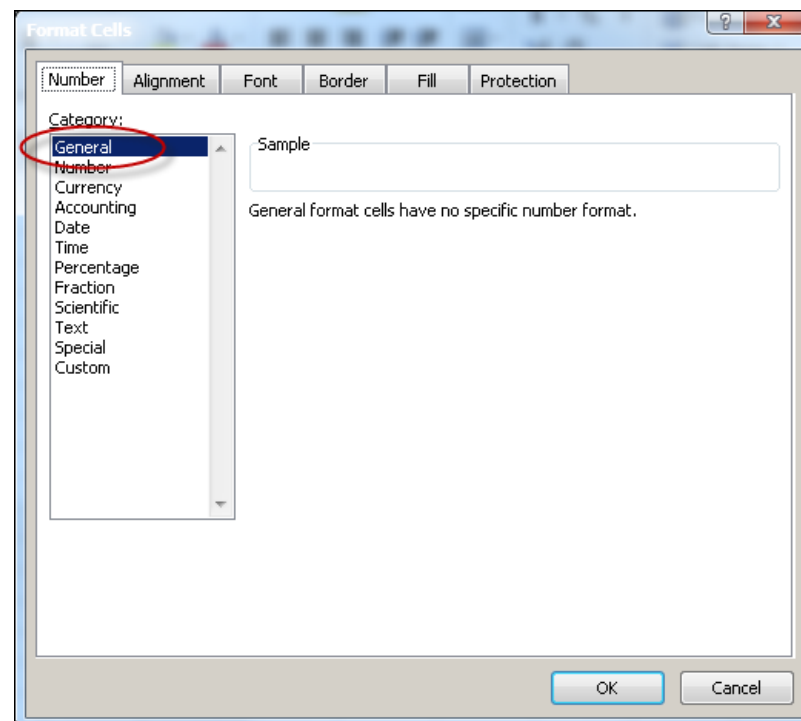
| Obs | sccode | element  | startperiod | endperiod | value | period   |
|-----|--------|----------|-------------|-----------|-------|----------|
| 1   | code1  | element1 | 11-01-11    | 11-30-11  | 36.3  | 11-01-11 |
| 2   | code2  | element2 | 12-01-11    | 12-31-11  | 43.2  | 12-01-11 |

The date value 11-01-11 appears as the character value 11-01-11. This is the date value when SAS stores it as a character value.

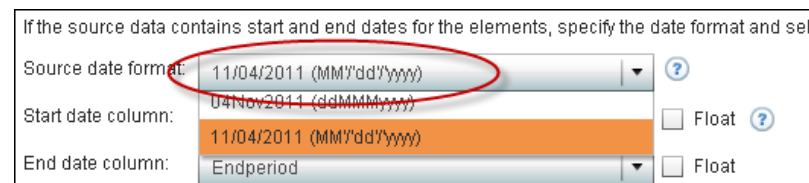
On the **Number** tab in the Format Cells window in Excel, you can select **General** as the format of the cell.

**CAUTION:**

**Do not store dates in the Text format.** For the import to succeed when using Excel data, dates can be stored only in the General or Date format.



Both of these methods create a date value as a character string. The Import wizard cannot read these values correctly by using the default setting. Instead, you must select a source date format in the Import wizard that matches the format that you used to create the date value. For the Excel example, select the MM/dd/yyyy format.





## Changing Source Data Files and Its Consequences

After you create an import configuration, an association exists between the configuration and your source data file. Because of this association, you must avoid making certain changes to the source data file.

| Change Affects Only Data Values                                                                                                                                                                                                       | Change Affects Data Structure or Mapping Associations                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The following changes affect the data values, but not the structure of the data:</p> <ul style="list-style-type: none"> <li>• adding rows of data</li> <li>• deleting rows of data</li> <li>• changing values in a cell</li> </ul> | <p>The following changes affect the structure of the data or the data mapping associations between the source data file and the import configuration:</p> <ul style="list-style-type: none"> <li>• adding columns</li> <li>• deleting columns</li> <li>• renaming column headings</li> </ul> |

You cannot make structural changes to the source data file without updating the configuration. If the source data file is registered, you must update the metadata of the source data file by using SAS Management Console.

For example, suppose you define a configuration that uses an unregistered Excel spreadsheet and a worksheet called MySheet\$. Then, you edit the Excel spreadsheet and rename the worksheet to DifferentSheet\$. Because of this change, you must edit the content configuration. On the Select Source Data page, you must select the new worksheet name.

*Note:* This correction does not work for a registered Excel spreadsheet. Instead, in the SAS Management Console Data Library Manager, you must delete the old table named MySheet\$ and register the renamed worksheet.

As another example, suppose a SAS data set is associated with a configuration and you add a new column to the data set. After you save the changes, you must delete the old table and register the changed data set in the SAS Management Console Data Library Manager.

**TIP** If the file does not successfully import after you reregister it, consider creating a new import configuration.

---

## Define How to Import Data from a Source File

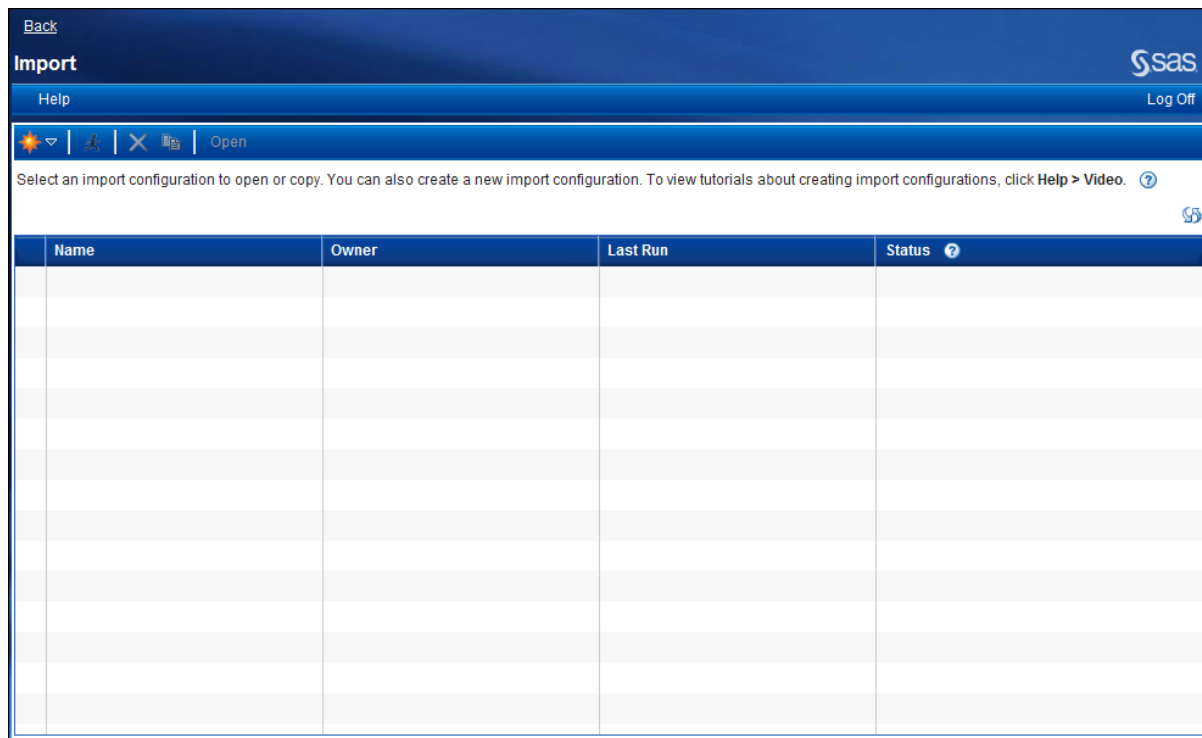
The content configuration requires that a scorecard hierarchy already exist in the project. The hierarchy might contain other data as well. When you run the content configuration, the data in the source data file is imported into the SAS Strategy Management scorecards as element and cell data, or as project-level elements.

To define how SAS Strategy Management imports data from a source file:

### **CAUTION:**

**In the following procedure, do not select the same column from your source data more than once.** The column mappings must be one-to-one. Otherwise, the import configuration fails when you run it.

1. In an open scorecard, select **Project** ⇒ **Manage Import Options**. The Import page appears.



2. In the toolbar, click  and then click **New Content Import Configuration**. The Import Content wizard appears.
3. On the Identification page, type a name that is unique within this SAS Strategy Management project. A description is optional.
4. Click **Next**.
5. On the Select Source Data page, select the type of data that you want to import.

---

**Local source data** If your source file is located on your local system, select **Local Excel source data**. Typically, you select this option if you are importing a Microsoft Excel file that is unregistered.

In the **File path** field, type the file path and click **Retrieve**.

*Note:* The file path must include the computer name. In the following example, the system is called MYCOMPUTER. If the file is located on a system that is running Windows, an example file path is

`\\MYCOMPUTER\spreadsheets\monthly_reports.xlsx`. For more information, see “[Local Microsoft Excel Files and Shared Directories](#)” on page 313.

From the **Worksheet** list, select the Excel worksheet that contains the data that you want to use.

---

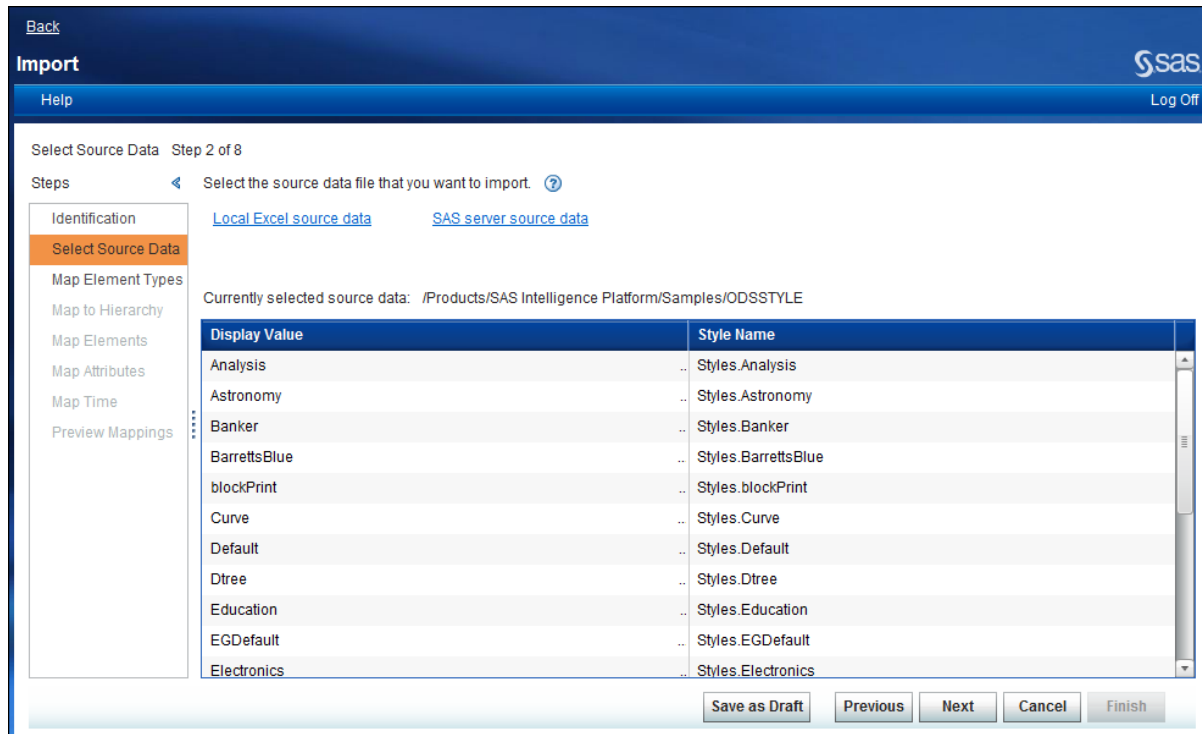
**SAS server source data**

If you want to import a SAS data set or Excel spreadsheet, select **SAS server source data**.

*Note:* SAS data sets or Excel spreadsheets must be registered before you can use them. For more information, see [“Registering Source Data Files” on page 313](#).

In the Select window, navigate to the table that you want to import and select it. Then, click **OK**.

6. A preview table appears in the wizard. In this table, view the data that is contained in the file that you selected.



7. Click **Next**.
8. On the Map Element Types page, select the element type names to use when the source data is imported.

**Element type**

If you want to import all of the data by using the same element type name or if the source data does not include the element type name to use, select the element type from the **Element type** list.

*Note:* The selections in this list are the element types that are already defined in the current SAS Strategy Management template.

**Element type column**

If your source data includes the element type information, select the column that provides the element type information. The data that the column contains appears in the **Preview** field so that you can verify your selection.

*Note:* The selections in this list are the columns that are in the source data. Select the column name that contains the elements to import.

*Note:* Element type names in the source data must match the element type names that are defined in the Strategy Management template.

9. Click **Next**.

10. On the Map to Hierarchy page, map the content in the source data to an existing scorecard in a SAS Strategy Management project. When you define this mapping, you implicitly map your data to the hierarchy in which the scorecard exists in the project. Alternatively, you can map the content to elements of a project.

**TIP** A hierarchy represents the levels in your scorecard tree. You can have a root level, parent levels, and child levels. The following hierarchy of scorecards is an example: worldwide, division, department, and group. Worldwide is the root level. Division is a child of worldwide and a parent of department, and so on.

|                          |                                                                                                                                                                                                                                                                                                                   |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Identifier column</b> | These selections are the columns that are in the source data. Select the column name that contains the unique scorecard identifiers that are already defined in the SAS Strategy Management project. The data that the column contains appears in the <b>Preview</b> field so that you can verify your selection. |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

*Note:* If you have already selected a column in the Import wizard, do not select it again.

|                         |                                                                                                                                                                                                                                |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hierarchy levels</b> | From the <b>Available items</b> list, select columns from the source data to map to the scorecard hierarchy in your SAS Strategy Management project. You can change the order of the levels in the <b>Selected items</b> list. |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

*Note:* A best practice is to map the same number of levels that you are importing. For example, if you are importing two levels of data, then map only two levels of the hierarchy.

*Note:* If you have already selected a column in the Import wizard, do not select it again.

|                                         |                                                                                                                                    |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Import as project-level elements</b> | If the project has project-level element types defined, use this selection to create project-level elements from your source data. |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|

11. On the Map Elements page, map the element column in the source data to the elements that are in the scorecards of the SAS Strategy Management project. If the source data contains elements that are not in the project, you can create them. Complete the following steps:

- If you want the import process to create elements that exist in the source data but that do not exist in the project, click **Create elements that do not exist**.
- From the **Element column** list, select the column name in the source data that contains the elements to import. The data that the column contains appears in the **Preview** field so that you can verify your selection.

*Note:* If you have already selected a column in the Import wizard, do not select it again.

- If the source data contains start and end dates for the elements, specify the date format and select the applicable columns from the source data. For more information, see [“Date Representation Considerations” on page 314](#).
  - If the date values are stored as numeric values in your source data, click **Use as defined in source**.

- If the date values are stored as character values in your source data, select the format from the **Source date format** list that matches the format of your date character values.

**CAUTION:**

**Do not store dates in the Text format.** For the import to succeed when using Excel data, dates can be stored only in the General or Date format.

- From the **Start date column** list, select the column to use for the start dates.

**TIP** Select **Float** to specify that the affected dates are always valid for that selection.

*Note:* If you have already selected a column in the Import wizard, do not select it again.

- From the **End date column** list, select the column to use for the end dates.

**TIP** Select **Float** to specify that the affected dates are always valid for that selection.

*Note:* If you have already selected a column in the Import wizard, do not select it again.

12. Click **Next**.

## 13. On the Map Attributes page, map the source data to the metric attributes content that is defined in SAS Strategy Management. Complete the following steps:

- If you are importing source data into scorecards that contain metric attributes that already contain manually entered values, click **Overwrite cells that contain manually-entered values**. Selecting this option ensures that the imported data overwrites the pre-existing data in the scorecards. Otherwise, the imported data for the affected metric attributes is ignored.
- If you are importing source data into scorecards that contain metric attributes that already contain formulas, click **Overwrite cells that contain formulas**. Selecting this option ensures that the imported data overwrites the pre-existing formulas in the scorecards. Otherwise, the imported data for the affected metric attributes is ignored.
- Choose the mapping option that matches the organization of your source data:

**Metric attributes are in one row**

The source data typically has only one row for each element. An element might have one or more metric attributes, such as Actual and Target. The row contains columns that describe the value, text, and link for one or more metric attributes. The following table provides an example:

| element | actual | target | Link actual     | Link target |
|---------|--------|--------|-----------------|-------------|
| grow    | 1      | 2      | finance numbers | future      |
| prosper | 1      | 2      | goole finance   | future      |

**Each metric attribute is in its own row**

The source data has multiple rows for an element. Each row can define the value, text, or link for one metric attribute. For example, one row defines the value, text, or link for the metric attribute called Actual, and another row defines the value, text, or link for the metric attribute called Target. The following table provides an example:

| element | metric attribute | value | Link            |
|---------|------------------|-------|-----------------|
| grow    | actual           | 1     | finance numbers |
| grow    | target           | 2     | future          |
| prosper | actual           | 1     | goole finance   |
| prosper | target           | 2     | future          |

For more information, see [“Source Data Organization” on page 313](#).

14. Click **Next**.

15. On the Map Time page, map the column in the source data that contains date values. The date values must map to time periods that are defined in SAS Strategy Management. The metric attribute value, text, and link are associated with these date values. Complete the following steps:

- a. From the **Time period column** list, select the column that provides the time period for your data. The data that the column contains appears in the **Preview** field so that you can verify your selection.

*Note:* If you have already selected a column in the Import wizard, do not select it again.

- b. From the **Period type** list, select the type of time period (for example, month or year) that the date values use.

16. Click **Next**.

17. On the Preview Mappings page, preview a sample of the specified mappings that you want to use for your data. When you are satisfied, click **Finish** to save and run the import configuration.

[Back](#)

**Import** sas

Help Log Off

Preview Mappings Step 8 of 8

Steps ◀ Preview a sample of the specified mappings. When you are satisfied, click **Finish** to save and run the import configuration. If you do not want to run the import configuration, click **Save as Draft**.

Source table:

| Name                | Type     | Date         | Attribute Name         |
|---------------------|----------|--------------|------------------------|
| Styles.Analysis     | Measures | Analysis     | .. Styles.Analysis     |
| Styles.Astronomy    | Measures | Astronomy    | .. Styles.Astronomy    |
| Styles.Banker       | Measures | Banker       | .. Styles.Banker       |
| Styles.BarrettsBlue | Measures | BarrettsBlue | .. Styles.BarrettsBlue |
| Styles.blockPrint   | Measures | blockPrint   | .. Styles.blockPrint   |
| Styles.Curve        | Measures | Curve        | .. Styles.Curve        |
| Styles.Default      | Measures | Default      | .. Styles.Default      |
| Styles.Dtree        | Measures | Dtree        | .. Styles.Dtree        |
| Styles.Education    | Measures | Education    | .. Styles.Education    |
| Styles.EGDefault    | Measures | EGDefault    | .. Styles.EGDefault    |
| Styles.Electronics  | Measures | Electronics  | .. Styles.Electronics  |
| Styles.fancyPrinter | Measures | fancyPrinter | .. Styles.fancyPrinter |
| Styles.Festival     | Measures | Festival     | .. Styles.Festival     |

**TIP** If you want to save the import configuration but you do not want to run it, click **Save as Draft**. The import configuration is saved to the selection list. When you want to run it, select the import configuration and click .

The **Import** selection list appears and includes the new import configuration. The **Status** column indicates whether the configuration ran successfully. If the status icon indicates that errors occurred, click that icon to view the error log.

## Define How to Import a Hierarchy from a Source File

When you run the hierarchy configuration, the hierarchy that is specified in the source data file is imported into the SAS Strategy Management project as scorecards. You can populate the scorecard hierarchy by using the content configuration or the Batch Maintenance Facility. To define how SAS Strategy Management imports data from a source file:

1. In an open scorecard, select **Project** ⇌ **Manage Import Options**. The Import page appears.
2. In the toolbar, click  and then click **New Hierarchy Import Configuration**. The Import wizard appears.

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Import

Help Log Off

**Identification**

Specify a name that is unique within this Strategy Management project.

Name: \* klm-2

Description: Enter a description

Owner: sasdemo

**Select Source Data**

Map to Hierarchy

Cancel Save

3. In the **Identification** section, type a name that is unique within this SAS Strategy Management project. A description is optional.
4. Expand the **Select Source Data** section.
5. Select the type of data that you want to import.

#### Local source data

If your source file is located on your local system, select **Local Excel source data**. Typically, you select this option if you are importing a Microsoft Excel file that is unregistered.

In the **File path** field, type the file path and click **Retrieve**.

*Note:* The file path must include the computer name. In the following example, the system is called MYCOMPUTER. If the file is located on a system that is running Windows, an example file path is

\\MYCOMPUTER\spreadsheets\monthly\_reports.xlsx. For more information, see [“Local Microsoft Excel Files and Shared Directories”](#) on page 313.

From the **Worksheet** list, select the Excel worksheet that contains the data that you want to use.

#### SAS server source data

If you want to import a SAS data set or Excel spreadsheet, select **SAS server source data**.

*Note:* SAS data sets or Excel spreadsheets must be registered before you can use them. For more information, see [“Registering Source Data Files”](#) on page 313.

In the Select window, navigate to the table that you want to import and select it. Then, click **OK**.

6. A preview table appears in the wizard. In this table, view the data contained in the file that you selected.



**Identification**

**Select Source Data**

Select the source data file that you want to import. ?

[Local Excel source data](#)    [SAS server source data](#)

Currently selected source data: /Products/SAS Intelligence Platform/Samples/ODSSTYLE

| Display Value | Style Name             |
|---------------|------------------------|
| Analysis      | .. Styles.Analysis     |
| Astronomy     | .. Styles.Astronomy    |
| Banker        | .. Styles.Banker       |
| BarrettsBlue  | .. Styles.BarrettsBlue |
| blockPrint    | .. Styles.blockPrint   |
| Curve         | .. Styles.Curve        |
| Default       | .. Styles.Default      |
| Dtree         | .. Styles.Dtree        |
| Education     | .. Styles.Education    |
| EGDefault     | .. Styles.EGDefault    |

**Map to Hierarchy**

Cancel Save

7. Expand the **Map to Hierarchy** section.

**Identification**

**Select Source Data**

**Map to Hierarchy**

To build the scorecard hierarchy in a Strategy Management project, define the order of the hierarchy levels in the source data and specify their relationship for use in scorecards. ?

Hierarchy levels:

Available items:

- Style Name
- Display Value

Selected items: ?

- Style Name
- Display Value

Optionally, you can select a column from the source data that provides unique scorecard identifiers.

Unique scorecard identifiers: Select a column

Preview:

Cancel Save

8. Define the order of the hierarchy levels in the source data and specify their relationship for use in scorecards. SAS Strategy Management uses this information to build the scorecard hierarchy in the project.

From the **Available items** list, select columns from the source data to map to the scorecard hierarchy in your SAS Strategy Management project. You can change the order of the levels in the **Selected items** list.

**TIP** A best practice is to map the same number of levels that you are importing. For example, if you are importing two levels of data, then map only two levels of the hierarchy.

**TIP** A hierarchy represents the levels in your scorecard tree. You can have a root level, parent levels, and child levels. The following hierarchy of scorecards is an

example: worldwide, division, department, and group. Worldwide is the root level. Division is a child of worldwide and a parent of department, and so on.

9. (Optional) From the **Unique scorecard identifiers** list, select a column from the source data that provides unique scorecard identifiers. The data that the column contains appears in the **Preview** field so that you can verify your selection.
10. Click **Save** to save the import configuration. The **Import** selection list appears and includes the new import configuration.

---

## Open an Import Configuration

To open an import configuration, double-click the configuration in the selection list or select the configuration from the selection list and then click **Open**.

---

## Run an Import Configuration

To run an import configuration, select the configuration from the selection list and then click . The configuration runs, and its status is reported in the **Status** column of the selection list.

*Note:* Do not run more than one configuration at a time. This is especially true if a content configuration requires that its hierarchy already be created by a hierarchy configuration.

---

## View the Import Configuration Error Log

If a configuration did not run successfully, you can view its error log. Double-click the status icon in the **Status** column of the selection list.

---

## Copy an Import Configuration

To copy an import configuration, select the configuration from the **Import** selection list and then click . A copy of the import configuration is created, which you can then edit.

---

## Delete an Import Configuration

To delete an import configuration, select the configuration from the **Import** selection list and then click . The import configuration is deleted.

## **Part 7**

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# Creating Reports

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*Chapter 36*

# Creating Reports Using SAS Information Maps

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## Creating Reports Using SAS Information Maps

You can create reports using SAS Information Maps. Information maps can be used in many SAS products, including the following:

- SAS Information Map Studio
- SAS BI Dashboard
- SAS Web Report Studio

For more information, see the documentation for these products. For information about saving a scorecard as a SAS Information Map, see [“Save a Scorecard as a SAS Information Map” on page 79](#).



## Chapter 37

# Viewing Strategy Management Reports in Microsoft Office

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## Overview

By using the SAS Add-In for Microsoft Office plug-in with SAS Strategy Management, you can view SAS Strategy Management reports in the following Microsoft applications:

- Excel
- Outlook
- PowerPoint
- Word

To determine whether SAS Add-in for Microsoft Office is installed, open any of these Microsoft Office applications. If the tabs for the ribbon bar across at the top of the window include a **SAS** tab, the plug-in is installed. For information about installation, see the SAS Add-in for Microsoft Office documentation at <http://support.sas.com/documentation/onlinedoc/addin/index.html>.

---

## Creating a SAS Strategy Management Report

To create a SAS Strategy Management report that you can view in Microsoft Office:

1. In Strategy Management Builder, open a project.
2. Select **Scorecard** ⇒ **Save As SAS ROM Report**. The New Report wizard appears.
3. On the Location page, navigate to the location where you want to save the report and select the folder. Click **Next**.
4. On the Properties page, type a name for the report. A description is optional. Click **Next**.

5. Review the Summary page. When you are satisfied, click **Finish** to exit the wizard. The report is saved to the location that you selected. A message appears, which states that the report was created.

---

## Viewing a SAS Strategy Management Report

For information about using SAS Add-in for Microsoft Office to view SAS reports, including Strategy Management reports, see the SAS Add-in for Microsoft Office documentation at: <http://support.sas.com/documentation/onlinedoc/addin/index.html>.

The following restrictions apply to the specified Microsoft Office applications:

- (PowerPoint only) You cannot view SAS Strategy Management diagrams or icons that were included with diagrams by using PowerPoint. An error message appears if you attempt to do so.
- (Excel only) Columns that contain time periods do not display the time periods the same as in Outlook or in the Strategy Management Builder.
- (Excel, PowerPoint, and Word only) Columns that contain e-mail addresses and web addresses do not provide active links. The links are active in Outlook.
- (All Microsoft Office applications) Links that are specified for metric attributes are not active when you view SAS Strategy Management reports in any Microsoft Office application.

---

## Enable Colors for Ranges

Reports that include range icons and colors might fail to display the colors. To enable the color display in ranges:

1. On the Microsoft Office application Ribbon, select **SAS** ⇒ **Tools** ⇒ **Options**. The SAS Options window appears.
2. Click the **Results** tab.
3. In the **Format** list, select **SAS Report**.
4. Select **Always apply the SAS style to the results**.
5. Select **sasweb** from the style list.
6. Click **OK** to save the settings.



## Chapter 38

# Accessing Strategy Management Data from Microsoft Excel

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## Accessing Strategy Management Data from Microsoft Excel

You can access the value of a scorecard element metric attribute from within Microsoft Excel. Using the following function, you can place the value directly into a cell or use the value as part of a formula.

*Note:*

- To access the data in SAS Strategy Management, you must be logged on to SAS Strategy Management, and have Read access permission to the numeric attribute.
- Each name in an argument must match the name that is used with the default language for the template.
- No validation is performed on the values of the arguments. If any problems arise with the values, the function returns an empty string.

The function uses the following syntax:

**GETSPMCELLVALUE**(*Template, Project, Scorecard, Element-Type, Element, Metric-Attribute, Date*)

This function uses the following arguments:

- *Template* is a quoted string that represents the template name.
- *Project* is a quoted string that represents the project name.
- *Scorecard* is a quoted string that represents the scorecard name.
- *Element-Type* is a quoted string that represents the element type name.
- *Element* is a quoted string that represents the element name.
- *Metric-Attribute* is a quoted string that represents the metric attribute name.
- *Date* is a quoted string that represents a valid date. This is the specific date for which to return the value of the metric attribute. The format can be any recognizable date format.



## Part 8

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# Appendix

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## Appendix 1

# Strategy Management Function Dictionary

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## Functions for Use in Formulas

The following functions are specific to SAS Strategy Management. These functions are available for selection on the **Functions** tab of the Formula Editor.

*Note:*

- The case that you choose to use for a function does not affect that function in a formula. Uppercase, lowercase, and mixed case are all valid.
- Both parentheses and square brackets are valid in formulas. The examples in the following table use parentheses.

| Function  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Example                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ABS       | Returns the absolute value of its only argument.<br><b>Syntax:</b> ABS( <i>value</i> )<br><i>value</i> is a numeric value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>ABS (-20)</b> returns <b>20</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| ACOS      | Returns the arccosine, in radians, of its only argument.<br><b>Syntax:</b> ACOS( <i>value</i> )<br><i>value</i> is a numeric value between -1 and +1, inclusive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>ACOS (-0.5)</b> returns <b>2.094395</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ASIN      | Returns the arcsine, in radians, of its only argument.<br><b>Syntax:</b> ASIN( <i>value</i> )<br><i>value</i> is a numeric value between -1 and +1, inclusive.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>ASIN (-0.5)</b> returns <b>-0.52360</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ATAN      | Returns the arctangent, in radians, of its only argument.<br><b>Syntax:</b> ATAN( <i>value</i> )<br><i>value</i> is a numeric value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>ATAN(1)</b> returns <b>0.78540</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| attribute | Returns the string representation of the value of an attribute.<br><b>Syntax:</b> attribute( <i>element</i> ) ( <i>attribute</i> ) ( <i>period</i> ) <ul style="list-style-type: none"> <li><i>element</i> is an element.</li> <li><i>attribute</i> is a metric attribute associated with the element.</li> <li><i>period</i> is an optional argument that indicates the period of time associated with the element and its attribute.</li> </ul> <p>The combination of these arguments identifies the string value of an attribute. The value must be one of the following types:</p> <ul style="list-style-type: none"> <li>Text</li> <li>E-mail address</li> <li>Date</li> <li>Web address (URL)</li> <li>Element type</li> </ul> | <ul style="list-style-type: none"> <li><b>attribute ( (ELE=current ("ELE")) (ATTR="Status") )</b><br/>returns the text value of the attribute Status for the current element.</li> <li><b>attribute ( (ELE=current ("ELE")) (ATTR="EndDate") )</b><br/>returns the attribute value of the attribute End Date for the current element. The returned value is the SAS numeric Date value representing the number of days since January 1, 1960 to the value of End Date.</li> <li><b>attribute ( (ELE=current ("ELE")) (COL=current ("COL")) (PER=current ("PER")) )</b><br/>returns the metric text values of the column and period for the current element.</li> </ul> |

| Function      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Example                                                                                                                                                                                     |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| attributeIsMe | <p>Selects the elements that are associated to the current element. Typically this function is used to provide input to another function.</p> <p><b>Syntax:</b> ATTRIBUTEISME(<i>(element) (attribute) (period)</i>)</p> <ul style="list-style-type: none"><li>• <i>element</i> is an element.</li><li>• <i>attribute</i> is a metric attribute associated with the element.</li><li>• <i>period</i> is the period of time associated with the element and its attribute.</li></ul> <p>The combination of these arguments identifies the value of the current element.</p>                               | <p><b>SUM( ATTRIBUTEISME( (ATTR="Initiative" RelatedObjective(s)) (COL="Actual") (PER=current("PER")) ) )</b></p>                                                                           |
| CEIL          | <p>Returns the smallest integer that is greater than or equal to its only argument.</p> <p><b>Syntax:</b> CEIL(<i>value</i>)</p> <p><i>value</i> is a numeric value.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"><li>• <b>CEIL(5.3)</b> returns <b>6</b></li><li>• <b>CEIL(5.0)</b> returns <b>5</b></li></ul>                                                             |
| CHILDREN      | <p>Returns an array of values for the immediate children of the specified element. Use this function to provide input to other functions that use a list of values as input (for example, MEAN).</p> <p><b>Syntax:</b> CHILDREN(<i>(element) (column) (period)</i>)</p> <ul style="list-style-type: none"><li>• <i>element</i> is an element.</li><li>• <i>column</i> is a metric attribute associated with the element.</li><li>• <i>period</i> is the period of time associated with the element and its attribute.</li></ul> <p>The combination of these arguments identifies an attribute value.</p> | <p><b>SUM( CHILDREN( ( ELE=CURRENT( "ELE" ) ) ( COL=CURRENT( "COL" ) ) ( PER = CURRENT( "PER" ) ) ) )</b></p>                                                                               |
| COMPRESS      | <p>Returns a string that is formed by removing certain characters from an input string. You can use this function with either one argument or two arguments.</p> <p><b>Syntax:</b> COMPRESS(<i>'string1', 'string2'</i>)</p> <p><i>string1</i> and <i>string2</i> are strings. <i>string2</i> is optional.</p> <p>If you specify only <i>string1</i>, the function removes all spaces from <i>string1</i>. When you specify <i>string2</i>, the function removes all characters specified in <i>string2</i> from <i>string1</i>.</p>                                                                     | <ul style="list-style-type: none"><li>• <b>COMPRESS( 'A B C D ' )</b> returns the string <b>ABCD</b></li><li>• <b>COMPRESS( 'A+B-C=D', '+-=' )</b> returns the string <b>ABCD</b></li></ul> |

| Function   | Description                                                                                                                                                                                                                                  | Example                                                                                                                                                                                                            |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COS        | Returns the cosine of its only argument.<br><b>Syntax:</b> COS( <i>value</i> )<br><i>value</i> is a numeric value, which represents an angle measure in radians.                                                                             | COS ( 0 . 5 ) returns 0 . 87758 .                                                                                                                                                                                  |
| Current    | Returns the current dimension member, given the dimension type. This function is typically used as part of a relative reference within a time hierarchy.<br><b>Syntax:</b> Current( <i>value</i> )<br><i>value</i> is a dimension type code. | CURRENT( "ELE" ) return the current element.                                                                                                                                                                       |
| DATE       | Returns the SAS integer representation of the date on which it is evaluated.<br><b>Syntax:</b> DATE()<br><i>Note:</i> The DATE and TODAY functions are equivalent.                                                                           | <ul style="list-style-type: none"> <li>On January 1, 1960, <b>DATE ( )</b> returns 1.</li> <li>On January 2, 1960, <b>DATE ( )</b> returns 2.</li> <li>On February 1, 1960, <b>DATE ( )</b> returns 32.</li> </ul> |
| DATETIME   | Returns the number of seconds that have elapsed since the beginning of January 1, 1960.<br><b>Syntax:</b> DATETIME()                                                                                                                         | <p>You can use the PUTN function to convert the value returned by the DATETIME function to a readable exact time, as follows:</p> <p><b>PUTN ( DATETIME ( ) , "DATETIME . " )</b></p>                              |
| DAYOFMONTH | Returns the sequence number of the day on which it is evaluated within the month in which it is evaluated.<br><b>Syntax:</b> DAYOFMONTH()                                                                                                    | On the twelfth day of any month <b>DAYOFMONTH ( )</b> returns 12.                                                                                                                                                  |
| DAYOFWEEK  | Returns the sequence number of the day on which it is evaluated within the week in which it is evaluated, starting with Sunday as day 1.<br><b>Syntax:</b> DAYOFWEEK()                                                                       | On any Thursday <b>DAYOFWEEK ( )</b> returns 5.                                                                                                                                                                    |
| DAYOFYEAR  | Returns the sequence number of the day on which it is evaluated within the year in which it is evaluated, starting with January 1 as day 1.<br><b>Syntax:</b> DAYOFYEAR()                                                                    | On February 10 of any year <b>DAYOFYEAR ( )</b> returns 41.                                                                                                                                                        |



| Function | Description                                                                                                                                                                                                                                                                                                | Example                                                                                                                                                                               |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EXP      | Returns the result of raising e to the power that is specified in its only argument. e is the base of the natural logarithms, which is approximately 2.718.<br><b>Syntax:</b> EXP( <i>value</i> )<br><i>value</i> is a numeric value.<br><i>Note:</i> The EXP function is the inverse of the LOG function. | <b>EXP (LOG (2 . 65) )</b> returns <b>2 . 65</b> .                                                                                                                                    |
| FLOOR    | Returns the largest integer that is less than or equal to its only argument.<br><b>Syntax:</b> FLOOR( <i>value</i> )<br><i>value</i> is a numeric value.                                                                                                                                                   | <ul style="list-style-type: none"><li>• <b>FLOOR (5 . 3)</b> returns <b>5</b>.</li><li>• <b>FLOOR (5 . 0)</b> returns <b>5</b>.</li></ul>                                             |
| ForAll   | Returns Boolean true when all values in an array of values satisfy a logical condition.<br><b>Syntax:</b> ForAll( <i>value1</i> , <i>value2</i> , ..., <i>value_n</i> )<br><i>value1</i> , <i>value2</i> , and <i>value_n</i> are numeric values in an array of values.                                    | <b>ForAll (children ( (ELE="Revenue") (COL="Actual") (PER=current ("PER")) ) &gt; 0 . 5</b> returns true when all of the children of element Revenue have a value greater than 0.5.   |
| ForAny   | Returns Boolean true when any value in an array of values satisfy a logical condition.<br><b>Syntax:</b> ForAny( <i>value1</i> , <i>value2</i> , ..., <i>value_n</i> )<br><i>value1</i> , <i>value2</i> , and <i>value_n</i> are numeric values in an array of values.                                     | <b>ForAny (children ( (ELE="Revenue") (COL="Actual") (PER=current ("PER")) ) &gt; 0 . 5</b> returns true when any of the children of element Revenue have a value greater than 0.5.   |
| ForNone  | Returns Boolean true when no values in an array of values satisfy a logical condition.<br><b>Syntax:</b> ForNone( <i>value1</i> , <i>value2</i> , ..., <i>value_n</i> )<br><i>value1</i> , <i>value2</i> , and <i>value_n</i> are numeric values in an array of values.                                    | <b>ForNone (children ( (ELE="Revenue") (COL="Actual") (PER=current ("PER")) ) &gt; 0 . 5</b> returns true when none of the children of element Revenue have a value greater than 0.5. |

| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Example                                                                                                                                                                  |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IF       | <p>Returns a value that depends on the truth value of a Boolean expression.</p> <p><b>Syntax:</b> IF(<i>boolean</i>, <i>expression1</i>, <i>expression2</i>)</p> <p>where:</p> <ul style="list-style-type: none"><li>• <i>boolean</i> is a Boolean expression. If <i>boolean</i> is true, the IF function returns the value of <i>expression1</i>. If <i>boolean</i> is false, the IF function returns the value of <i>expression2</i>. The Boolean expression can compare two character values or two numeric values. Within the Boolean expression, you can use any of the Boolean operators and comparison operators that are available on the symbol toolbar.</li><li>• <i>expression1</i> and <i>expression2</i> are expressions of any kind. These expressions must be of the same data type. They must both yield numeric values, or they must both yield string values, or they must both yield Boolean values.</li></ul> | <ul style="list-style-type: none"><li>• IF("A"="B", "right", "wrong")</li><li>• IF(1=2, "right", "wrong")</li><li>• IF("A"="B", 1, 0)</li><li>• IF(1=2, 1, 0)</li></ul>  |
| INDEX    | <p>Returns an integer that indicates the starting position of a specified substring within a longer string.</p> <p><b>Syntax:</b> INDEX(<i>string1</i>, <i>string2</i>)</p> <p>where:</p> <ul style="list-style-type: none"><li>• <i>string1</i> is a string and is a longer string than <i>string2</i>.</li><li>• <i>string2</i> is a potential substring in <i>string1</i>.</li></ul> <p>If <i>string2</i> occurs more than once in <i>string1</i>, then the INDEX function returns the starting position of the first occurrence of <i>string2</i>.</p> <p>If <i>string2</i> does not occur in <i>string1</i>, then the INDEX function returns 0.</p>                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"><li>• INDEX("herewego", "we") returns 5.</li><li>• INDEX("nono", "no") returns 1.</li><li>• INDEX("yesyes", "no") returns 0.</li></ul> |

| Function   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Example                                                                                                                                                                                                                                                   |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INDEXC     | <p>Returns an integer that indicates the first position in an input string that contains any character in a specified set of characters.</p> <p><b>Syntax:</b> INDEXC(<i>string1</i>, <i>string2</i>)</p> <p>where:</p> <ul style="list-style-type: none"><li>• <i>string1</i> is a string to search.</li><li>• <i>string2</i> is a set of characters to search for in <i>string1</i>.</li></ul> <p>If any of the characters specified in <i>string2</i> occur in <i>string1</i>, then the INDEX function returns the first position of the occurrence in <i>string1</i>.</p> <p>If none of the characters specified in <i>string2</i> occur in <i>string1</i>, then the INDEX function returns 0.</p> | <ul style="list-style-type: none"><li>• INDEXC("education", "aeiou") returns 1.</li><li>• INDEXC("school", "aeiou") returns 4.</li><li>• INDEXC("jklmn", "aeiou") returns 0.</li></ul>                                                                    |
| INPUTVALUE | <p>When a data-entry user enters a value into a form, INPUTVALUE passes the value into a formula for evaluation. By passing in the value, this function enables the formula to test the value against a rule and to ensure that the value is valid in the form.</p> <p><i>Note:</i> This function is supported only when you are specifying formula-based rules. For more information, see Chapter 10, “Defining Rules,” on page 111.</p>                                                                                                                                                                                                                                                              | <p><b>if (inputvalue() / 100 &gt; .7)</b> is an example of a rule that evaluates the value that a user enters in a data-entry form. If the value is divided by 100 and is greater than 0.7, then the value passes the rule and is valid for the form.</p> |
| LEFT       | <p>Returns a string that is formed by removing all the leading spaces from an input string.</p> <p><b>Syntax:</b> LEFT(<i>string</i>)</p> <p><i>string</i> is a character string.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><b>LEFT (" abc")</b> returns the string <b>abc</b>.</p>                                                                                                                                                                                                |
| LENGTH     | <p>Returns the length of an input string. It takes one argument, which must have a character value.</p> <p><b>Syntax:</b> LENGTH(<i>string</i>)</p> <p><i>string</i> is a character string.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <p><b>LENGTH ("January")</b> returns 7.</p>                                                                                                                                                                                                               |
| LOG        | <p>Computes the natural logarithm of a number.</p> <p><b>Syntax:</b> LOG(<i>value</i>)</p> <p><i>value</i> is a numeric value greater than zero.</p> <p><i>Note:</i> The LOG function is the inverse of the EXP function.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <p><b>LOG (EXP (2.65))</b> returns 2.65.</p>                                                                                                                                                                                                              |

| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Example                                           |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| LOWCASE  | <p>Returns a character string that is formed from an input character string by converting each uppercase letter to the corresponding lowercase letter.</p> <p><b>Syntax:</b> LOWCASE(<i>string</i>)</p> <p><i>string</i> is a character string.</p>                                                                                                                                                                                                                                                 | LOWCASE("HIGH5") returns <b>high5</b> .           |
| MAX      | <p>Returns the value of the argument that has the largest value.</p> <p><b>Syntax:</b> MAX(<i>value1</i>, <i>value2</i>, ..., <i>value_n</i>)</p> <p><i>value1</i>, <i>value2</i>, and <i>value_n</i> are numeric values in an array of values. This function can have any number of arguments.</p> <p>You can also specify ranges of values in this function. See <a href="#">“Specify a Range in a Function” on page 353</a>.</p>                                                                 | MAX(-5, -2.1, 0.3, 1.1, 1.3) returns <b>1.3</b> . |
| MEAN     | <p>Returns the mean of the values of all its arguments. The mean is the sum of all the values, divided by the number of values.</p> <p><b>Syntax:</b> MEAN(<i>value1</i>, <i>value2</i>, ..., <i>value_n</i>)</p> <p><i>value1</i>, <i>value2</i>, and <i>value_n</i> are numeric values in an array of values. This function can have any number of arguments.</p> <p>You can also specify ranges of values in this function. See <a href="#">“Specify a Range in a Function” on page 353</a>.</p> | MEAN(1, 2, 3, 3, 16) returns <b>5</b> .           |
| MIN      | <p>Returns the value of the argument that has the smallest value.</p> <p><b>Syntax:</b> MIN(<i>value1</i>, <i>value2</i>, ..., <i>value_n</i>)</p> <p><i>value1</i>, <i>value2</i>, and <i>value_n</i> are numeric values in an array of values. This function can have any number of arguments.</p> <p>You can also specify ranges of values in this function. See <a href="#">“Specify a Range in a Function” on page 353</a>.</p>                                                                | MIN(-5, -2.1, 0.3, 1.1, 1.3) returns <b>-5</b> .  |
| MOD      | <p>Returns the remainder after dividing <i>value1</i> by <i>value2</i>.</p> <p><b>Syntax:</b> MOD(<i>value1</i>, <i>value2</i>)</p> <p><i>value1</i> and <i>value2</i> are numeric values.</p>                                                                                                                                                                                                                                                                                                      | MOD(5, 2) returns <b>1</b> .                      |

| Function    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Example                                                                                                                                                                          |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| myAttribute | <p>Selects the elements that are associated from the current element.</p> <p><b>Syntax:</b> myAttribute(<i>element</i>)(<i>attribute</i>)(<i>period</i>)</p> <ul style="list-style-type: none"><li>• <i>element</i> is an element.</li><li>• <i>attribute</i> is a metric attribute associated with the element.</li><li>• <i>period</i> is the period of time associated with the element and its attribute.</li></ul> <p>The combination of these arguments identifies an attribute of the element to which the formula is assigned.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <pre>SUM( MYATTRIBUTE( ( ATTR="MeasureSupported" ) ( COL="Actual" ) ( PER=current( "PER" ) ) ) )</pre>                                                                           |
| NESTIF      | <p>Returns the value of the first even-numbered argument that is associated with a true Boolean expression.</p> <p><i>Note:</i> The NESTIF function accepts an even number of arguments, which are arranged in pairs. There is no limit to the number of arguments that the NESTIF function can accept. However, the number must be even.</p> <p><b>Syntax:</b> NESTIF(<i>boolean_expression</i>, <i>expression</i>)</p> <ul style="list-style-type: none"><li>• <i>boolean_expression</i> is a Boolean expression that is associated with <i>expression</i>. It is the first argument of each pair (the odd-numbered arguments of the function). Within the Boolean expression, you can use any of the Boolean operators and comparison operators that are available on the symbol toolbar.</li><li>• <i>expression</i> is an expression whose value might be returned. It is the second argument of each pair (the even-numbered arguments of the function).</li></ul> <p>For even-numbered arguments (<i>expression</i>), all the even-numbered arguments must be of the same data type. They must all yield numeric values, or they must all yield character-string values, or they must all yield Boolean values.</p> <p>For odd-numbered arguments (<i>boolean_expression</i>), if all the Boolean expressions in the odd-numbered arguments are false, then NESTIF returns a default value that depends, in the following way, on the data type of the even-numbered arguments:</p> <ul style="list-style-type: none"><li>• Numeric data type — SAS missing value</li><li>• Character-string data type — zero-length empty string</li><li>• Boolean data type — Boolean FALSE.</li></ul> | <ul style="list-style-type: none"><li>• NESTIF(1=2, "first", 1=1, "second") returns <b>second</b>.</li><li>• NESTIF(1=1, "first", 1=1, "second") returns <b>first</b>.</li></ul> |



| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Example                                                                                                                                                                                                                   |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REPEAT   | Returns a string that is formed from an input string by appending the input string to itself a specified number of times.<br><b>Syntax:</b> REPEAT( <i>string</i> , <i>repetition</i> ) <ul style="list-style-type: none"><li><i>string</i> is the input string.</li><li><i>repetition</i> is the number of times to append <i>string</i> to itself, beyond the first occurrence.</li></ul>                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"><li>REPEAT(<b>no</b>, 1) returns <b>nono</b>.</li><li>REPEAT(<b>ha</b>, 2) returns <b>hahaha</b>.</li></ul>                                                                             |
| REVERSE  | Returns a string that is formed by reversing the character sequence of an input string.<br><b>Syntax:</b> REVERSE( <i>string</i> )<br><i>string</i> is a character string.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | REVERSE( <b>"nuts"</b> ) returns <b>stun</b> .                                                                                                                                                                            |
| RIGHT    | Returns a string that is formed by removing all the trailing spaces from an input string.<br><b>Syntax:</b> RIGHT( <i>string</i> )<br><i>string</i> is a character string.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RIGHT( <b>"abc "</b> ) returns the character string <b>abc</b> .                                                                                                                                                          |
| ROUND    | Returns the integer that is closest to a specified number. If the specified number is exactly midway between two integers, then the larger integer is returned.<br><b>Syntax:</b> ROUND( <i>value</i> )<br><i>value</i> is a numeric value.                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"><li>ROUND(<b>2.4</b>) returns <b>2</b>.</li><li>ROUND(<b>2.5</b>) returns <b>3</b>.</li><li>ROUND(<b>2.6</b>) returns <b>3</b>.</li><li>ROUND(<b>-2.5</b>) returns <b>-2</b>.</li></ul> |
| SCAN     | Returns a segment of an input string that is selected by a standard set of delimiters and a specified numeric position.<br><b>Syntax:</b> SCAN( <i>string</i> , <i>position</i> ) <ul style="list-style-type: none"><li><i>string</i> is the input string.</li><li><i>position</i> is the numeric position of the desired substring. Positions are counted from the beginning of <i>string</i> if <i>position</i> is positive, and from the end of <i>string</i> if <i>position</i> is negative. The following characters are treated as delimiters that divide <i>string</i> into countable segments: <b>&lt; (+&amp;!\$* ) ^ - / , %  </b></li></ul> | <ul style="list-style-type: none"><li>SCAN(<b>"12+34-56+78"</b>, 4) returns <b>78</b>.</li><li>SCAN(<b>"The%quick%brown%fox%jumped"</b>, -2) returns <b>fox</b>.</li></ul>                                                |

| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Example                                                                                                                                              |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| SIN      | Returns the sine of its only argument.<br><b>Syntax:</b> SIN( <i>value</i> )<br><i>value</i> is a numeric value, which represents an angle measured in radians.                                                                                                                                                                                                                                                                                                                                                       | SIN(0.5) returns 0.47943.                                                                                                                            |
| SQRT     | Returns the square root of its only argument..<br><b>Syntax:</b> SQRT( <i>value</i> )<br><i>value</i> is a nonnegative numeric value.                                                                                                                                                                                                                                                                                                                                                                                 | SQRT(81) returns 9.                                                                                                                                  |
| SUBSTR   | Returns a substring of an input string.<br><b>Syntax:</b> SUBSTR( <i>string</i> , <i>position</i> ) <ul style="list-style-type: none"><li>• <i>string</i> is an input string.</li><li>• <i>position</i> is the numeric position in <i>string</i> of the first character of the returned substring.</li><li>• <i>length</i> is an optional argument that specifies the length of the returned substring.</li></ul> If <i>length</i> is not specified, then the returned substring runs to the end of the input string. | <ul style="list-style-type: none"><li>• SUBSTR("reiterate",3,2) returns <b>it</b>.</li><li>• SUBSTR("reiterate",3) returns <b>iterate</b>.</li></ul> |
| SUM      | Returns the sum of its arguments.<br><b>Syntax:</b> SUM( <i>value1</i> , <i>value2</i> , ..., <i>value_n</i> )<br><i>value1</i> , <i>value2</i> , and <i>value_n</i> are all numeric values. SUM can accept any number of arguments.<br>You can also specify ranges of values in this function. See " <a href="#">Specify a Range in a Function</a> " on page 353.<br><i>Note:</i> This function must always be used within another function.                                                                         | SUM(1, 2, 3, 3, 16) returns 25.                                                                                                                      |



| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Example                                                                                                                                                                                                                                                                                                                                                                                                      |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|--------|---|----|-----|---|----|-----|---|----|------|---|----|--------|
| TABLEC   | <p>Returns a character value that it retrieves from a specified table.</p> <p><b>Syntax:</b> TABLEC(<i>tableName</i>, <i>whereClause</i>, <i>columnName</i>)</p> <ul style="list-style-type: none"><li><i>tableName</i> is the name of a registered data table.</li></ul> <p><i>Note:</i> Before you can use this function, the Strategy Management administrator must register the referenced table. For more information, see the <i>SAS Strategy Management: System Administration Guide</i>.</p> <ul style="list-style-type: none"><li><i>whereClause</i> identifies a row in the specified table.</li><li><i>columnName</i> is the name of the column that contains the value to return.</li></ul> | <p><b>TABLEC("stmtable.sas_data", "id1=1 and id2=11", "animal")</b> returns <b>Dog</b>.</p> <p>When the stmtable.sas_data table contains the following data:</p> <table><tr><td>id1</td><td>id2</td><td>animal</td></tr><tr><td>1</td><td>11</td><td>Dog</td></tr><tr><td>2</td><td>22</td><td>Cat</td></tr><tr><td>3</td><td>33</td><td>Bird</td></tr><tr><td>4</td><td>44</td><td>Rabbit</td></tr></table> | id1 | id2 | animal | 1 | 11 | Dog | 2 | 22 | Cat | 3 | 33 | Bird | 4 | 44 | Rabbit |
| id1      | id2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | animal                                                                                                                                                                                                                                                                                                                                                                                                       |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 1        | 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Dog                                                                                                                                                                                                                                                                                                                                                                                                          |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 2        | 22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Cat                                                                                                                                                                                                                                                                                                                                                                                                          |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 3        | 33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Bird                                                                                                                                                                                                                                                                                                                                                                                                         |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 4        | 44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                       |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| TABLEN   | <p>Returns a numeric value that it retrieves from a specified table.</p> <p><b>Syntax:</b> TABLEN(<i>tableName</i>, <i>whereClause</i>, <i>columnName</i>)</p> <ul style="list-style-type: none"><li><i>tableName</i> is the name of a registered data table.</li></ul> <p><i>Note:</i> Before you can use this function, the Strategy Management administrator must register the referenced table. For more information, see the <i>SAS Strategy Management: System Administration Guide</i>.</p> <ul style="list-style-type: none"><li><i>whereClause</i> identifies a row in the specified table.</li><li><i>columnName</i> is the name of the column that contains the value to return.</li></ul>   | <p><b>TABLEN("stmtable.sas_data", "id1=3 and id2=33", "sales")</b> returns <b>61</b>.</p> <p>When the stmtable.sas_data table contains the following data:</p> <table><tr><td>id1</td><td>id2</td><td>sales</td></tr><tr><td>1</td><td>11</td><td>157</td></tr><tr><td>2</td><td>22</td><td>132</td></tr><tr><td>3</td><td>33</td><td>61</td></tr><tr><td>4</td><td>44</td><td>23</td></tr></table>          | id1 | id2 | sales  | 1 | 11 | 157 | 2 | 22 | 132 | 3 | 33 | 61   | 4 | 44 | 23     |
| id1      | id2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | sales                                                                                                                                                                                                                                                                                                                                                                                                        |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 1        | 11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 157                                                                                                                                                                                                                                                                                                                                                                                                          |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 2        | 22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 132                                                                                                                                                                                                                                                                                                                                                                                                          |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 3        | 33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 61                                                                                                                                                                                                                                                                                                                                                                                                           |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| 4        | 44                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 23                                                                                                                                                                                                                                                                                                                                                                                                           |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| TAN      | <p>Returns the tangent of its only argument.</p> <p><b>Syntax:</b> TAN(<i>value</i>)</p> <p><i>value</i> is a numeric value, which represents an angle measured in radians.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p><b>TAN(0)</b> returns <b>0.0000</b>.</p>                                                                                                                                                                                                                                                                                                                                                                  |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| TIME     | <p>Returns the current clock time in military format, to the nearest second.</p> <p><b>Syntax:</b> TIME()</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p>If TIME is executed at exactly noon, the function returns <b>12:00:00</b>.</p>                                                                                                                                                                                                                                                                                                                            |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |
| TODAY    | <p>Returns the SAS integer representation of the current date.</p> <p><b>Syntax:</b> TODAY()</p> <p><i>Note:</i> The DATE function and the TODAY function are equivalent.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"><li>January 1, 1960 is <b>1</b>.</li><li>January 2, 1960 is <b>2</b>.</li><li>February 1, 1960 is <b>32</b>.</li></ul>                                                                                                                                                                                                                                                     |     |     |        |   |    |     |   |    |     |   |    |      |   |    |        |

| Function  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Example                                                                                                                                                                                                                                                  |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TRANSLATE | <p>Returns a character string that is formed by replacing certain characters in an input string with designated substitution characters.</p> <p><b>Syntax:</b> TRANSLATE(<i>string</i>, <i>substitutes</i>, <i>replace</i>)</p> <ul style="list-style-type: none"><li>• <i>string</i> is an input string to translate.</li><li>• <i>substitutes</i> lists one or more substitution characters.</li><li>• <i>replace</i> lists the characters to replace, in a sequence that corresponds to the sequence of substitution characters.</li></ul> | <p><b>TRANSLATE("bone", "iw", "ob")</b> returns <b>wine</b>.</p> <p>If required, you can spread the translation instructions over additional pairs of arguments. For example, <b>TRANSLATE("bone", "i", "o", "w", "b")</b> also returns <b>wine</b>.</p> |
| TRIM      | <p>Returns a character string that is formed by removing all the leading spaces and all the trailing spaces from an input character string.</p> <p><b>Syntax:</b> TRIM(<i>string</i>)</p> <p><i>value</i> is a character string.</p>                                                                                                                                                                                                                                                                                                          | <p><b>TRIM("   abc   ")</b> returns the character string <b>abc</b>.</p>                                                                                                                                                                                 |
| UPCASE    | <p>Returns a character string that is formed from an input character string by converting each lowercase letter to the corresponding uppercase letter.</p> <p><b>Syntax:</b> UPCASE(<i>string</i>)</p> <p><i>value</i> is a character string.</p>                                                                                                                                                                                                                                                                                             | <p><b>UPCASE("they8it")</b> returns <b>THEY8IT</b>.</p>                                                                                                                                                                                                  |

| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Example                                                                                                                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VAL      | <p>Provides a quick way to refer to a cell in a scorecard. Typically this function is used to provide input to another function.</p> <p>For example, if you want to refer to element O3_Month, attribute Total in the current period, you previously had to use the following syntax:</p> <pre>[ELE="O3_Month"] [COL="Total"] [PER=current('PER')]</pre> <p>By using the VAL function, you can refer to the same cell in the following way:</p> <pre>VAL("O3_Month", "Total", "current")</pre> <p><b>Syntax:</b> VAL(<i>element</i>, <i>attribute</i>, <i>period</i>)</p> <ul style="list-style-type: none"><li>• <i>element</i> is an element.</li><li>• <i>attribute</i> is a metric attribute associated with the element.</li><li>• <i>period</i> is the period of time associated with the element and its attribute.</li></ul> <p>When you specify <i>period</i>, you can use any of the following methods:</p> <ul style="list-style-type: none"><li>• the CURRENT function</li><li>• relative offsets combined with the CURRENT function</li><li>• specific time periods</li></ul> | <ul style="list-style-type: none"><li>• VAL("O3_Month", "Total", "current-2")</li><li>• VAL("O3_Month", "Total", "current+2")</li><li>• VAL("O3_Month", "Total", "sep_2012")</li></ul>                                                         |
| VERIFY   | <p>Checks whether one or more characters are present in one or more strings. If every character in the first argument is found in at least one subsequent argument, then VERIFY returns the numeric value 0. Otherwise, VERIFY returns the numeric position of the first character that is not found in any subsequent string.</p> <p><i>Note:</i> This function can accept any number of arguments.</p> <p><b>Syntax:</b> VERIFY(<i>characters</i>, <i>string</i>, ..., <i>string_n</i>)</p> <ul style="list-style-type: none"><li>• <i>characters</i> is a list of characters to check for in the other arguments.</li><li>• <i>string</i> and <i>string_n</i> are strings to check for <i>characters</i>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"><li>• VERIFY("aeiou", "state", "union") returns 0 because each vowel is found in at least one of the words.</li><li>• VERIFY("aeiou", "state", "onion") returns 5 because neither word contains u.</li></ul> |

| Function | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Example                                                                                                                           |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| YTD      | <p>Returns all of the data values to date for the current year from a specified cell.</p> <p><b>Syntax:</b> YTD(<i>element</i>, <i>attribute</i>, <i>period</i>)</p> <ul style="list-style-type: none"><li>• <i>element</i> is an element.</li><li>• <i>attribute</i> is a metric attribute associated with the element.</li><li>• <i>period</i> is the period of time associated with the element and its attribute.</li></ul> <p><i>Note:</i> This function must always be used within another function.</p> | <p><b>YTD("O3_Month", "Total", "sep_2012")</b> returns all of the values for a specific cell during the current year-to-date.</p> |

---

## Get the Value of an Element

Several functions require as input the value of an element. This value is the intersection of an element, its metric attribute, and a point in time. The combination of these arguments identifies a specific value of an element. To specify this value in a function, use either of the following syntaxes:

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short form | <b>VAL ( "CURRENT" , "CURRENT" , "CURRENT" )</b><br><br><i>Note:</i> For more information about the VAL function, see its entry in <a href="#">“Functions for Use in Formulas” on page 337</a> .                                                                                                                                                                                                                                                                                                                         |
| Long form  | <b>[ELEMENT=CURRENT ( "element" ) ]</b><br><b>[COLUMN=CURRENT ( "column" ) ]</b><br><b>[PERIOD=CURRENT ( "period" ) ]</b><br><br><ul style="list-style-type: none"> <li>• <i>element</i> is an element.</li> <li>• <i>column</i> is a metric attribute associated with the element.</li> <li>• <i>period</i> indicates the specific period of time associated with the element and its attribute. For more information, see <a href="#">“Specify a Current or Relative Period in a Function” on page 353</a>.</li> </ul> |

---



---

## Specify a Current or Relative Period in a Function

You can specify the current period by using the following function:

```
current ( 'PER' )
```

You can also specify a relative period by using a numeric offset, for example:

```
current ( 'PER' ) -1
```

If the current period is June, this example returns May.

---

## Specify a Range in a Function

When using the MAX, MEAN, MIN, and SUM functions, you can specify a range of location values by using a colon (:) as in the following example:

```
SUM ( [ELE='Interest'] [COL='Actual'] [PER='JAN2005'] : [ELE='Interest']  
[COL='Actual'] [PER='JUN2005'] )
```

When specifying a range of locations, the following requirements must be met:

- The first and last periods must be at the same level in the hierarchy of variation
- The elements and columns must be the same
- The first period must be before the second period

The specified range in the above example includes only periods at that one level, in order to avoid double counting. The example also specifies a six-period range at the month level of a time hierarchy.

Also, you can exclude certain numbers—for example, **EXCLUDE** ( - 4 , 4 , 2 . 3 ) .

---

## Specify a Full Reference to an Element or Attribute

When you specify a formula for a formula-based range, you must refer to elements and attributes in the formula by using a full reference. Because a range is created at the project level, the range has no context for a scorecard or element type. The full reference acts like a path for the range, and provides the missing context.

For example, if you want to reference the element Pers1, you must enter the full reference to that element in the formula:

```
[ELE='Basketball|Basketball Scorecard^1974 Scorecard|Perspectives|Pers1']  
[COL='Actual'] [PER='NOV2008_Default']
```

When you use the **ATTRIBUTE** function, you must specify the element type by using a full reference to the attribute. For example, if you want to reference the Start Date attribute value for elements of the Task element type, you must also reference the Task element type in the formula:

```
attribute( [ELE=current('ELE')] [ATTR='Task|Start Date'] )
```

## Appendix 2

# Configuring Java

---

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---

## Configure Java for Use with SAS Strategy Management

When you first use the Diagram Editor or the Formula Editor, you must configure your system to run Java. SAS Strategy Management requires the Java 2 Runtime Environment (J2RE) version 1.5 or later. The configuration steps vary depending on your installation:

---

|                                          |                                                                                                                                                                                                                                                                             |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For version 1.5 or later                 | <ol style="list-style-type: none"> <li>1. <a href="#">“Delete the Java Plug-In Cache” on page 356</a></li> <li>2. <a href="#">“Delete Temporary Internet Files” on page 356</a></li> </ol>                                                                                  |
| Any earlier versions or no JRE installed | <ol style="list-style-type: none"> <li>1. <a href="#">“Install the Java 2 Runtime Environment” on page 355</a></li> <li>2. <a href="#">“Delete the Java Plug-In Cache” on page 356</a></li> <li>3. <a href="#">“Delete Temporary Internet Files” on page 356</a></li> </ol> |

---

## Install the Java 2 Runtime Environment

SAS Strategy Management requires the Java 2 Runtime Environment (J2RE) version 1.5 or later. If you do not have version 1.5 installed, complete one of the following steps:

|                                                       |                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For JRE 1.6 or later                                  | <p>If you have a version of the JRE installed that is later than the required version, a message might appear asking if you want to use your version. Click <b>Yes</b>.</p> <p><i>Note:</i> The following security message might appear: <b>Java has discovered application components that could indicate a security concern.</b> Click <b>No</b> to continue.</p> |
| For versions earlier than JRE 1.5 or no JRE installed | <p>If you do not have the required version of the JRE installed, a message prompts you to install it. After the installation is complete, restart your computer.</p>                                                                                                                                                                                                |

---

## Delete the Java Plug-In Cache

To delete the Java plug-in cache, complete the following steps:

*Note:* The names of the controls in the Java Control Panel might differ from the names shown here. Also, these steps might vary depending on your operating system installation.

1. Open the Windows Control Panel.
2. Double-click **Java** to open the Java Control Panel.
3. On the **General** tab, in the **Temporary Internet Files** section, click **Settings**. The Temporary Files Settings list appears.
4. Click **Delete Files**. The Delete Temporary Files list appears.
5. Click **Applications and Applets** and **Trace and Log Files**.
6. Click **OK**. Then click **OK** to exit the Temporary Files Settings list. Click **OK** to exit the Java Control Panel.

---

## Delete Temporary Internet Files

If you are using SAS Strategy Management on more than one server, you must delete the temporary Internet files in Internet Explorer to ensure correct installation and operation of the editor. To do so, complete the following steps.

*Note:* These steps might vary depending on your version of Microsoft Internet Explorer.

1. In Internet Explorer, click **Tools** ⇒ **Delete Browsing History**. The Delete Browsing History list appears.
2. Click **Preserve Favorites website data**.
3. Click **Temporary Internet files**.
4. Click **Delete**.



---

## Enable Java in the Web Browser

### ***Enable Java in Firefox***

You must ensure that Java is enabled for use in your web browser.

*Note:* These steps might vary depending on your version of Firefox.

To enable your web browser to use Java:

1. Click **Tools** ⇒ **Add-ons**. The Add-ons page opens.
2. Click **Plug-ins**.
3. Locate the entry for your Java plug-in and click **Enable**.

### ***Enable Java in Microsoft Explorer***

You must ensure that Java is enabled for use in your web browser.

*Note:* These steps might vary depending on your version of Microsoft Explorer.

To enable your web browser to use Java:

1. Click **Tools** ⇒ **Add-ons**. The Add-ons window appears.
2. Click **Toolbars and Extensions**.
3. Locate and select the entry for your Java plug-in.
4. Click **Enable**.
5. Click **Close** to exit the window.



## Appendix 3

# Install the Adobe SVG Viewer Plug-in

If you want to view diagrams in the SVG format by using the Firefox web browser, you must install the Adobe SVG plug-in. If the plug-in is not installed, the following message is displayed: A plugin is needed to display this content.

*Note:* These steps might vary depending on your version of Firefox.

To install the Adobe SVG plug-in:

1. On the Diagram Viewer page, click **Install plug-in**. The Plug-in Finder Service window appears. The following message is displayed: No suitable plug-ins found.
2. Click **Manual Install**. The Adobe SVG Viewer web page opens.
3. In the Viewers table, locate your language and click the associated Microsoft Windows installation link. Follow the installation instructions for the Adobe SVG Viewer.
4. When the installation is complete, navigate to the following directory on your system:  
**c:\Program Files\Common Files\Adobe\SVG Viewer 3.0**
5. Locate the NPSVG3.dll and NPSVG3.zip files and copy them to the Firefox plug-in directory:  
**c:\Program Files\Mozilla Firefox\Plugins**
6. In the Firefox web browser, click **Tools** ⇒ **Add-ons**.
7. On the Add-ons page, click the **Plugins** tab.
8. Locate the Adobe SVG Viewer plug-in and click **Enable**.
9. Close and restart all open Firefox web browser windows.



## Appendix 4

# View SAS Strategy Management Data in SAS BI Dashboard

You can view SAS Strategy Management data by creating and using a dashboard in SAS BI Dashboard. For detailed information about using SAS BI Dashboard, see the *SAS BI Dashboard 4.31 User's Guide, Second Edition*.

To create new SAS Strategy Management indicator data in SAS BI Dashboard, complete the following steps:

1. Open the SAS BI Dashboard designer.
2. Select **Manage Dashboards**.
3. In the workspace, click **New Indicator Data**.
4. In the Create Indicator Data window, enter a name to use for the indicator data in the **Name** field.
5. Click **OK**. A tab with the specified name appears in the workspace.
6. From the **Data source** list, select **SAS Strategy Management 5.x**.

**CAUTION:**

**The default maximum number of rows returned by any data source is 10,000.** If the source data contains more than 10,000 rows, an error message about making an adjustment appears. If possible, aggregate the data in order to reduce the number of rows to return.

7. In the **Scorecard Server URL** field, enter the host name and port name for the server running the SAS Strategy Management web application.

*Note:* The resulting web address points to the location of the SAS Strategy Management web application.

8. Click **Set Server**.
9. Select the template, project, and scorecard for your data.
  - a. From the **Scorecard Template** list, select the template that you want to use.
  - b. From the **Scorecard Project** list, select the project that you want to use. The scorecard hierarchy appears.
  - c. In the **Scorecard** hierarchy, select the scorecard that you want to use.
10. Select the element type, elements, and attributes that you want to display in the dashboard.
  - a. From the **Element Type** list, select the element type that you want to use.
  - b. From the **Element** list, select one or more elements that you want to use.
  - c. From the **Attributes** list, select one or more attributes that you want to use.
11. Define the formatting that you want to use in the dashboard.

- a. Specify the start date and end date.

| Date Option  | Description                                                                                                                                  |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| No selection | Enables you to specify a start or end date by clicking  . |
| Any date     | Returns all data for the element start date or end date.                                                                                     |
| Today        | Displays the current date.                                                                                                                   |

The following examples show how the date options interact:

- If **Start Date** is set to **Any date** and **End Date** is set to **Today**, the system returns all past data and today's results.
- If **Start Date** is set to **Today** and **End Date** is set to **Any date**, the system returns today's results and any data that is defined for the future.
- If **Start Date** and **End Date** are both set to **Any date**, the system returns all available data for the selection.

- b. In the **Name Format** field, define a label for your dashboard artifact.

*Note:* SAS Strategy Management keywords are used to define the format. When these keywords are displayed, the keywords are replaced with actual values from the strategy, which ensures that labels contain meaningful information.

- c. In the **Value Format** field, call metric values and set SAS formats for display in the dashboard.

**TIP** Use **Metric\_Value** to substitute the actual metric value for a measure.

- Click **Submit**. In the Preview Dashboard window, the specified SAS Strategy Management data appears.
- To save the SAS Strategy Management indicator data, click the **Save** icon in the toolbar.

The following additional steps are required to complete setting up a dashboard:

- Set up a new range.
- Create a new indicator.
- Create a new dashboard.

For information about these steps, see the *SAS BI Dashboard 4.31 User's Guide, Second Edition*.

# Glossary

---

**alert**

an automatic notification of an electronic event that is of interest to the recipient.

**Alerts portlet**

a portlet that lists alert messages that have been issued to the user.

**attribute**

a property of an object, component, or other entity. Examples of attributes include name, size, or color.

**audit**

the formal examination and evaluation of an organization's controls to ensure organizational compliance.

**dashboard**

a view that displays ranges of data in a graphical format. Key performance indicators (KPIs) or any element can be displayed in a dashboard. Each element is represented by a gauge that displays the data ranges that are defined. Links to comments, trend data, and element properties can also be provided.

**data node**

a diagram component that contains all the data and metadata that are associated with an element, such as its labels, attributes, associations, and values.

**data tier**

in a SAS business intelligence system, the architectural layer in which SAS runs data-handling programs (including the logical servers for workspace and stored process servers). The data tier includes transformations, error tables, and jobs.

**dimension**

a data element that categorizes values in a data set into non-overlapping categories that can be used to group, filter, and label the data in meaningful ways. Hierarchies within a dimension typically represent different groupings of information that pertains to a single concept. For example, a Time dimension might consist of two hierarchies: (1) Year, Month, and Date, and (2) Year, Week, and Day.

**element**

a unit of data that is represented in a row in a scorecard table. Each element belongs to an element type. For example, the element type "Objective" might contain the elements "Expenses", "Create New Products", and "Profitability".

**group**

See user group

**identity**

See metadata identity

**information map**

a collection of data items and filters that provides a user-friendly view of a data source. When you use an information map to query data for business needs, you do not have to understand the structure of the underlying data source or know how to program in a query language.

**key performance indicator**

a measurement that shows whether an organization is progressing toward its stated goals. Short form: KPI.

**KPI**

See key performance indicator

**locale**

a setting that reflects the language, local conventions, and culture for a geographic region. Local conventions can include specific formatting rules for paper sizes, dates, times, and numbers, and a currency symbol for the country or region. Some examples of locale values are French\_Canada, Portuguese\_Brazil, and Chinese\_Singapore.

**metadata**

descriptive data about data that is stored and managed in a database, in order to facilitate access to captured and archived data for further use.

**metadata identity**

a metadata object that represents an individual user or a group of users in a SAS metadata environment. Each individual and group that accesses secured resources on a SAS Metadata Server should have a unique metadata identity within that server.

**metadata repository**

a collection of related metadata objects, such as the metadata for a set of tables and columns that are maintained by an application.

**metadata server**

a server that provides metadata management services to one or more client applications.

**metric**

any standard of measurement that is used as a basis for evaluation or comparison. For example, ROI (return on investment) is a metric that is commonly used by businesses as a basis for making decisions, and bytes per second throughput is a common performance metric.

**metric attribute**

a value type that measures, groups, or tracks strategy results. A strategy uses metric attributes as a basis for evaluation and comparison of results. Actual, Target, and Status are examples of metric attributes.



**middle tier**

in a SAS business intelligence system, the architectural layer in which Web applications and related services execute. The middle tier receives user requests, applies business logic and business rules, interacts with processing servers and data servers, and returns information to users.

**performance management framework**

a management system that is supported by measures of performance. The framework can combine financial and nonfinancial measures of performance, as well as leading and lagging indicators. The framework enables optimization and testing of strategies, and evaluation of results.

**permission**

the type of access that a user or group has to a resource. The permission defines what the user or group can do with the resource. Examples of permissions are ReadMetadata and WriteMetadata.

**portal**

a Web application that enables users to access Web sites, data, documents, applications, and other digital content from a single, easily accessible user interface. A portal's personalization features enable each user to configure and organize the interface to meet individual or role-based needs.

**role**

a set of capabilities. In some applications, certain actions are available only to users or groups that have a particular role.

**rollback**

a data recovery process that restores a database after a hardware or software failure, or that returns it to a state before changes were made.

**SAS Stored Process**

a SAS program that is stored on a server and defined in metadata, and which can be executed by client applications. Short form: stored process.

**scorecard**

a collection of content or information about a specific topic, such as a business unit or product. A scorecard tracks internal business processes and external outcomes as an aid to planning a strategy for an organization.

**source system**

the type of database from which operational loss data originates or to which it is being exported.

**stored process**

See SAS Stored Process

**template**

a collection of information that describes the key parts of a strategy. A template consists of element types, metric attributes, and a language setting. A template can be associated with one or more projects.

**Time dimension**

a dimension that divides time into levels such as Year, Quarter, Month, and Day.

**time period level**

a grouping of one or more time periods. For example, the time period level Day consists of the time periods Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday.

**time period set**

in a template or project, a grouping of one or more time period levels.

**trend**

a long-term consistent change, as measured by time series values.

**Unicode Transformation Format 8**

See UTF-8

**universal unique identifier**

a number that is used to uniquely identify information in distributed systems without significant central coordination. There are 32 hexadecimal digits in a UUID, and these are divided into five groups with hyphens between them as follows: 8-4-4-4-12. Altogether the 16-byte (128 bit) canonical UUID has 32 digits and 4 hyphens, or 36 characters.

**user group**

an organization of user roles within an entity organization. User groups contain the roles and access rights for the individuals assigned to the group.

**user role**

See role

**UTF-8**

a method for converting 16-bit Unicode characters to 8-bit characters. This format supports all of the world's languages, including those that use non-Latin 1 characters. Short form: UTF-8.

**UUID**

See universal unique identifier

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