THE POWER TO KNOW.

SAS® Strategy Management 5.2

User's Guide

SAS® Documentation

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SAS® Strategy Management 5.2: User's Guide

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Contents

About This Book

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 5.2

Overview

SAS Strategy Management 5.2 provides the following changes and enhancements:

- new Strategy Management enhanced portlet
- new data entry portlet
- integration into SAS BI Dashboard
- enhanced Batch Maintenance Facility

New Strategy Management Enhanced Portlet

Strategy Management now provides a new portlet that can display unlimited views. You can view and interact with multiple strategy views from within a single portlet. You can find and analyze information quickly with global settings, enhanced user controls, and the interactive drag and drop interface.

- Tiles deliver different views of strategy management content. Choose from six tile types when creating a Strategy Management portlet. Portlet owners can mix tile types, select the same tile type multiple times, or a single tile to deliver the right information to business users. You can rename tiles to convey the right business context to users. The available tile types are table view, aggregate view, association view, gauge view, trend analysis, and scorecard hierarchy.
- Individual tiles work as one when they are synchronized with the scorecard hierarchy. The scorecard hierarchy tile shows the scorecards in your project. As users select scorecards from the hierarchy, all synchronized tiles update their information for the new selection.
- Most tiles include the option to use global date settings that are specified in the Strategy Management portlet. When selected, the date specified in the portlet is used for associated tiles.
- The height of your portlet can be customized, ensuring that your portal page is designed for best viewing. Horizontal portlet sizing is provided using portal controls.
- Tiles are easily rearranged in the portlet by dragging them to the desired location. Column and row placement occurs when a tile is dropped at the top, bottom, or side of the portlet content area. Portlet owners have the option to save the layout as the default view. Business users are able to rearrange tiles for the current session only.

- Tiles can be maximized for a focused view. Strategy Management provides a secondary interface to view, present, and analyze content. Users navigate to this view by maximizing a tile. The maximized tile displays in the view while remaining tiles in the portlet are organized, or docked, vertically. When a docked tile is selected, it replaces the maximized tile.

Table, Aggregate, Association, and Gauge Views in the Enhanced Portlet

- You can provide the capabilities users need from within the tile. Portlet owners are able to restrict features for some users while creating more dynamic views for others. Configure the tile bar to display key view information and selection controls, ensuring that each user is presented with the right options.
- You can show or hide the tile bar. When working with Strategy Management tiles, controls are located near the top of the tile in a tile bar. When expanded, users are able to view and use the controls displayed. Choose to hide the view to see more of the information within the tile.
- You can easily see different information. New exploration controls make it easy for users to get the information that they need using their existing views. When portlet owners chose to enable controls, users can change the view to compare and contrast critical strategy content.
- You can customize the tile to provide a read-only or writable **Date** field. Portlet owners can choose to display the date as read-only or enable users to change the date and update content in the view.
- You can choose tile-only or globally defined **Date** fields. The portlet owner can decide how the date is managed for each tile in the portlet. You can choose to use the global date setting and control the date from the portlet or manage the date from within the tile so you can deliver views for comparison.
- You can select which scorecard displays for a view when users open the Strategy Management portlet. Portlet owners can choose to synchronize with the scorecard hierarchy or select a unique default for an individual view.
- You can quickly see the historical performance of a measure in a trend chart. Display performance over time then refine your view by focusing on a subset of the information in the display.

Trend Analysis View in the Enhanced Portlet

- You can drag and drop data to analyze trends. When you see values that you want to analyze or compare, drag-and-drop the content onto the trend analysis view. Choose element names from a table view or aggregate view to see all displayed metric values graphed. Select individual values for a simplified view. Portlet owners can save a view as a default. Business users see their views for the current session. Drag-and-drop is supported for the table, aggregate, and gauge views.
- You can use features in the trend analysis toolbar to customize, export, and print the graph. When the trend analysis toolbar is displayed, the tile bar can be displayed or hidden.
- You can refine the trend analysis appearance by maximizing the view. When the trend analysis view is maximized, users can access additional controls. Business users are able to highlight displayed content by zooming on the x and y axis. Start and end date controls are also displayed.

- You can customize the view to provide a read-only or writable **Date** field. Portlet owners can choose to display the date as read-only or enable users to change the date and update content in the view.

Gauge View in the Enhanced Portlet

- You can now display gauges in intelligent groupings by reusing associations from your strategy. These grouping ensure users get to the right information quickly by only displaying gauges associated with the category.
- You can select from an assortment of predefined styles, or skins, to customize the look of the gauge display.
- The **Gauge view** selection list now displays icons showing portlet owners a preview of the gauge style.

New Data Entry Portlet

Strategy Management now provides a new data entry portlet. You can now easily update data entry content using this portlet. Portlet settings enable portlet owner to define row and column displays ensuring that data entry is quick and easy.

Integration into SAS BI Dashboard

Using an enhancement to SAS BI Dashboard that is provided by Strategy Management, you can integrate Strategy Management data and information into BI Dashboard.

Enhanced Batch Maintenance Facility

For a description of what is new in the Batch Maintenance Facility, see the *SAS Strategy Management: Batch Maintenance Facility User's Guide*.

What's New in SAS Strategy Management 5.1

Overview

SAS Strategy Management 5.1 provides the following changes and enhancements:

- management of new element suggestions
- testing and validation of strategic plans before execution
- enhanced management of scorecards

- enhanced diagram support
- enhanced formula support
- enhanced trend analysis
- general enhancements

Management of New Element Suggestions

You can now manage suggestions for scorecard enhancements in a central place. Users submit suggestions from within Strategy Management. Scorecard owners monitor suggestions, make decisions, and take action on the submissions.

Testing and Validation of Strategic Plans Before Execution

You can now test and validate your strategic plans before you execute them. After a strategy is defined, SAS analytics is applied. Integrated correlation and regression analysis ensure that you can refine and retest results until the strategic plan reflects the outcome expected.

Enhanced Management of Scorecard

- You can now select one scorecard or a scorecard and its children for calculation instead of the entire project.
- You can add the description field to any scorecard. By default, this property selection is available in both General and Element Type column selections.
- You can now view the trend analysis, comment manager, and comment alerts in the Association view. Also, navigation is improved with new expand-all and collapse-all functions.
- You can now sort and reorder element types in Templates.

Enhanced Diagram Support

- You can use links to connect to more in diagrams. This enhancement enables you to automate more productively by defining more links for metric attributes in the diagram editor. You can also retrieve timely relevant supporting information that is tied to critical measures in your strategy.
- You can now automatically organize critical parts of your diagram by using the diagram wizard. You can choose from an assortment of new diagram layouts (for example, cascade, rectangle, circle, and concentric circle), ensuring that information is ordered optimally for diagram creation.

Enhanced Formula

- You can use new calculation functions and expanded data-type support in the Formula editor. The **For All**, **For Any**, and **For None** functions reduce the size of your formulas while delivering the same results. You can also include non-metric values in formulas with the new attribute formula function.
- You can now create range intervals using formulas. Using formulas reduces the need to manually calculate or update time-sensitive values and calculations in a range definition.

Enhanced Trend Analysis

- You can use the new interactive historical trend graph to identify trends faster by comparing and contrasting results. With this feature, you can see the historical performance of a measure and then dynamically change your view. You can select what you want to compare and then format your selections by choosing colors and chart types.
- You can now set the default view for the trend analysis in project options. Designed for flexibility, the trend analysis can uncover different types of information. Sites can customize the display by setting their own default views.

General Enhancements

- Improved business-process alerting is provided by associating a stored process-to-threshold trigger. Use this feature to set business rules to take action when threshold conditions are met. Using SAS Stored Processes, this feature creates actions to handle critical tasks and associate the stored process with your threshold definition. When the threshold is met, the stored process is run.
- Batch Maintenance Facility (BMF) improvements are provided for scorecard creation and maintenance. BMF simplifies the process of entering and updating information in Strategy Management. BMF has enhancements to template objects (element types, metric attributes, attribute definitions), projects, range, and security. For detailed information about BMF, see the *SAS Strategy Management: Batch Maintenance Facility User's Guide*.
- Information that users need, but are not allowed to change, is now available in data entry forms as read-only information.
- Support for text guarantees that scorecards now include values that make the most sense to users. With enhanced text support, you can use descriptive words, instead of numbers, for results of performance measures. All text values are saved in Strategy Management so you can report and compare by time.

Part 1

Introduction to SAS Strategy Management

Chapter 1

About SAS Strategy Management

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

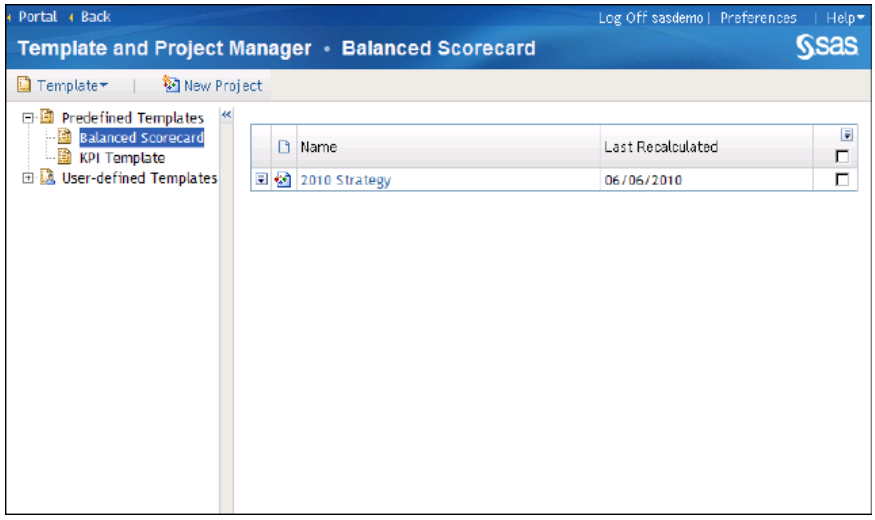
SAS Strategy Management serves the following users:

- 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:

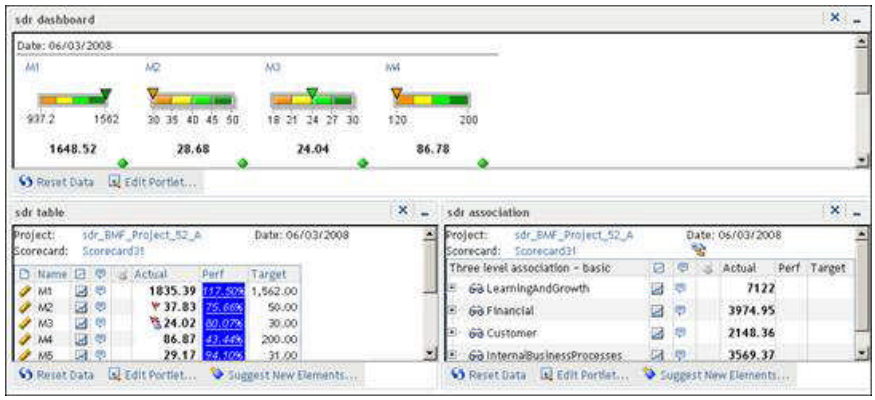
- SAS Strategy Management Builder



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 11. 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 21. Also, see "Part 3. Navigating Data and Creating Views in SAS Strategy Management Builder."

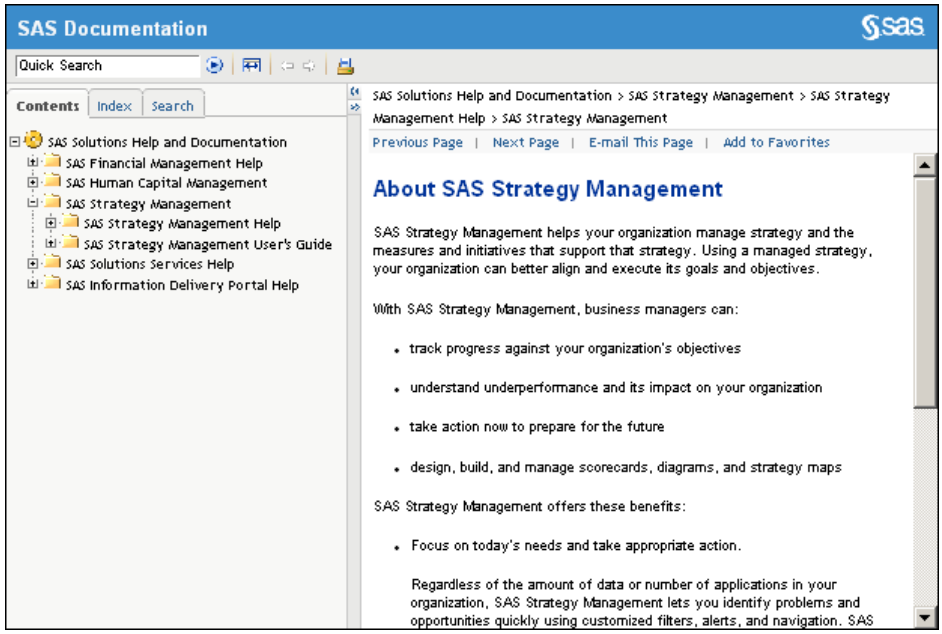
Note: Strategy Management information can also be viewed in SAS BI Dashboard. For more information, see Appendix A3, "View SAS Strategy Management Data in SAS BI Dashboard," on page 339.

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 dialog box 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.

Accessibility Features

Overview

SAS Strategy Management includes the following accessibility and compatibility features that improve usability of the product for users with disabilities. 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, as amended.

If you have questions or concerns about the accessibility of SAS products, send e-mail to **accessibility@sas.com**.

Keyboard Navigation

Strategy Management conforms to accessibility standards for the Windows platform and uses the same keyboard shortcuts as other Windows applications. For specific information about Windows accessibility features, refer to your operating system's help.

The supported Web browser for Strategy Management is Microsoft Internet Explorer. For information about the accessibility features of Internet Explorer, use the Index in the Internet Explorer Help to locate the topics about "accessibility."

Accessibility Limitations in Adobe Flex and the Adobe Flash Player

The Strategy Management enhanced portlet is built with Adobe Flex 3 for rendering in the Adobe Flash Player. As documented on the **Adobe Bug and Issue Management System**, known issues impair interoperability between Flex-based application in the Flash Player and assistive technologies such as the Freedom Scientific JAWS screen reader. Adobe offers JAWS scripts to improve the interoperability; see **Using Adobe Flex Applications with JAWS** on the Adobe Web site to download the scripts. In addition, software developers must enable accessibility (it is not enabled by default) in each project at compile time.

While the scripts do improve interoperability with JAWS, SAS test results have shown that, even when using the JAWS scripts, neither dynamic updates nor key semantic information is communicated to the screen reader through the Windows Accessibility API (MSAA).

As Adobe continues to improve the accessibility of its Flex Commons library and Flash Player, SAS plans to leverage these improvements to continue improving the interoperability of our Flex-based software with assistive technologies.

Problems and Workarounds

There are currently no known exceptions to accessibility standards.

Chapter 2

How Do You Describe a Strategy?

The Parts of a Strategy

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

Templates
: Describe the kind 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 kind 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 or your organization create
- 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 typing 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

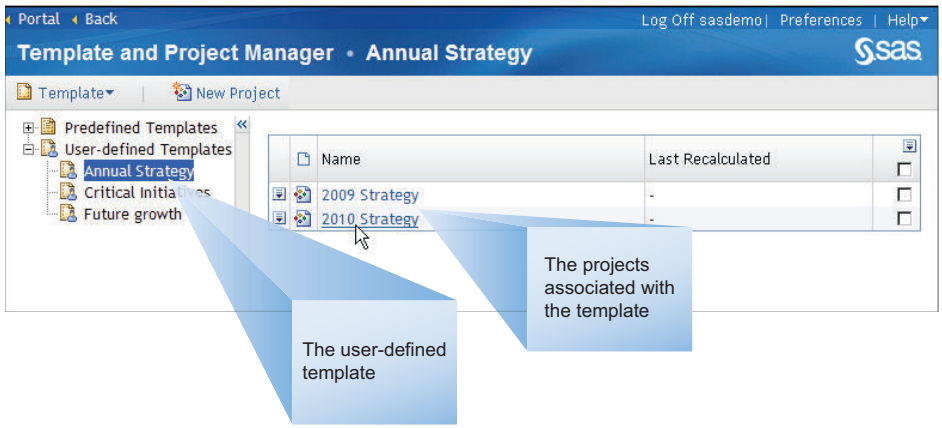
The KPI template is used to measure key performance indicators. The KPI template contains the following components:

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

Projects

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.



TIP SAS Strategy Management projects are stored within folders in the Document Manager.

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 21.

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*

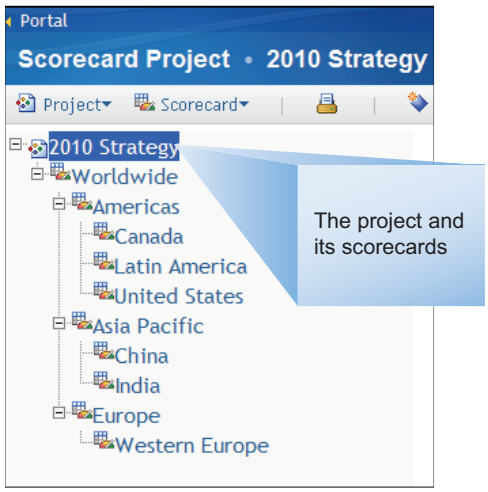
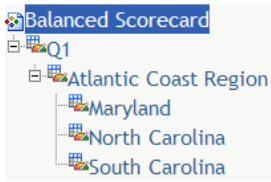


Figure 2.2 *A Parent Scorecard Selected in the Scorecard Hierarchy*

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.



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*

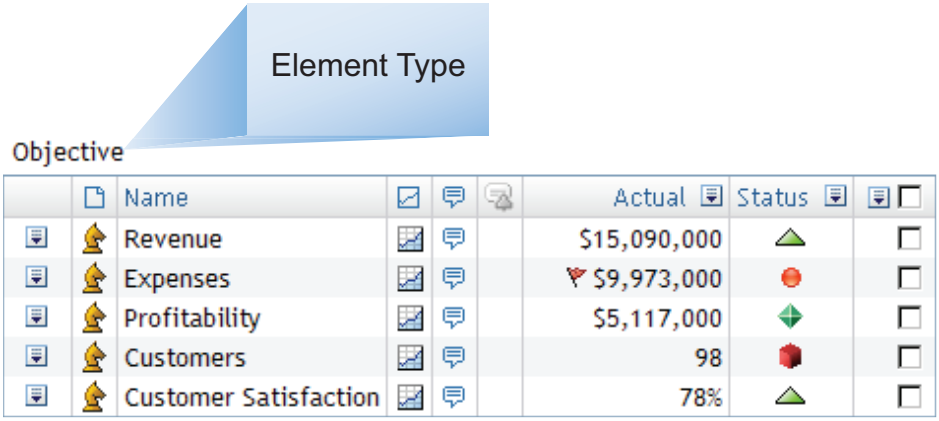
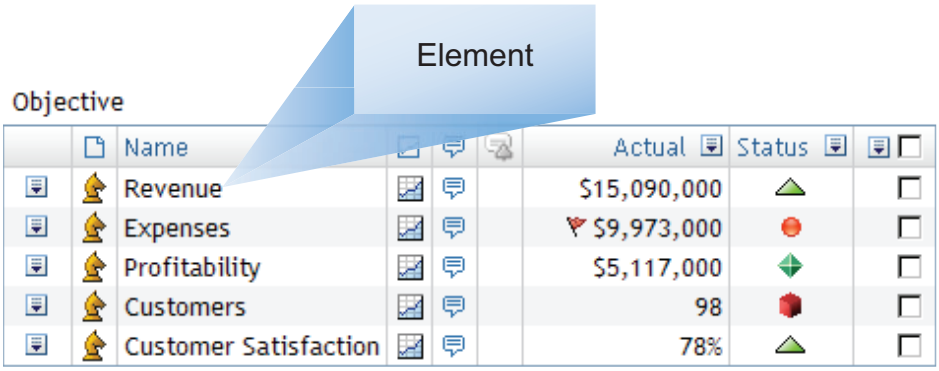


Figure 2.4 *An Element Is a Row in a Scorecard Table*



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

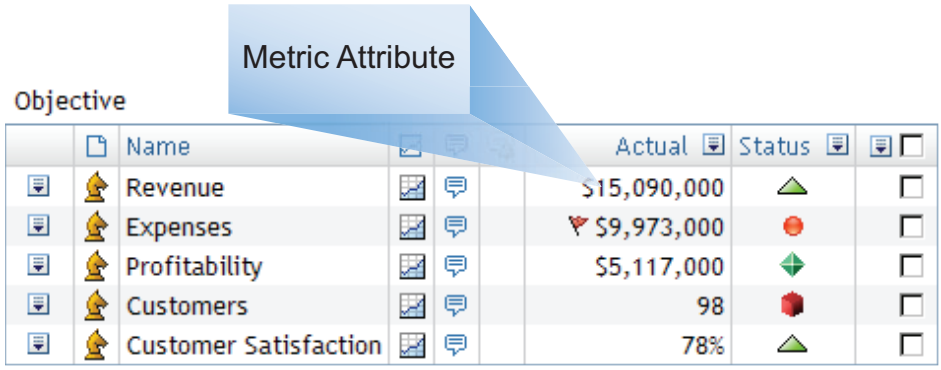
Element Type Example	Element Examples
Goals	• Reduce inspection costs • Reduce overall cost per product • Provide accurate, on-time, delivery service
Measures	• Average number of failed inspections • Average cost of each product • Average number of packages tracked online

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.

Figure 2.5 *A Metric Attribute in a Scorecard Table*



You can enter these values in the following ways:

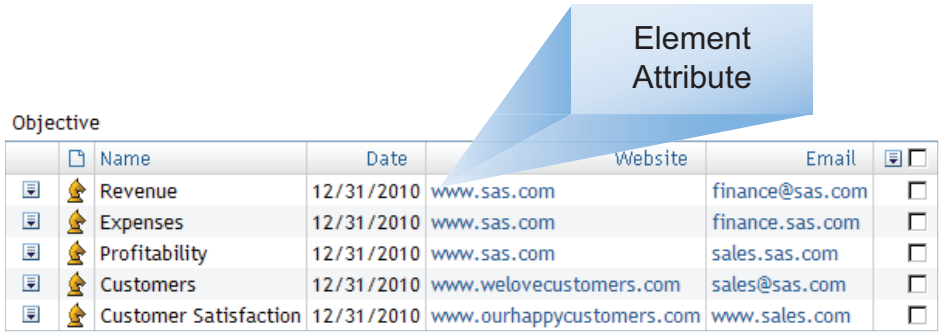
- by typing in values one cell at a time
- by specifying a formula
- by entering data using a data entry form
- by loading a batch of data

For more information, see "Part 6. Entering Data."

- Non-periodic values are a second type of data that might be included in a strategy. This data is informational and typically does not change over time. For example, a Web site address or a contact name can be displayed in the strategy. This information does not change from month-to-month. In Strategy Management, non-periodic values are called *element attributes*.

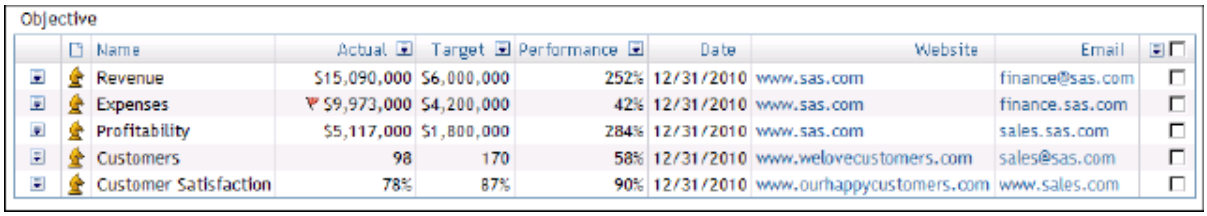
  Note: Element attributes are defined in the template for each element type. Element attribute values are set when specifying properties for each element.

Figure 2.6 *An Element Attribute in a Scorecard Table*



The following display shows a scorecard and all its attributes, both periodic and non-periodic.

Figure 2.7 *A Scorecard and All Its Attributes, Both Periodic and Non-Periodic*



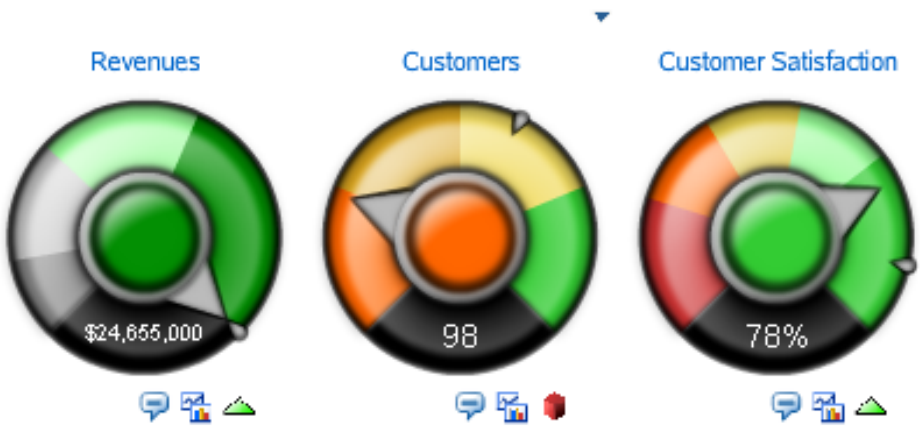
Ranges

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*



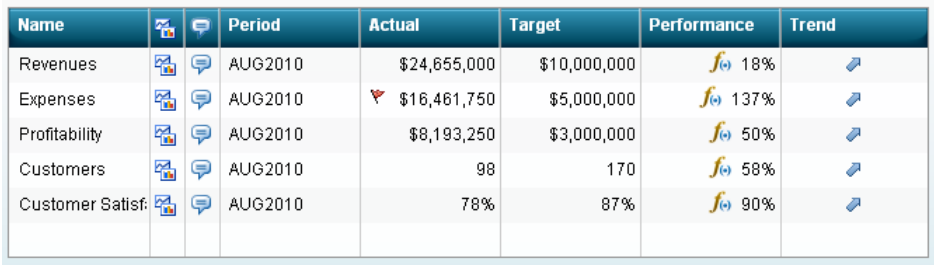
For more information, see "Create a Range" on page 116.

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.

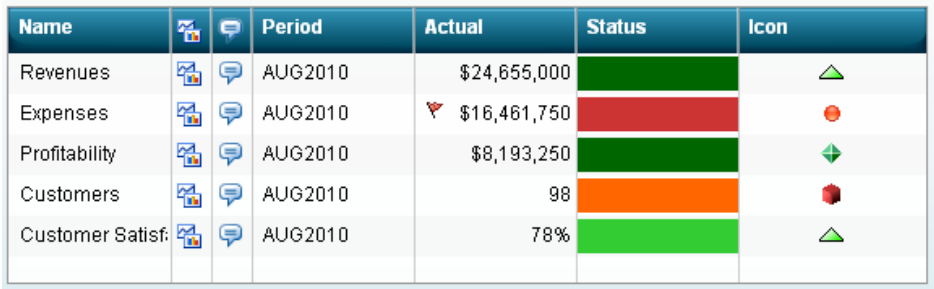
You can apply column selections to element types within a project. When you create a project that is based on a template that defines metric attributes, column selections for the new project are automatically generated from the metric attributes. Column selections are also generated for the element types.

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 122.

Forms

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

For information about data entry forms, see Chapter 32, "Creating Data Entry Forms," on page 285.

Chapter 3

What Is a View?

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 A3, "View SAS Strategy Management Data in SAS BI Dashboard," on page 339.

The views are available in the following ways:

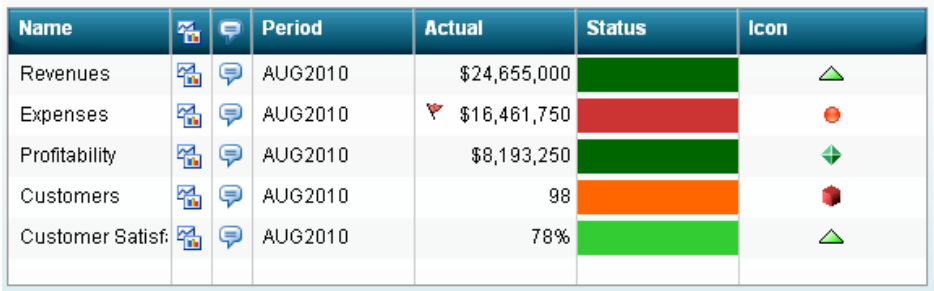
View	Builder	Classic-style Portlet	Enhanced-portlet Tile
Table	Yes	Yes	Yes
Aggregate	Yes	Yes	Yes
Association	Yes	Yes	Yes
Diagram	Yes	Yes	No
Gauge	No	Yes	Yes
Trend	Yes[1]	Yes[1]	Yes[2]

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*



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 Satisfa	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%	

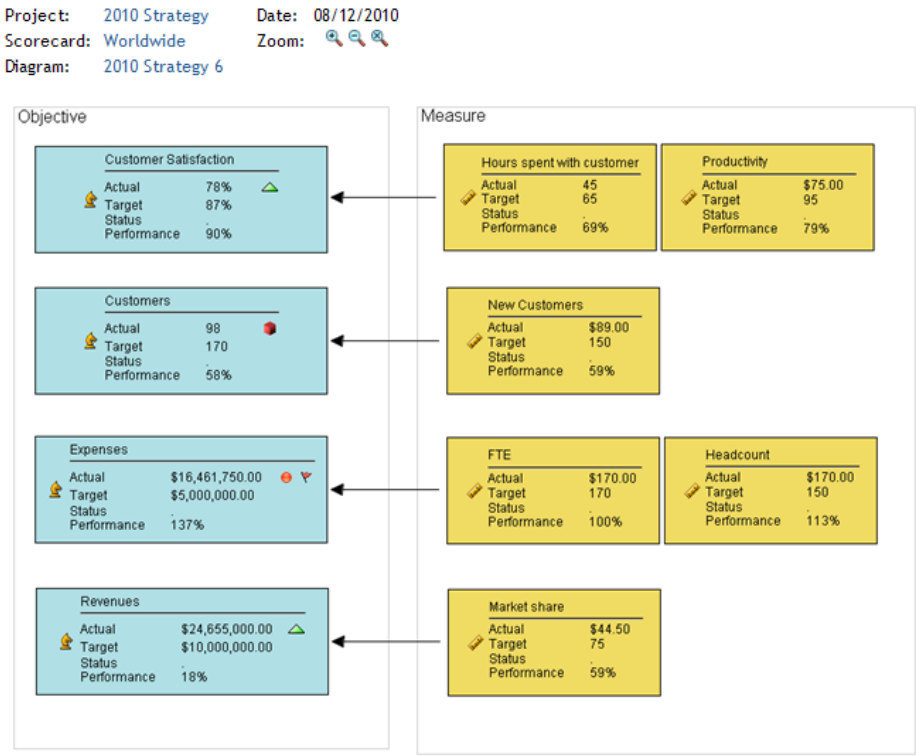
Diagram

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*

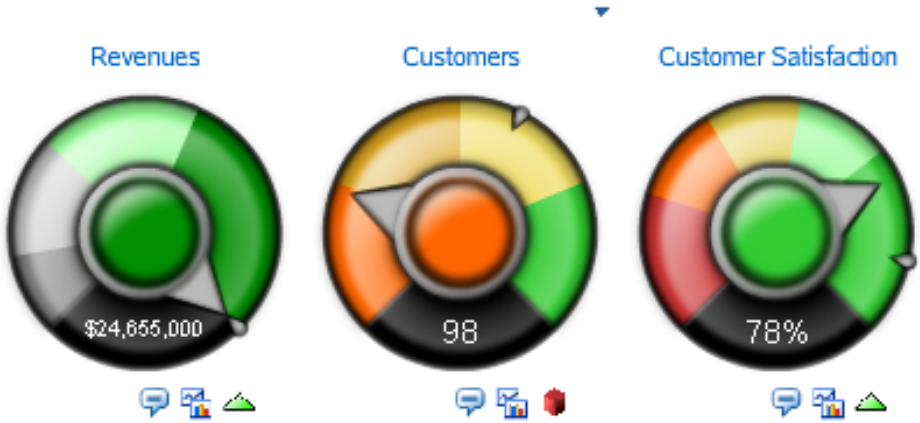


Gauge (Also Called Dashboard)

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, 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 Figure 3.6 on page 26.
Enhanced-portlet option	The enhanced-portlet tiles for the table, association, 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 Figure 3.7 on page 27.

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 21, “Creating and Editing Trend Analysis Views,” on page 203.

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

- “Edit the Trend Analysis Tile Properties” on page 242
- Chapter 29, “Navigating and Viewing the Strategy Management Enhanced Portlet and Its Tiles,” on page 263

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

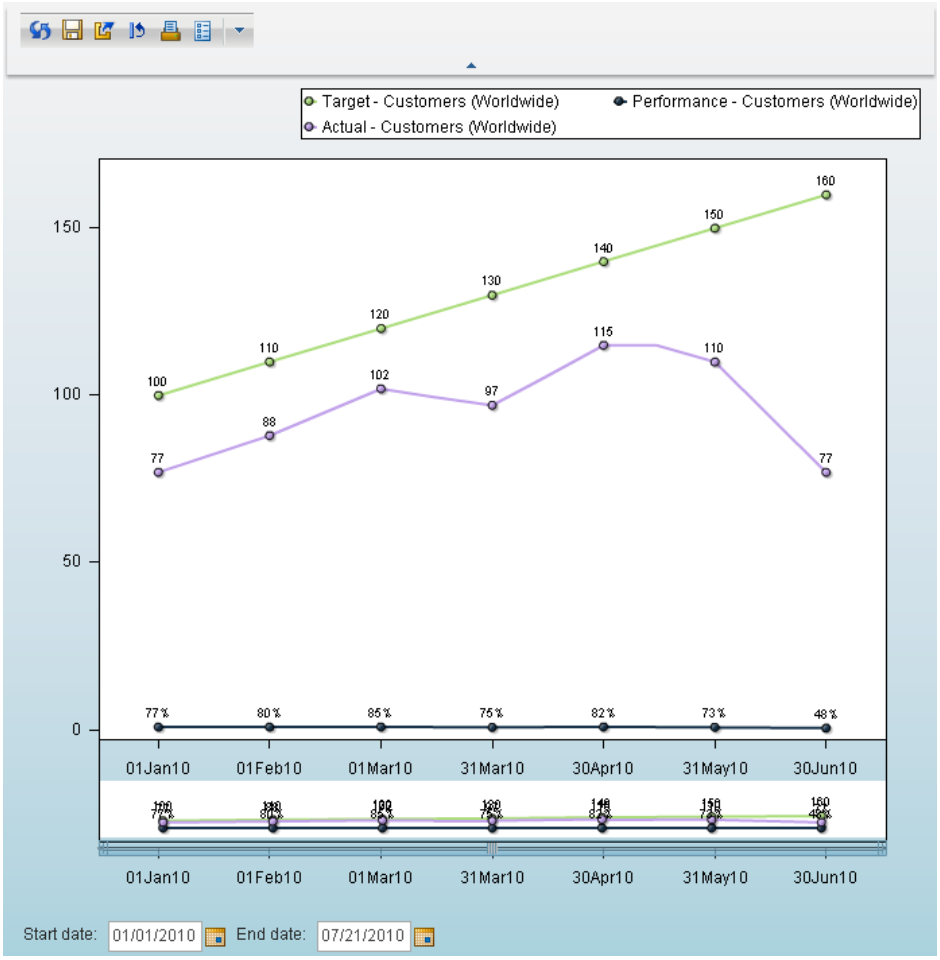
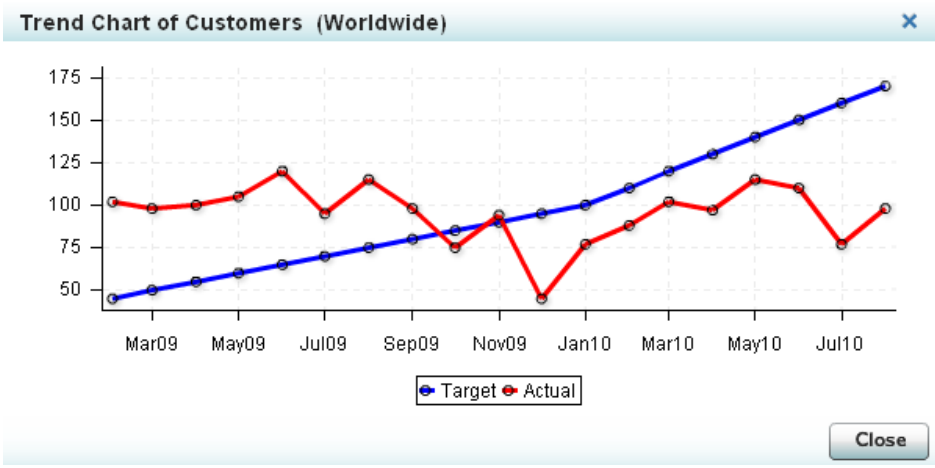


Figure 3.7 *Example of a Static Trend Chart in the Enhanced Portlet*



Part 2

Describing and Building Your Strategy

Chapter 4

Starting SAS Strategy Management Builder

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**, type the Web address for the SAS Strategy Management Web application.

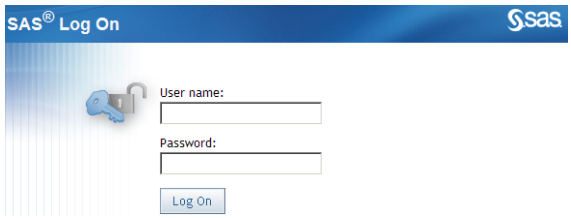
   Note: To obtain the Web address, contact your system administrator.
3. Click **Next**.
4. In the **Type a name for this shortcut**, type a short, descriptive name for this shortcut.

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. Type your user name 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 either a My Favorites portlet or a Collections portlet from which to start SAS Strategy Management Builder.

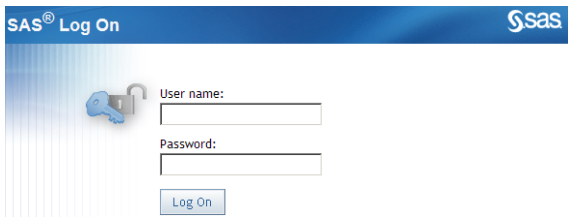
Log On

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

1. Open your browser and type the Web address for the portal.

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

   The Log On page appears.

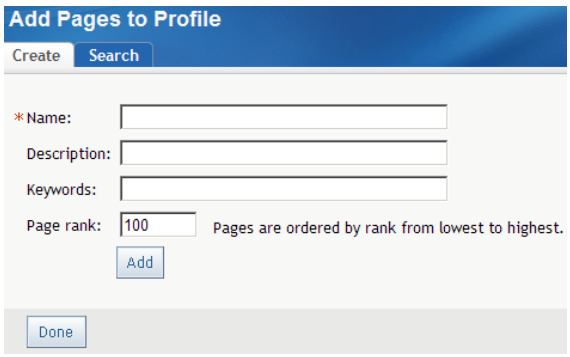


2. Type your user name and password.
3. Click **Log On**. Your personal portal opens. Initially, the portal contains no pages or portlets.

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.



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 drop-down 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 dialog box, on the Authorization tab, add any users and groups to share. Click **OK**.

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

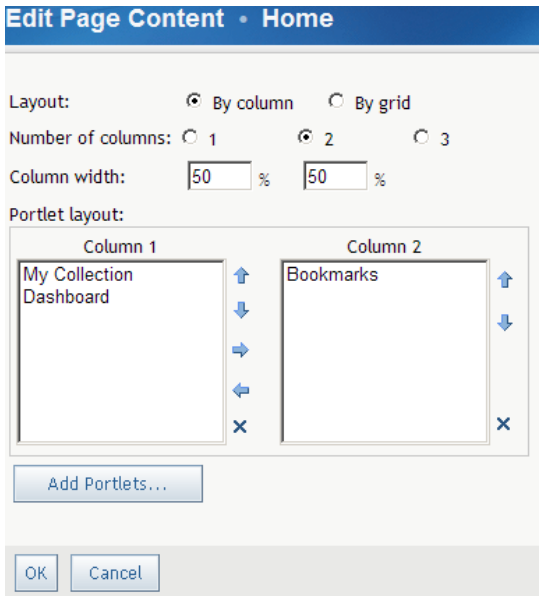
3. Click **Add**.
4. Click **Done**. The new, empty page appears in the portal.

Add a Portlet to the Page

A My Favorites portlet or Collections 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** drop-down list, select either **My Favorites** or Collections.
5. Type 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.

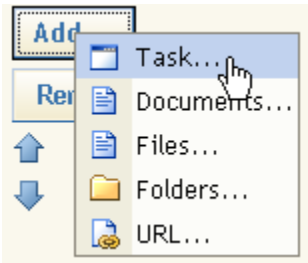
If you added a My Favorites portlet, go to "Edit a My Favorites Portlet to Start SAS Strategy Management Builder" on page 35.

If you added a Collections portlet, go to "Edit a Collections Portlet to Start SAS Strategy Management Builder" on page 35.

Edit a My Favorites Portlet to Start SAS Strategy Management Builder

To edit a My Favorites portlet to add a task link that starts SAS Strategy Management Builder, complete the following steps:

1. At the bottom of the portlet, click **Edit Portlet**. The Properties page appears.
2. Click **Add** ⇨ **Task**.



3. On the Add Tasks page, select **Manage Strategy Management Scorecard Projects and Templates**.

   Note: The selections available on the Add Tasks page vary depending on your software installation.

4. Click **OK**.
5. On the Properties page, click **OK**. The portlet now contains a link that starts SAS Strategy Management Builder and enables you to manage scorecard projects. For information about starting the Builder, see "Start the Strategy Management Builder" on page 36.

Edit a Collections Portlet to Start SAS Strategy Management Builder

To edit a Collections portlet to add a Web address link that starts SAS Strategy Management Builder, complete the following steps:

1. On the Collections portlet toolbar, click **Edit Content**. The Edit Portlet Content page appears.
2. Click **Add Items**. The Add Items to Portlet page appears.
3. Click **Application**. Doing so makes sure that you do not have to log on to the portal again.
4. In the **Name** field, type the name that you want to use to label the link.
5. In the **URL** field, type the Web address for the SAS Strategy Management Web application.

   Note: To obtain the Web address, contact your system administrator.

6. Click **Add**. Then, click **Done**.

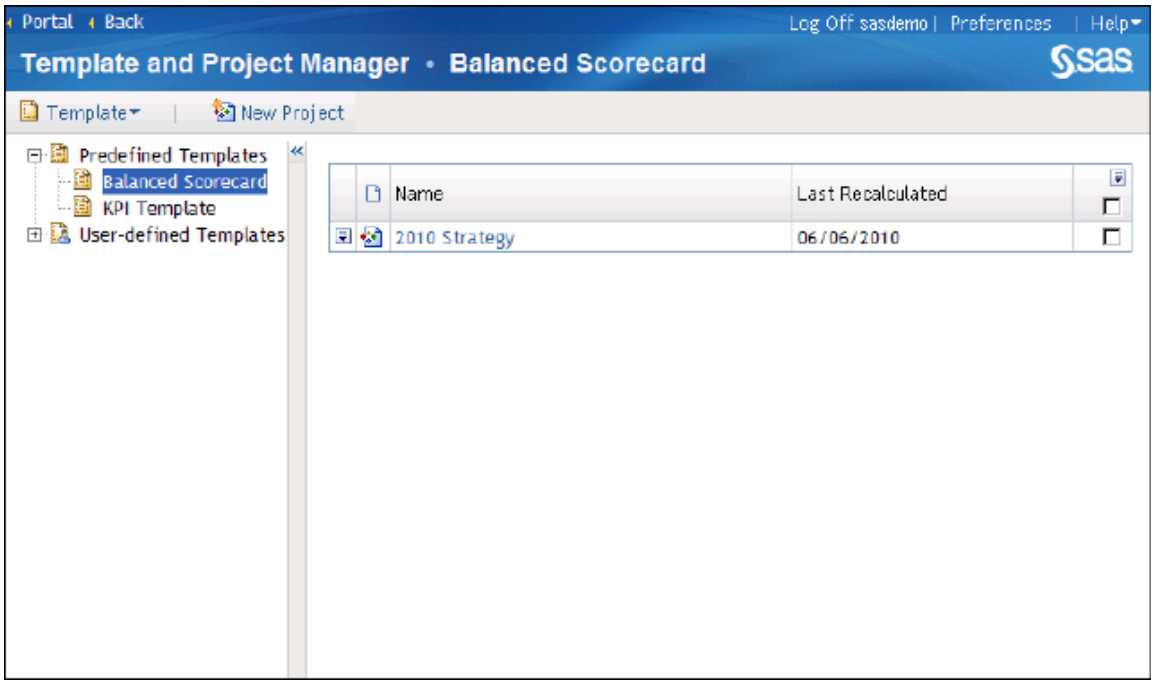
7. On the Edit Portlet Content page, click **OK**. The portlet now contains a link that starts SAS Strategy Management Builder and enables you to manage scorecard projects. For information about starting the Builder, see "Start the Strategy Management Builder" on page 36.

Start the Strategy Management Builder

To start the Strategy Management Builder, complete the applicable step in the portlet:

For the My Favorites portlet	Click **Manage Strategy Management Scorecard Projects and Templates**.
For the 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.

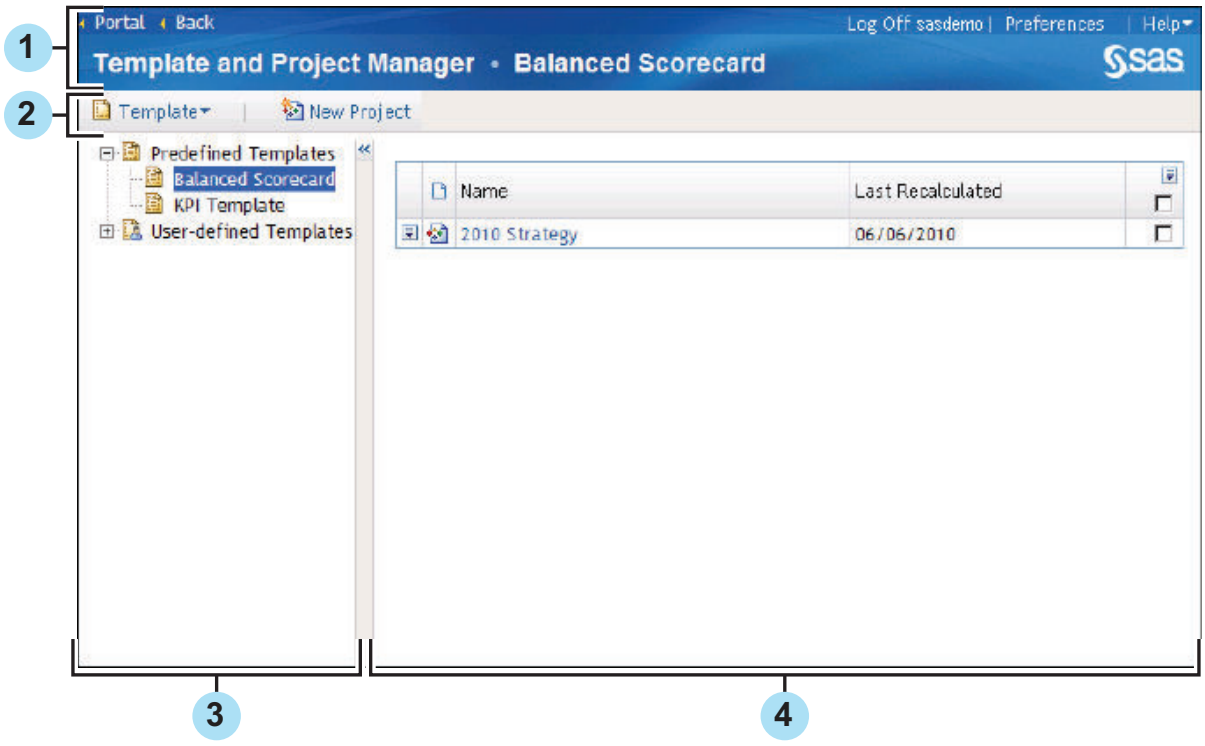
Note: If your session is inactive longer than the SAS Information Delivery Portal time-out value, you are automatically logged off.

Chapter 5

The SAS Strategy Management Builder Interface

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

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.

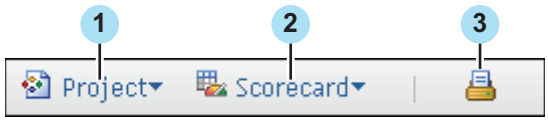
The Toolbar

The toolbar provides buttons for frequently used tasks in the Builder. The buttons displayed vary depending on selections 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 Over Navigation Pane*



1 Displays the **Project** menu. For more information, see Chapter 7, "Working with Projects," on page 57.

2 Displays the **Scorecard** menu. For more information, see Chapter 8, "Working with Scorecards," on page 71.

3 Prints the current view in the content pane. For more information, see "Print a View" on page 211.

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 Chapter 16, "Creating and Editing Table Views," on page 143.
	Aggregate view	Displays the aggregate view. For more information, see Chapter 17, "Creating and Editing Aggregate Views," on page 147.
	Association view	Displays the association view. For more information, see Chapter 18, "Creating and Editing Association Views," on page 149.
	Diagram view	Displays the diagram view. For more information, see Chapter 19, "Creating and Editing Diagram Views," on page 153.
	Add to portlet	Provides a way to save a view to a portlet. For more information, see "Save a View to a Portlet" on page 210.
	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 "Save a Scorecard as a SAS Information Map" on page 73.
	Copy Web address	Provides a way to copy a Web address of the view. For more information, see "Link to a View Using a Web Address" on page 211.
	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.

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, it provides the scorecards in the project.

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 a view of the currently selected content.

Chapter 6

Working with Templates

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 11.

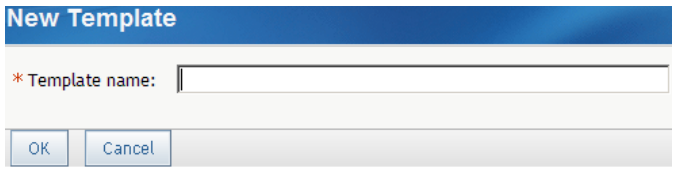
List Templates

Templates are listed in the Template and Project Manager. For more information, see "Display the Template and Project Manager Page" on page 127.

Create a Template

To create a template, complete the following steps:

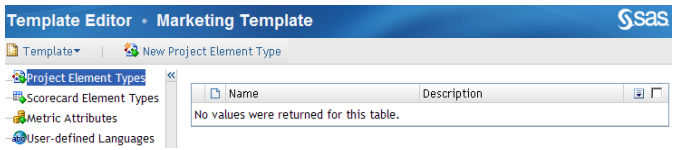
1. Display the Template and Project Manager page. For more information, see "Display the Template and Project Manager Page" on page 127.
2. Click **Template** ⇨ **New Template**. The New Template page appears.



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

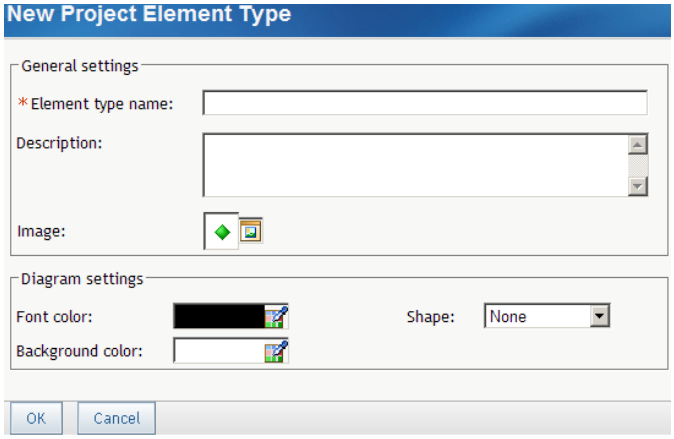
   Note: The name must be unique among the user-defined templates.

4. Click **OK**. The Template Editor page appears.



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.



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.

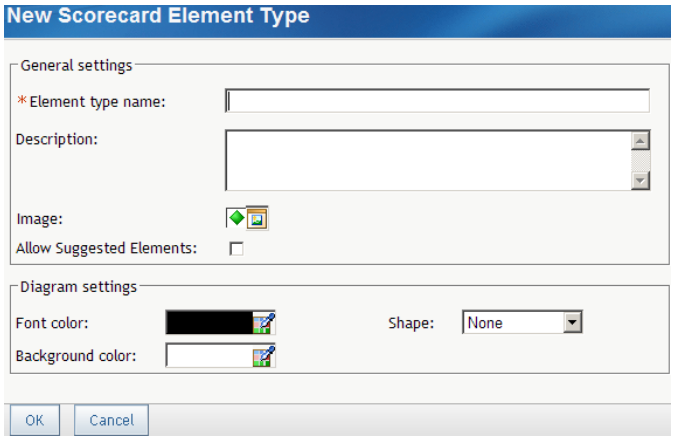
e. Click the icon that is next to **Background color** and select a color to be displayed in the background of the element type in a diagram.

f. From the **Shape** drop-down 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.



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** drop-down 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**.

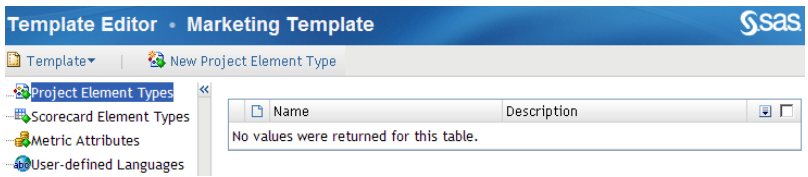
Open a Template

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.

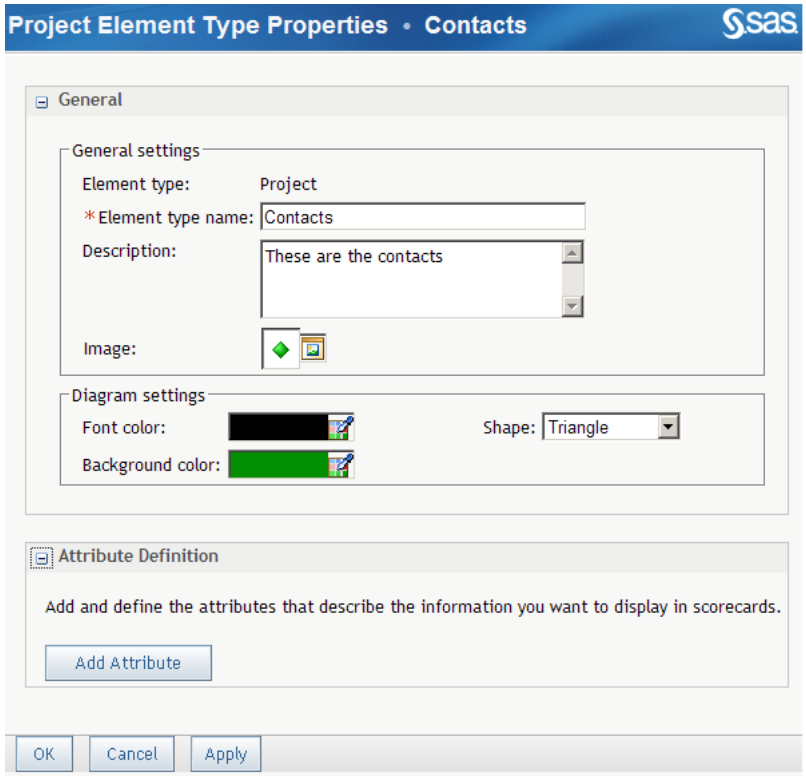
To list the project element types that are in a template, open a template and click **Project Element Types**.

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

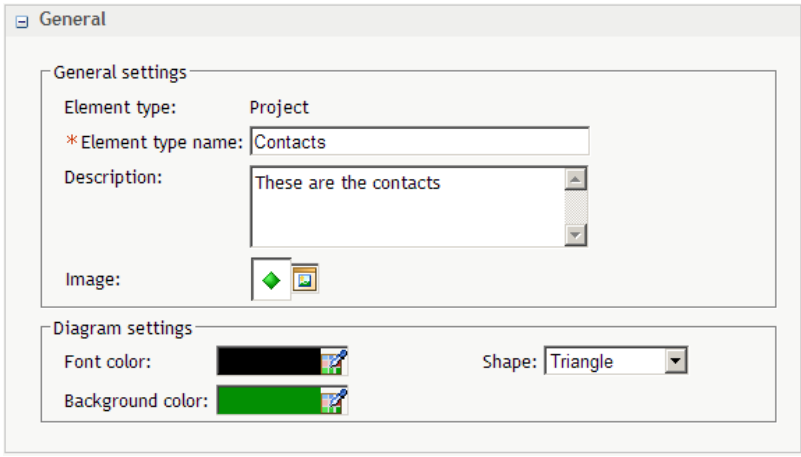
To edit project element type properties in a template, complete the following steps in an open template:

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.



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.



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.

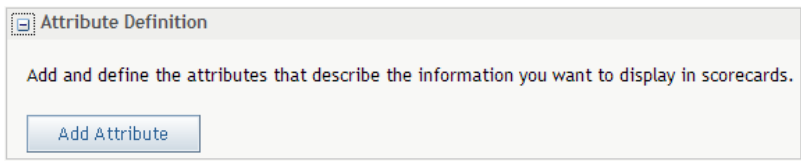
f. From the **Shape** drop-down list, change the shape to be displayed with the element type in a diagram.

4. To define an attribute for a project element type, complete the following steps.

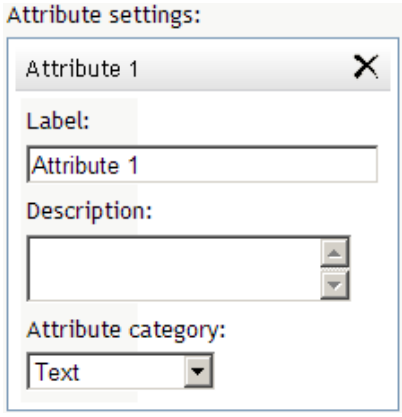
Note: An attribute definition describes the types of information that can be displayed with project element types. You can define more than one attribute for an element. An attribute can belong to one of the following categories:

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

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



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



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** drop-down list, select a category.

f. If you select **Element Type** as the category, select an element type from the **Element type** drop-down 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 ✕ 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-name*`copy`.
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**.

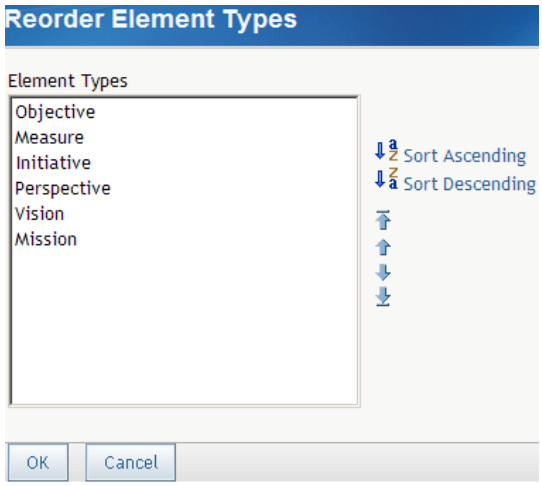
- To delete all element types, click the check box at the top of the right-most column, click for the column and click **Delete**.

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

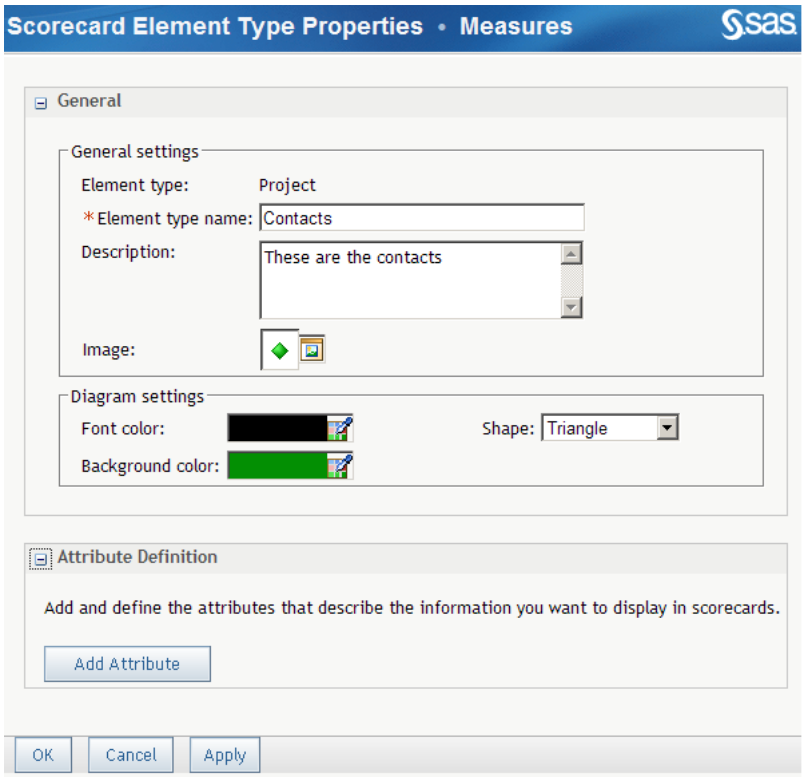
List Scorecard Element Types

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.



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.

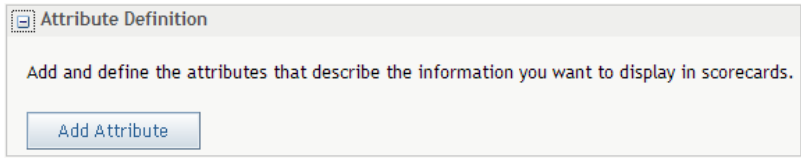
d. In the **Diagram Settings** section, click the icon that is next to **Font color** to change the font color to be displayed with the element type in a diagram.

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.

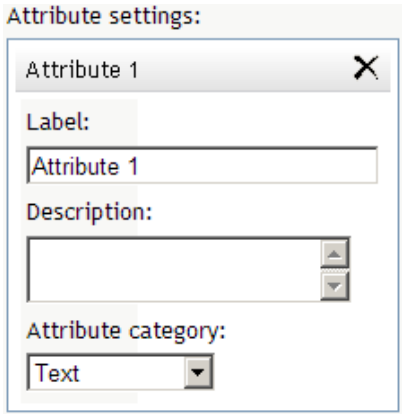
f. From the **Shape** drop-down list, change the shape to be displayed with the element type in a diagram.

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** drop-down list, select a category.

f. If you select **Element Type** as the category, select an element type from the **Element type** drop-down 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 23.

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-name*`copy`.

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.

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

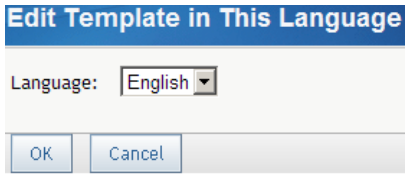
Overview

You define a language when you create a template. For more information, see "Create a Template" on page 42.

Select a Language to Use for Editing

To select a different language to use in editing a template, complete the following steps in an open template:

1. Click **Template** ⇨ **Select Template Edit Language**. The Edit Template in This Language page appears.



2. Select a language from the **Language** drop-down list.

   Note: The list includes all languages that have been defined. For more information, see "Create a Template" on page 42.

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.

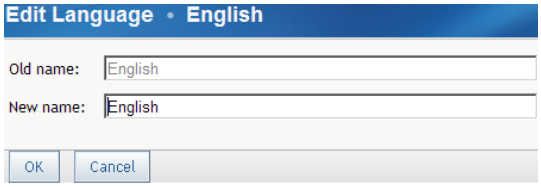
Rename a Language

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 127.
2. Select the template. The projects that are associated with the selected template are displayed on the right.

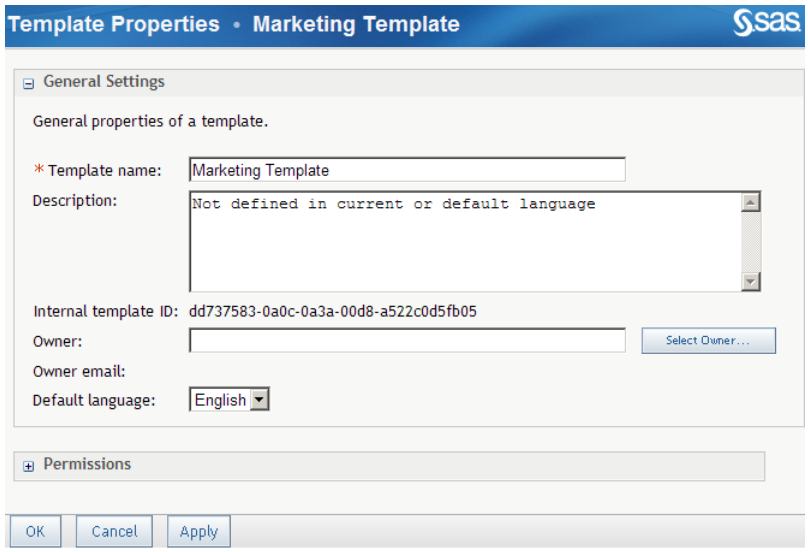
3. To open a project, click the project name.

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:

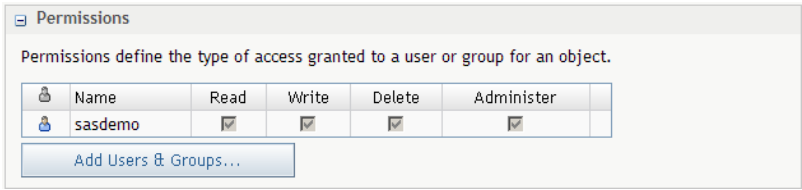
1. Select a user-defined template.
2. Click **Template** ⇨ **Properties**. The Template Properties page appears.



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 127.
6. To change the default language, select a language from the **Default language** drop-down 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.



8. Click **Add Users & Groups**. For more information, see "Add Users and User Groups" on page 128.
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 130.
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

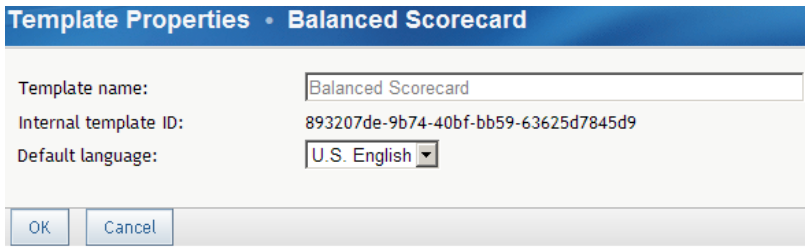
You can edit the default language of a predefined template such as the Balanced Scorecard template or KPI template.

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.



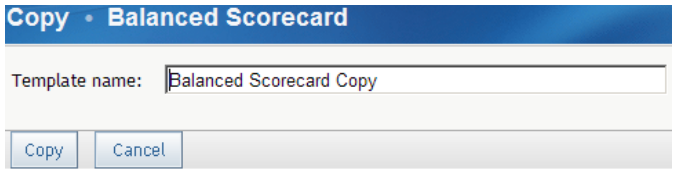
3. To change the default language, select a language from the **Default language** drop-down list. For more information, see "Create a Template" on page 42.

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.



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

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

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**.

Export a Template to SQL

For information about exporting and importing a template, see Chapter 36, "Exporting and Importing Strategy Management Data," on page 303.

Chapter 7

Working with Projects

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 11.

Create a Project

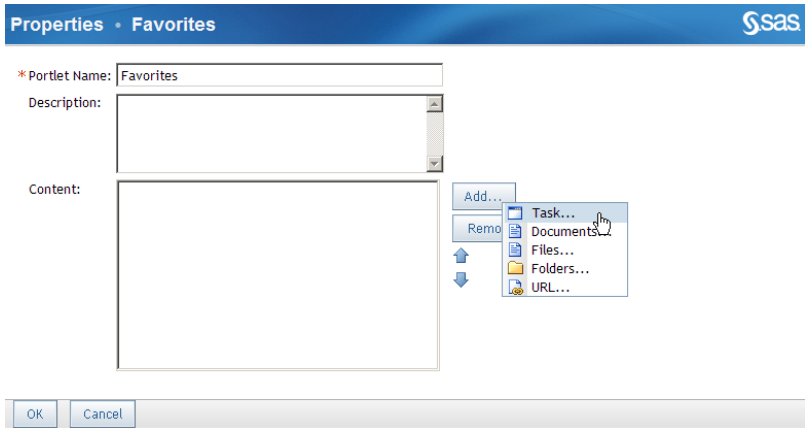
The New Project Wizard specifies the location, template, and other aspects of the project. You can start the New Project Wizard from the portal or from the Template and Project Manager, or from within another project. To create a project, you must be a scorecard modeler, and you must have the appropriate 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 Strategy Management Scorecard Project**. The New Project Wizard appears.

  For more information, see "Display the Template and Project Manager Page" on page 127.
- From the portal:

  1. Click  in a My Favorites portlet. The Properties page appears.
  2. Click **Add** and select **Task**.



  3. On the Add Tasks page, click **New Strategy Management Scorecard Project**.
  4. Click **OK**.
  5. Click **OK** on the Properties page.
  6. In the portlet, click **New Project**. The New Project Wizard appears.

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 11.
5. To build the project hierarchy manually, click **No**.

Otherwise, to import and use an existing dimensional hierarchy that you created to share with other SAS solutions, or that was created by other SAS solutions and is shared with SAS Strategy Management, click **Yes**. Then, expand the list of hierarchies, select a hierarchy from the list, and click **Next**.

CAUTION:

If you base your project on a shared hierarchy, you are alerted when changes are made to the hierarchy and when your project is no longer synchronized with the shared hierarchy. If hierarchy members (scorecards) are deleted in the existing hierarchy, they are deleted from your project during synchronization. You are not able to rename scorecards in the hierarchy. You can choose not to synchronize your project with the changes; you continue to receive alerts that your project is out of synchronization. You can remove your project from a shared hierarchy if you do not want to receive any more synchronization alerts.

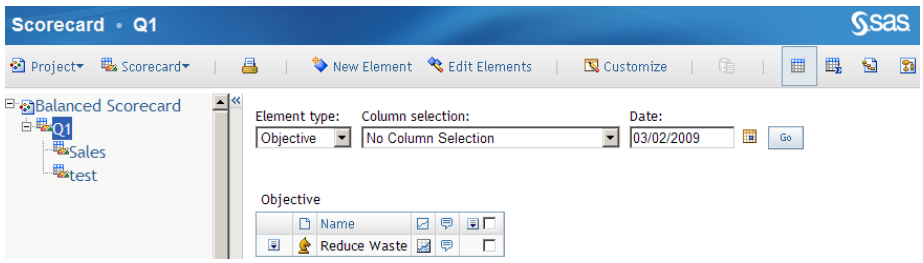
6. Review all of the options that you have selected for the project. To make changes, click **Previous** to return to the page that you want to change. If you do not want to make any more changes, click **Finish** to complete the creation of the new project.

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 in Document Manager

To display in Document Manager a project that was imported (such as a migrated project) or created with the %STMBMF macro, you must register the project. A project that is created with the New Project wizard is automatically registered. For information about the %STMBMF macro, see the *SAS Strategy Management: Batch Maintenance Facility User's Guide*.

When a project is registered in Document Manager, it is available to other applications. One such application, the SAS Solutions Services Add-In for Microsoft Office, enables you to insert values 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 in Document Manager where you want to save the project.

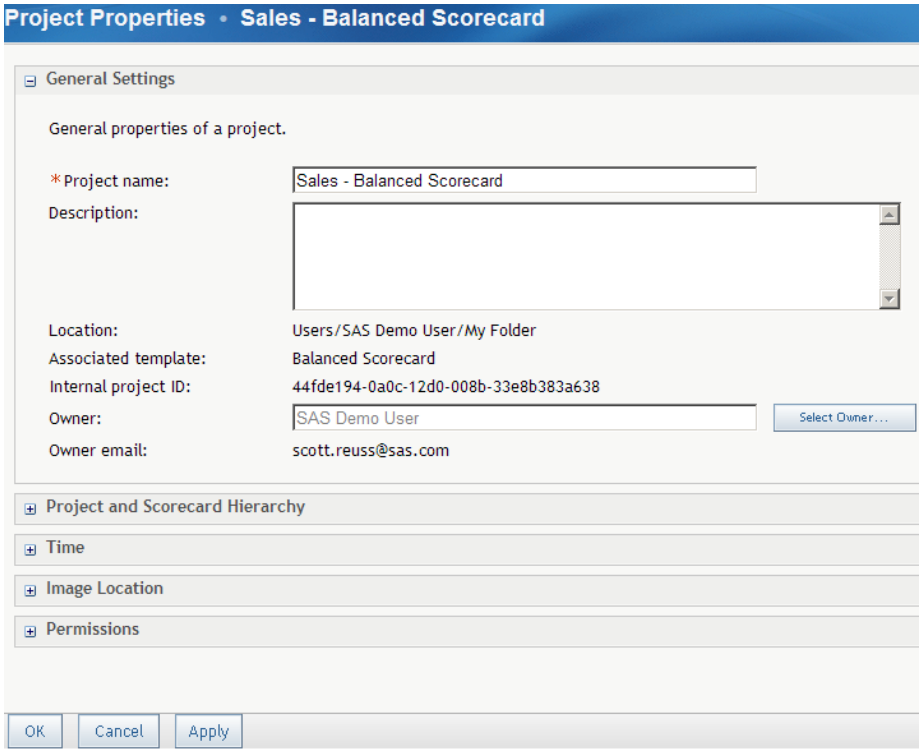
Edit Project Properties

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.



If the project is not registered, a message appears. For more information, see "Register a Project in Document Manager" on page 60.

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 (%). The project name is displayed in the default language in the Document Manager.

   b. To display a description of the project in Document Manager, 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 127.

3. To review the hierarchy on which the project and its scorecards are based, expand the **Project and Scorecard Hierarchy** section.

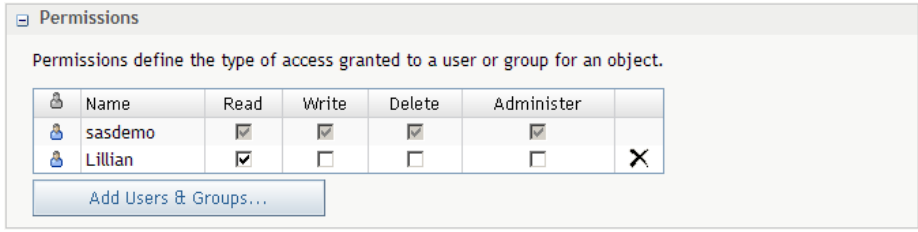
   Note:

   - In a dimension-based hierarchy, you can remove a project from the hierarchy. If you do this, SAS Strategy Management treats the project as if it had been created manually. Therefore, you no longer receive messages that the project is out of synchronization.
   - You can mark the project as needing synchronization with its dimension hierarchy. This option is useful when the dimension hierarchy members have been directly loaded with the %STMSMF macro or altered outside of the SAS Solutions Dimension Editor.

4. To review the time properties, expand the **Time** section.

5. To review where images are located, expand the **Image Location** section.

6. To set access permissions, expand the **Permissions** section. This section displays user names and their access permissions for the project.



7. Click **Add Users & User Groups**. For more information, see "Add Users and User Groups" on page 128.
8. 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.
9. 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:

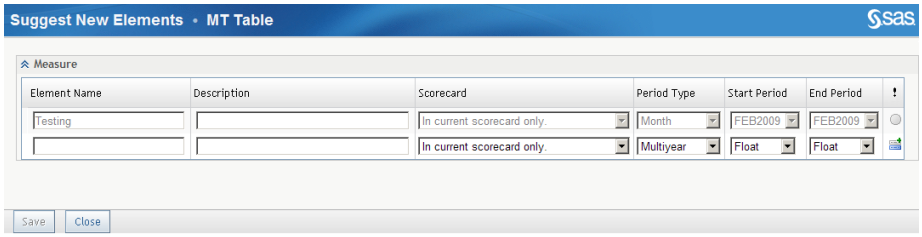
1. At the bottom of a SAS Strategy Management portlet (classic style), click **Suggest New Elements**.

   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.



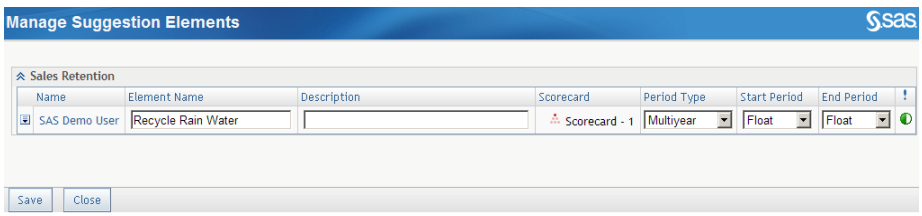
2. Type a name and, if needed, a description.
3. Select the scorecards in which you want to include the element.
4. Select the type of period, the start period, and the end period.
5. Click . A new row is added to the table.
6. To suggest more elements, repeat steps 2 through 5.
7. When you are finished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

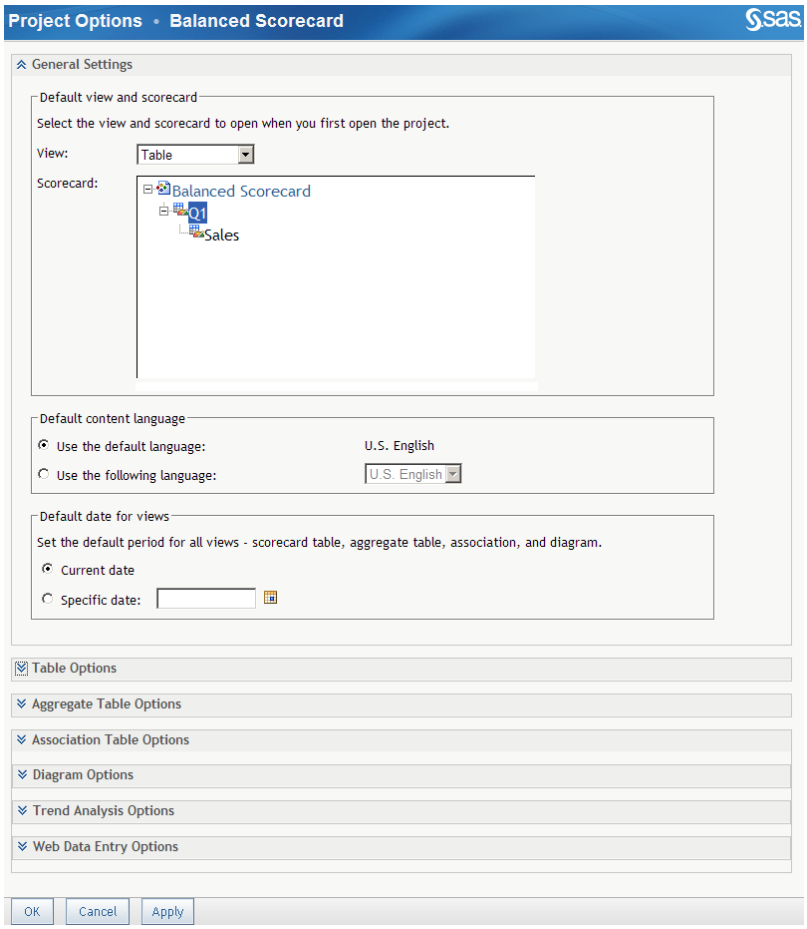


2. For each suggested element, click to the left of the element and click an action. Clicking **Send Notification** invokes your default e-mail application so that you can alert the business user who submitted the suggestion.

Specify Project Options

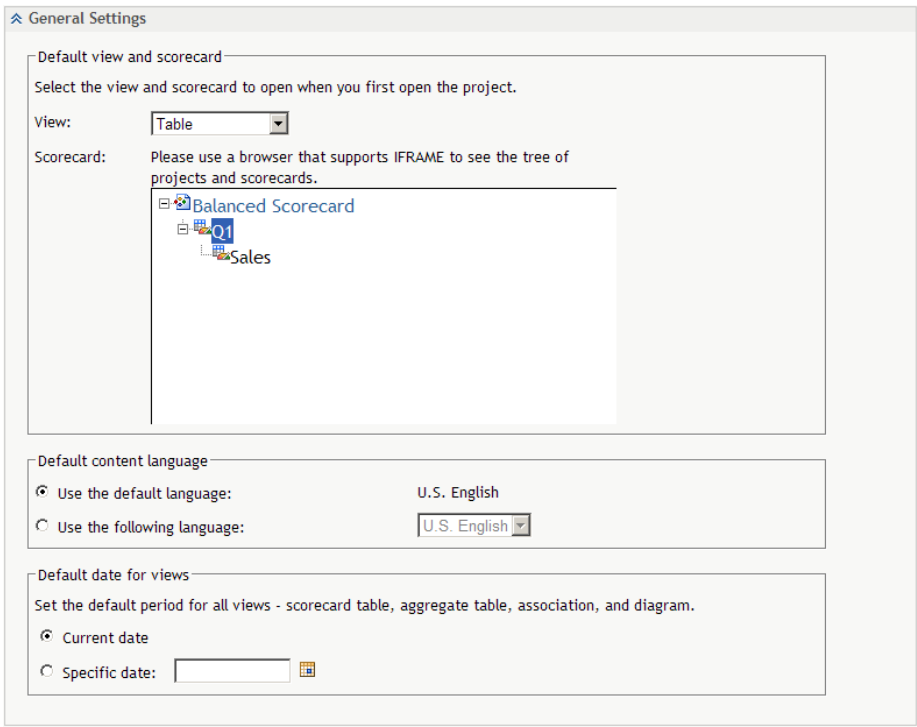
To specify project options, complete the following steps in an open project:

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



2. To specify the general settings, complete the following steps:

   a. If necessary, expand the **General Settings** section.



b. From the **View** drop-down 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 drop-down list.

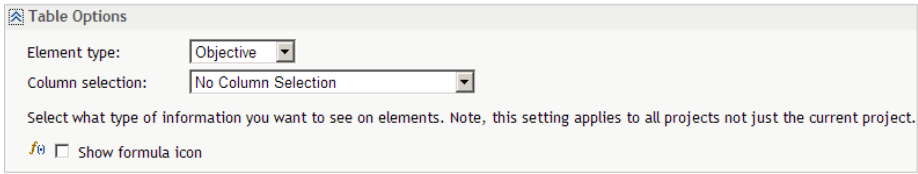
Note: Selecting another language does not affect the display of dates or numbers.

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** drop-down list, select the default element type to display in the scorecard.

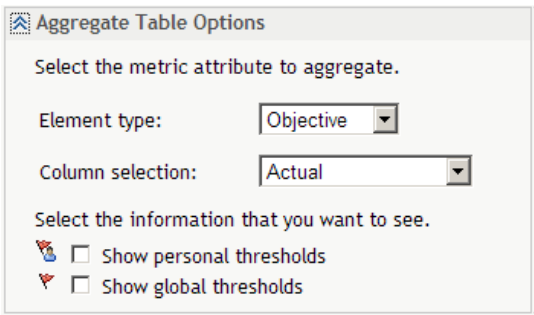
c. From the **Column selection** drop-down list, select the default column selection to display in the scorecard.

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 122.

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



b. Select an element type from the **Element type** drop-down list.

c. Select a column selection from the **Column selection** drop-down list.

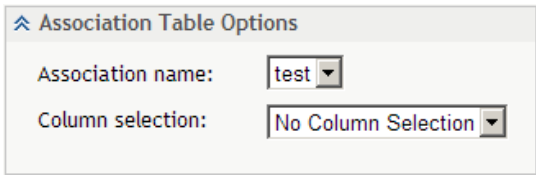
d. To display only personal thresholds, click **Show personal thresholds**.

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 122.

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

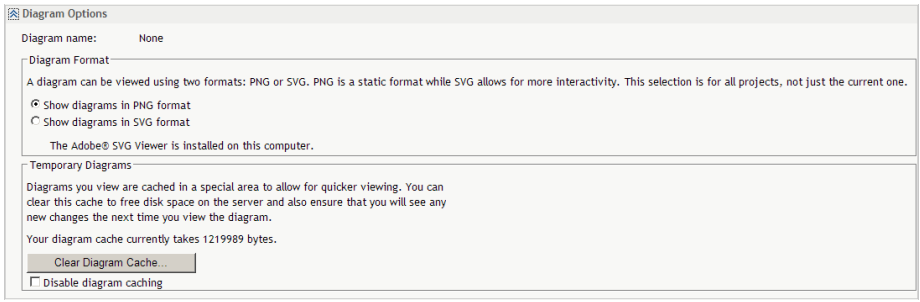


   b. Select a name from the **Association name** drop-down list.

   c. Select a column selection from the **Column selection** drop-down list.

6. To specify the diagram options, complete the following steps:

   a. Expand the **Diagram Options** section.



   b. Select a diagram from the **Diagram name** drop-down list.

      Note: When there are no diagrams, the drop-down list is replaced with the word **None**.

   c. Select a diagram format.

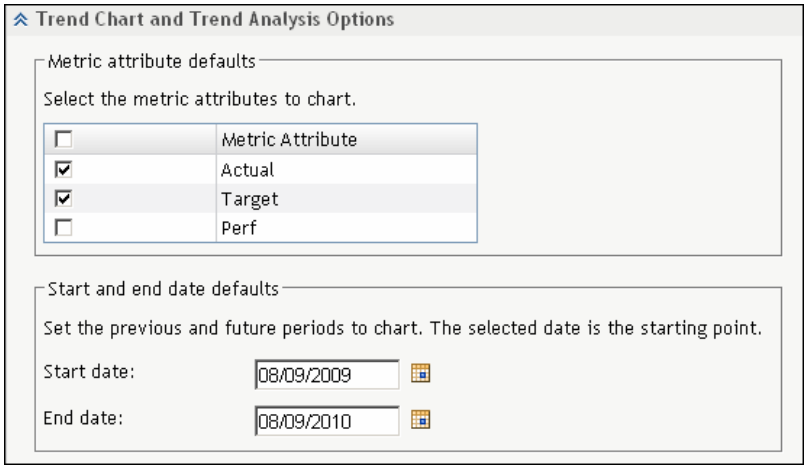
      Note: The format that you select applies to all projects, not to the current project only.

   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.



b. In the **Metric attribute defaults** section, select one or more metric attributes to include in the chart, by doing either of the following:

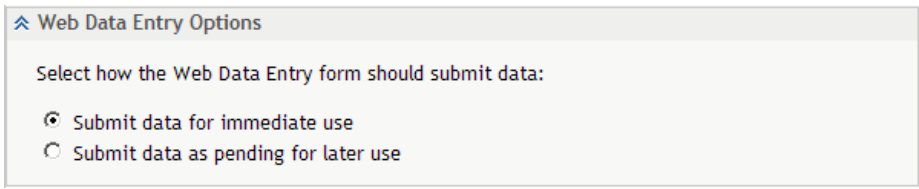
- To include specific metric attributes, select the check box that is next to each attribute.
- To include all metric attributes, select the check box that is at the top of the table.

c. In the **Start and end date defaults** section, specify a start date and an end date.

8. To specify the Web data entry options, complete the following steps.

Note: For information about data entry forms, see Chapter 32, "Creating Data Entry Forms," on page 285.

a. Expand the **Web Data Entry Options** section.



b. Select one of the following options:

- If you click **Submit data for immediate use**, data is automatically submitted to SAS Strategy Management. This is the default setting.

  Note: If there is pending data entry data, then a warning is displayed. You must either post the data or delete the data. If you post the data, it is immediately available to all users.

- If you click **Submit data as pending for later use**, then data entry data is stored in a temporary location until it is posted. When data is temporarily stored and awaiting posting, the Post and Calculate WDE Data icon ( ) appears on the toolbar.

9. When you are finished specifying options, click **OK**.

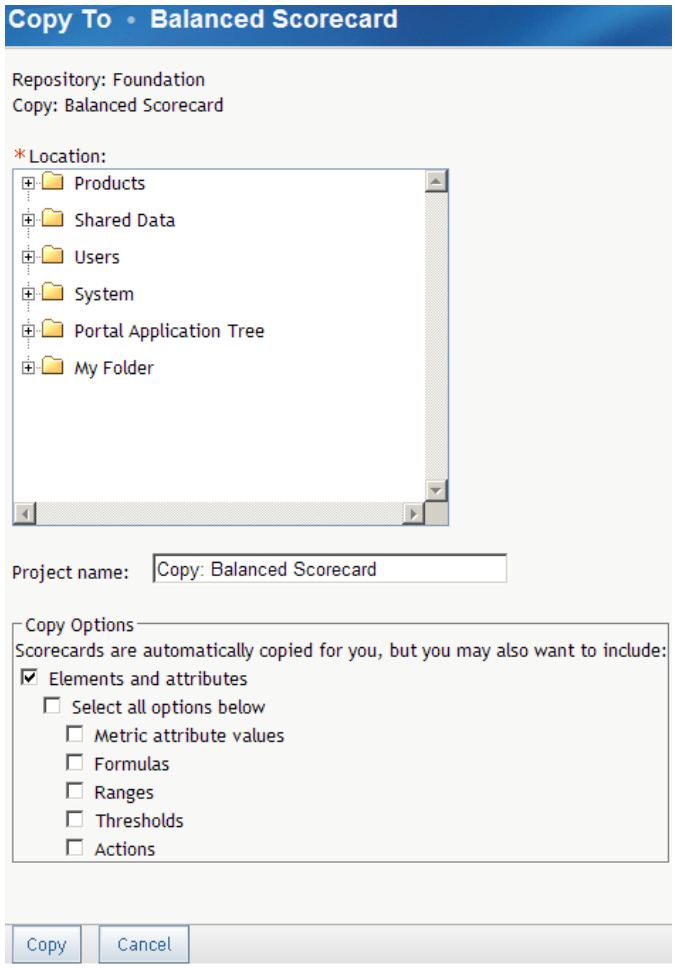
Copy a Project

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 in Document Manager" on page 60.

   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*.

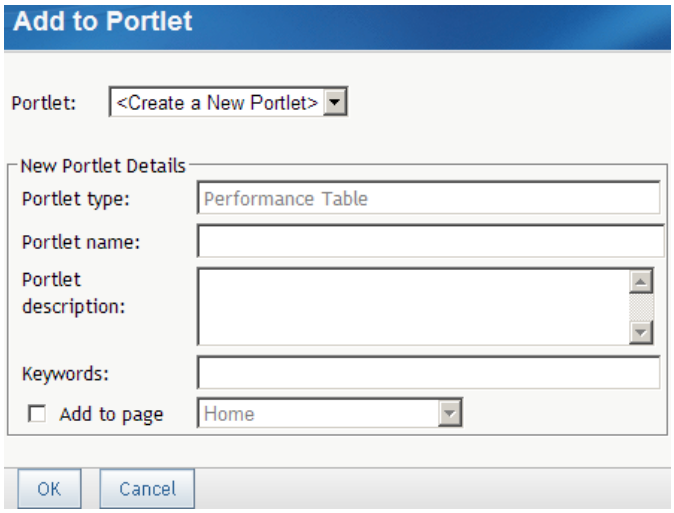
   Note: The project name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%). The project name is displayed in the default language in the Document Manager.

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**, and **Actions**.

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** drop-down 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** drop-down 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** drop-down 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 drop-down 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 Project

Use Document Manager to move a project to another location. For more information, see the SAS Information Delivery Portal online Help.

Delete a Project

You can delete a project from Document Manager or from the Template and Project Manager page.

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**.

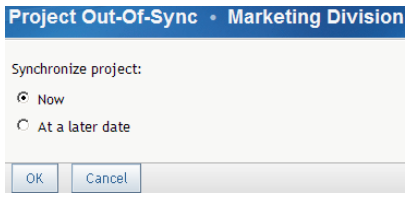
   Note: Alternately, to delete a single project, click  for the row and click **Delete**.

Synchronize a Project

If your project is based on an existing dimension hierarchy and if changes have been made to the hierarchy that affect the project, then you must synchronize your project with the existing hierarchy. This might mean that some scorecards and elements in your project are deleted.

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

1. Click **Project out-of-sync** above the list of projects on the left. The Project Out-Of-Sync page appears.



2. Click **Now** to synchronize the project now, or click **At a later date** to postpone the synchronization. If you click **At a later date**, the project remains out of synchronization with the dimension hierarchy until you synchronize it.

Export a Project to SQL

For information about exporting and importing a project, see Chapter 36, “Exporting and Importing Strategy Management Data,” on page 303.

Chapter 8

Working with Scorecards

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 11.

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 57.

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:

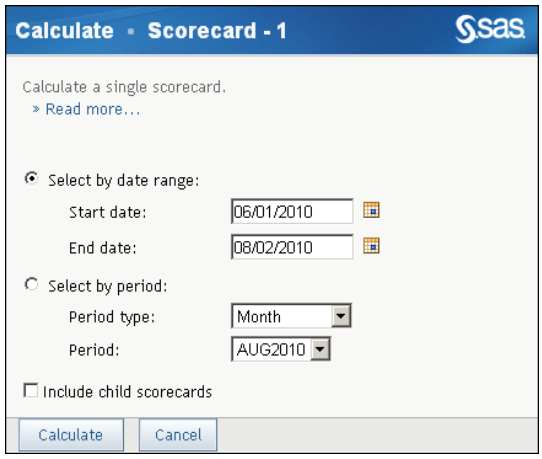
- To open a scorecard from within a project, open a project and click on the name of the scorecard.
- To open a scorecard from the portal, create a link to the scorecard from a portlet and click on the link.

Calculate a Scorecard

Note: The following task calculates only one scorecard in a project. To calculate all scorecards, see "Calculate a Project" on page 113.

To calculate a scorecard, complete the following steps:

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

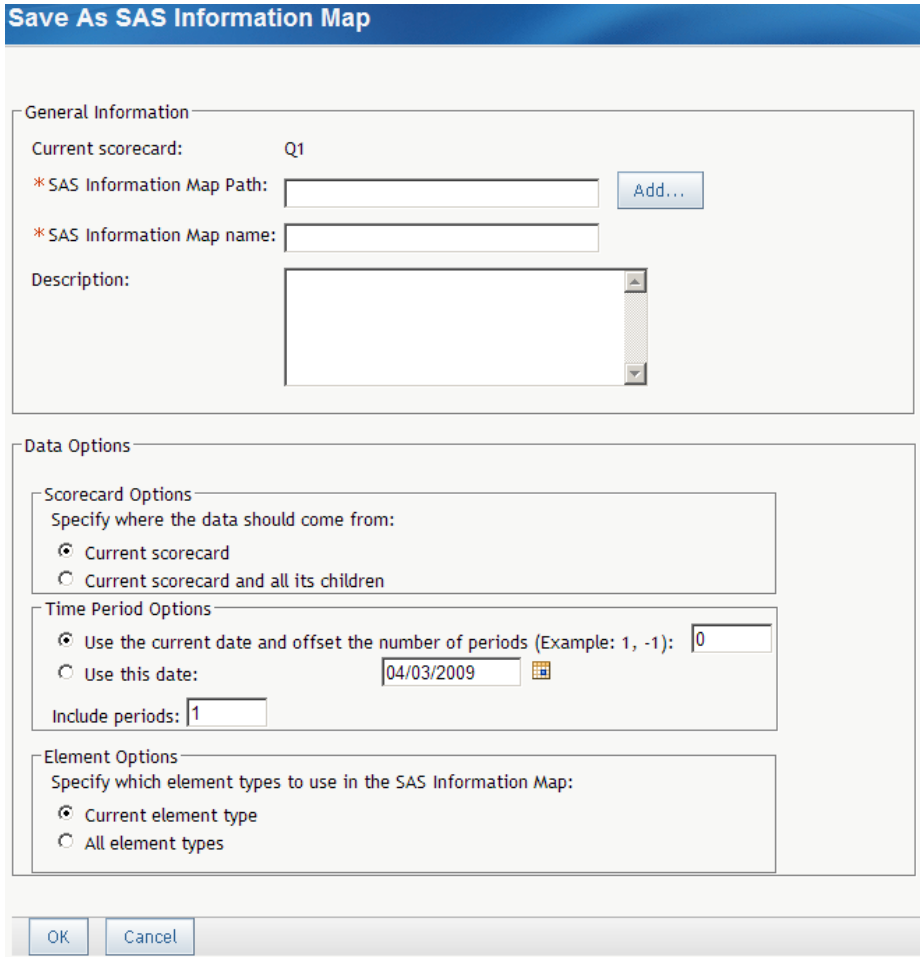


2. Specify either the date range or the period.
3. (Optional) Click **Include child scorecards**.
4. Click **Calculate**.

Save a Scorecard as a SAS Information Map

To save a scorecard as a SAS Information Map, complete the following steps:

1. Click **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) Type the name and description of the information map.

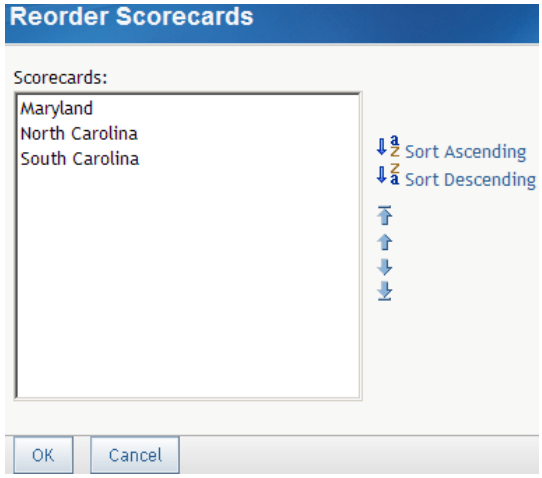
   Note: If you select an existing information map and do not change the name, the existing information map is overwritten.
5. In the Data Options section, set the options for which scorecards, time periods, and the element types included in the information map.
6. Click **OK**.

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:

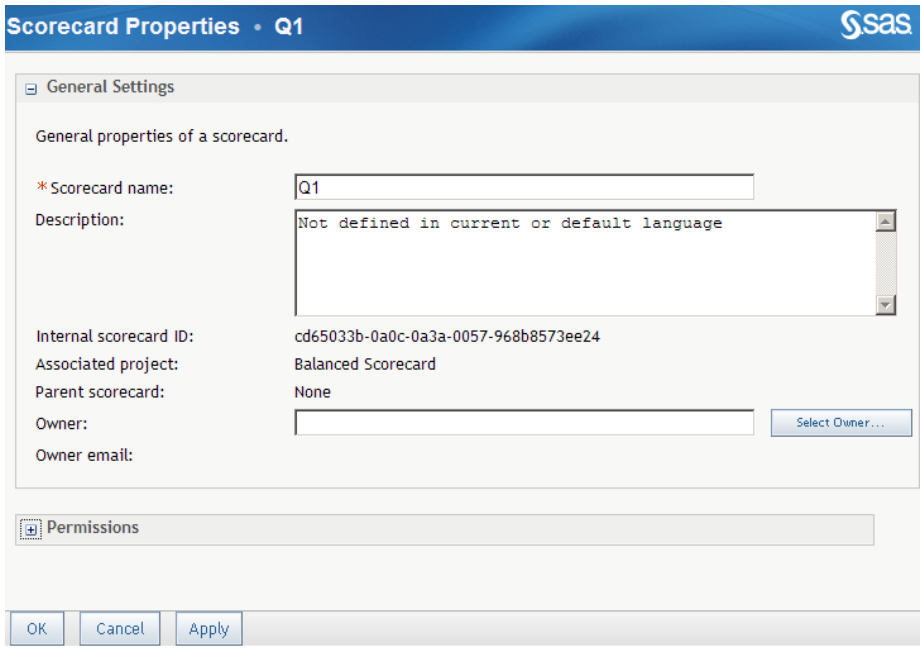
Icon	Action
	Moves the selected scorecard to the beginning of the list.
	Moves the selected scorecard up.
	Moves the selected scorecard down.
	Moves the selected scorecard to the end of the list.

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.



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:

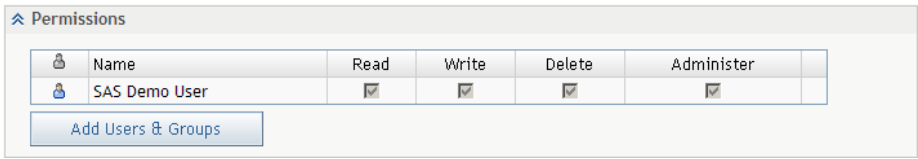
      - The name cannot contain a caret (^) or vertical bar (|). If you type a caret, it is converted to a tilde (~). If you type a vertical bar, it is converted to a percent sign (%).
      - You cannot change the name of a scorecard in a project that is based on an existing hierarchy.

   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 127.

3. To assign access permissions, complete the following steps:

   a. Expand the **Permissions** section.



   b. Click **Add Users & Groups**. For more information, see "Add Users and User Groups" on page 128.

   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 130.

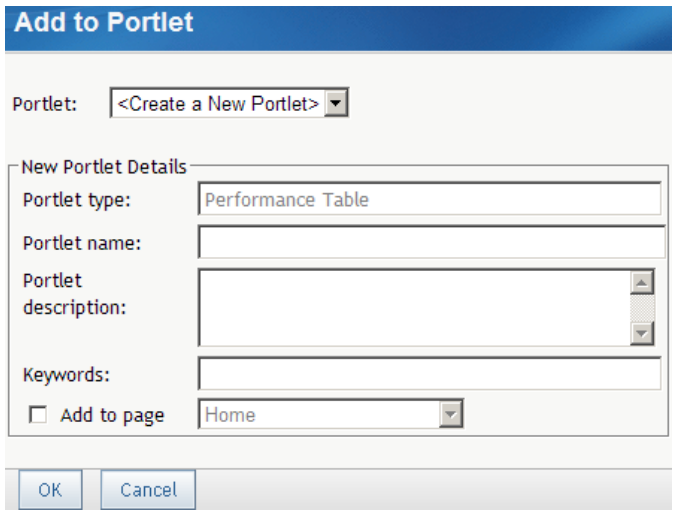
   d. To remove a user's name from the list of users who have access to the scorecard, click ✕ to the right of the check boxes.

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** drop-down 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** drop-down 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** drop-down 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 drop-down 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

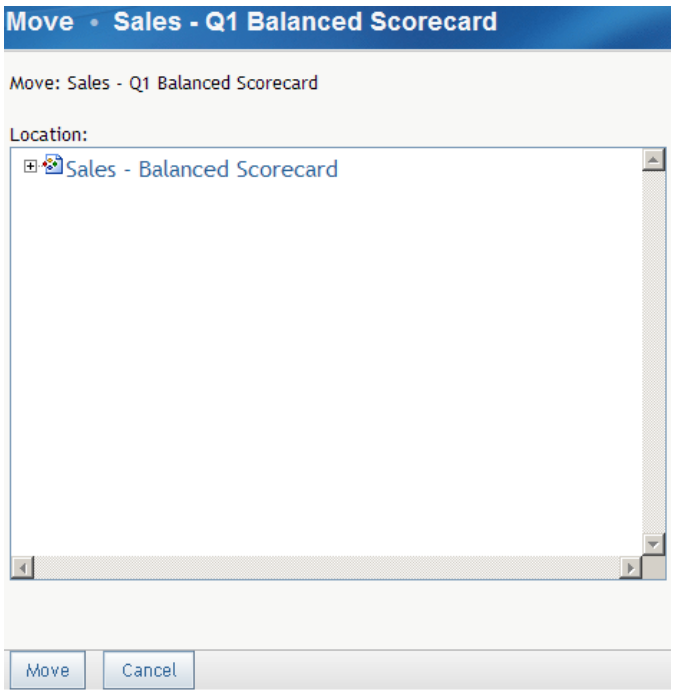
You can move a scorecard to a different location in the scorecard hierarchy within the same project or to another project that is associated with the same template.

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.



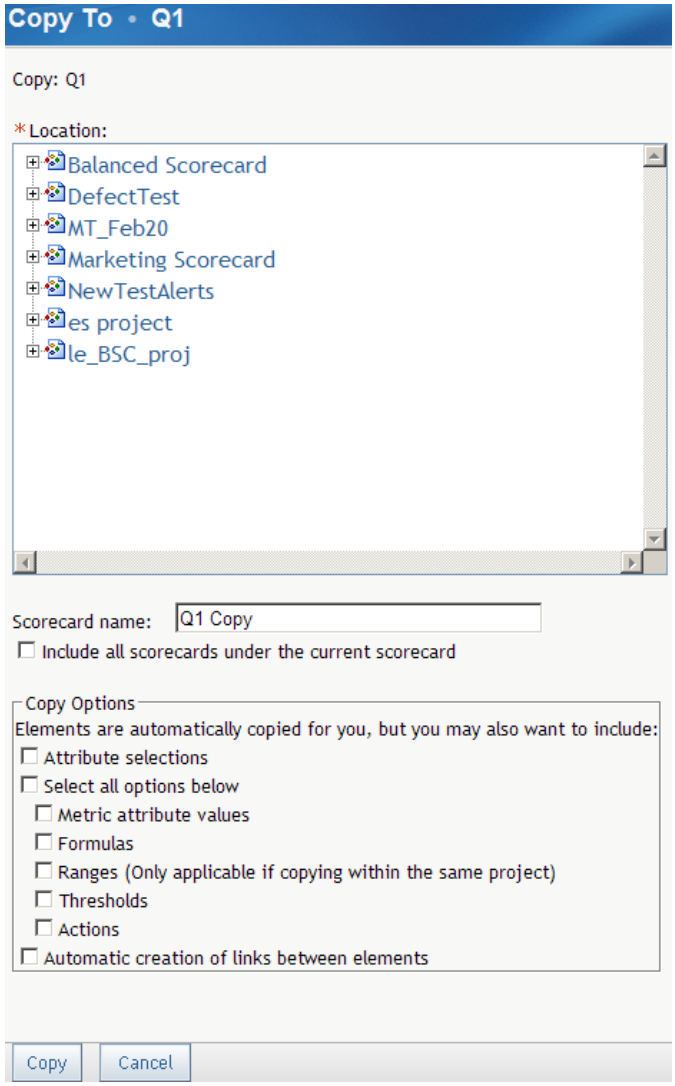
2. In the **Location** tree, select the location that you want to designate as the parent of the selected scorecard.
3. Click **Move**.

Copy a Scorecard

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

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

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



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 **Actions**.
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 92.

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**.

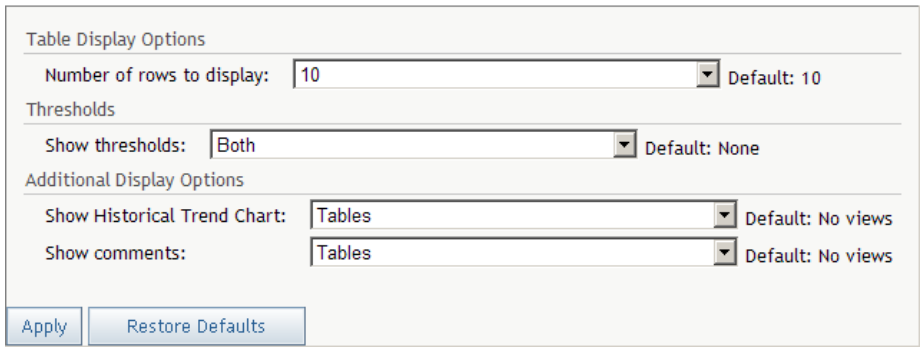
Note: If the scorecard contains child scorecards, the child scorecards are also deleted.

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 145.

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.



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

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 11.

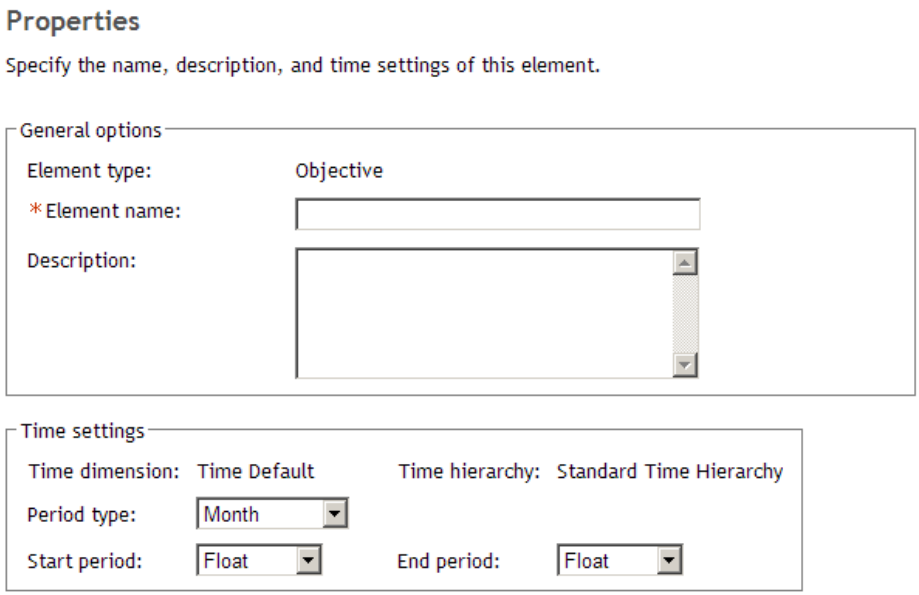
Create an Element

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** drop-down 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.



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** drop-down 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** drop-down 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** drop-down 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:

In current scorecard only	Adds the element to the scorecard that is currently open.
In current scorecard and all its children	Adds the element to the scorecard that is currently open and to all of its children.
In all scorecards of this project	Adds the element to all of the scorecards in the project that is currently open.

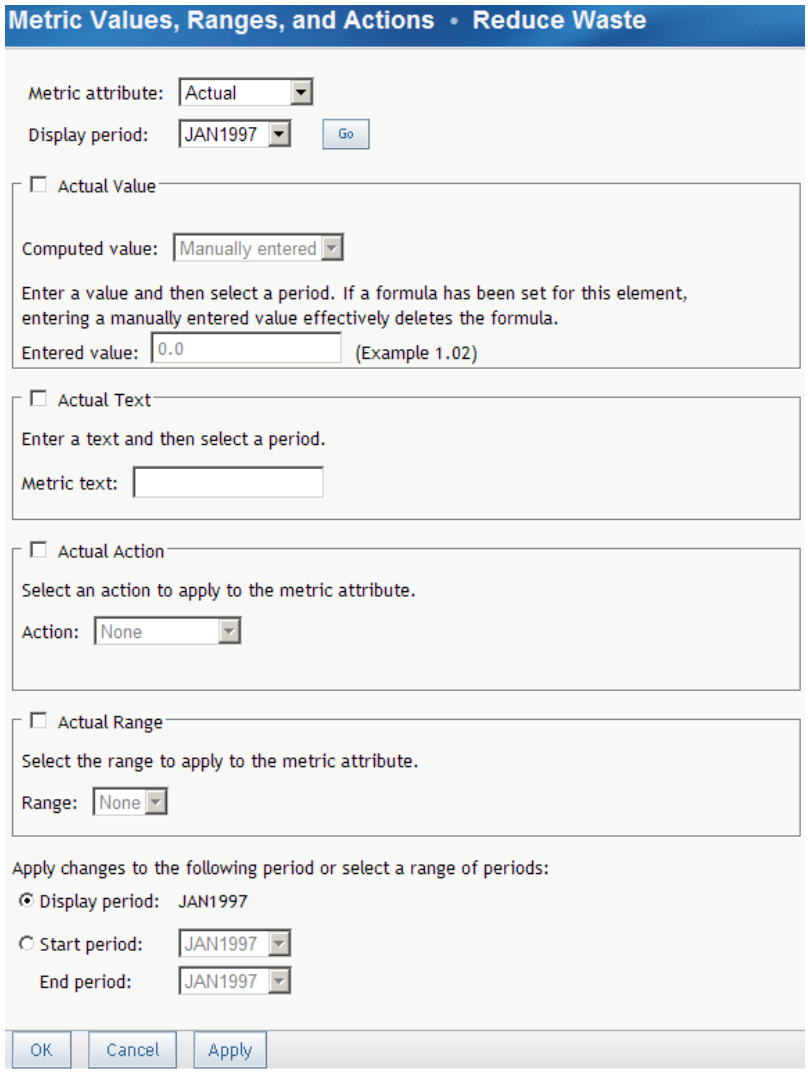
6. To change a setting, click **Previous** to return to a previous page. When you are satisfied with the settings, click **Finish**.

Edit Metric Attributes

Metric attributes are defined in the template that is associated with the project. You can change the values, actions, 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 click **Edit Metric Attributes**. The Metric Values, Ranges, and Actions page appears.



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

Way to Set the Value	Computed Value Option
Provide a value	Select **Manually-entered method**.
Specify a predefined formula to apply to the metric value	Select **Formula-based method**.
Define a new formula or modify a predefined formula to apply to the metric value	Select **Formula-based method**.
Provide a measure on which the element value is based	Select **Measure-based method**.

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** drop-down list.
   b. Select a function from the **Function** drop-down list.
   c. If the function that you selected supports an attribute and metric attribute, select values for these from the drop-down 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 109. If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see Appendix A2, "Configuring Java," on page 337.
8. (For measure-based method) Complete the following steps:
   a. Click **Select Measure**. The Select Measure page appears.
   b. Select a category from the **Category** drop-down list and click **Go**.
   c. From the **Metric table** drop-down list, select the metric table on which the measure is based and click **Go**.
   d. From the **Value** drop-down list, select the value on which the measure is based.
   e. Select a member from each dimension.
   f. Select a measure name in the table of measures.
   g. If the measure has a drill-through directive that has been set for it, click **Enable drill-through action on measure**.
9. To set a text, click ***<metric attribute>*** **Text**. Then type text in the **Metric text** field.
10. To set an action to occur when a metric attribute is selected, click ***<metric attribute>*** **Action**. Then select an action from the **Action** drop-down list.

Action	Description
None	Takes no action.
Generic Redirection Directive	Opens the Web address that you specify. Type the Web address in the **URL** field. *Note:* If the Web address contains the ampersand symbol (&), replace that symbol with the following string: *&amp.*
Human Capital Management Home	Opens the Human Capital Management Web application.
Manage Documents	Opens the Document Manager.
Manage Forms	Opens the Form Manager.

Action	Description
Manage Strategy Management Scorecard Projects and Templates	Opens the Template and Project Manager.
New Strategy Management Scorecard Project	Starts the New Project wizard.
Open a Document	Opens a document that you specify in the Document Manager. Click the icon that is next to the **Document** field to select the document.

11. To set a range, click ***<metric attribute>*** **Range**. Then select a range from the **Range** drop-down list. For more information, see "Create a Range" on page 116.
12. To set the time period to the selected period in the table view, click **Display period**.
13. 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.

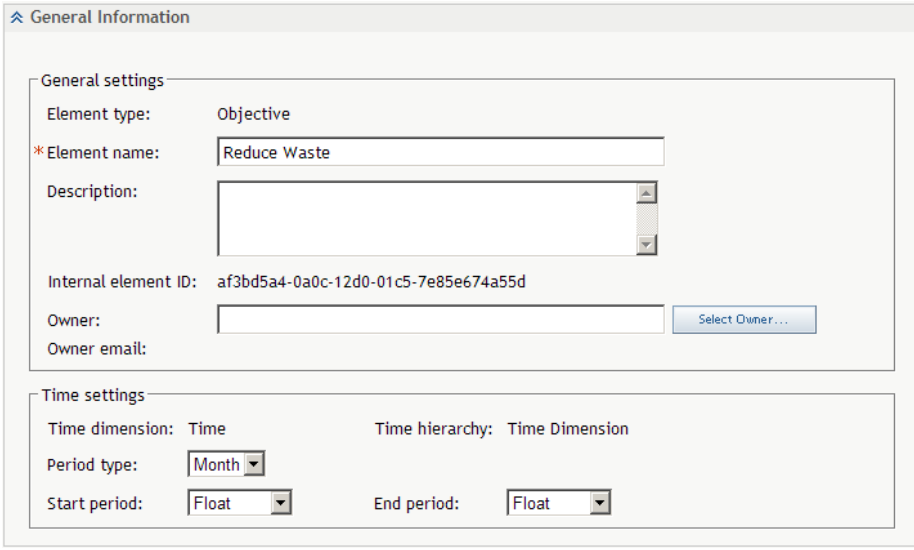
    b. Select a start period or end period from the drop-down lists.
14. Click **OK**.

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 127.

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** drop-down 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** drop-down 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** drop-down 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.

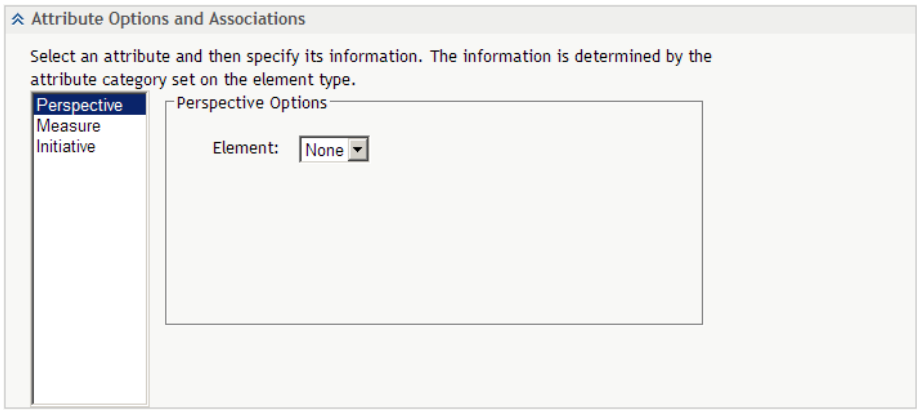
5. To select associations for an element, complete the following steps.

   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.

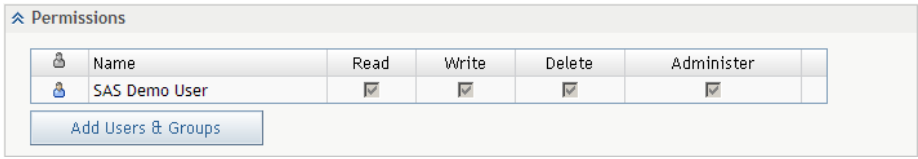
For example, if the element is a contact name and the category of the attribute is e-mail, supply the e-mail address for the contact name.

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.



b. Click **Add Users & Groups**. For more information, see "Add Users and User Groups" on page 128.

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 130.

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.

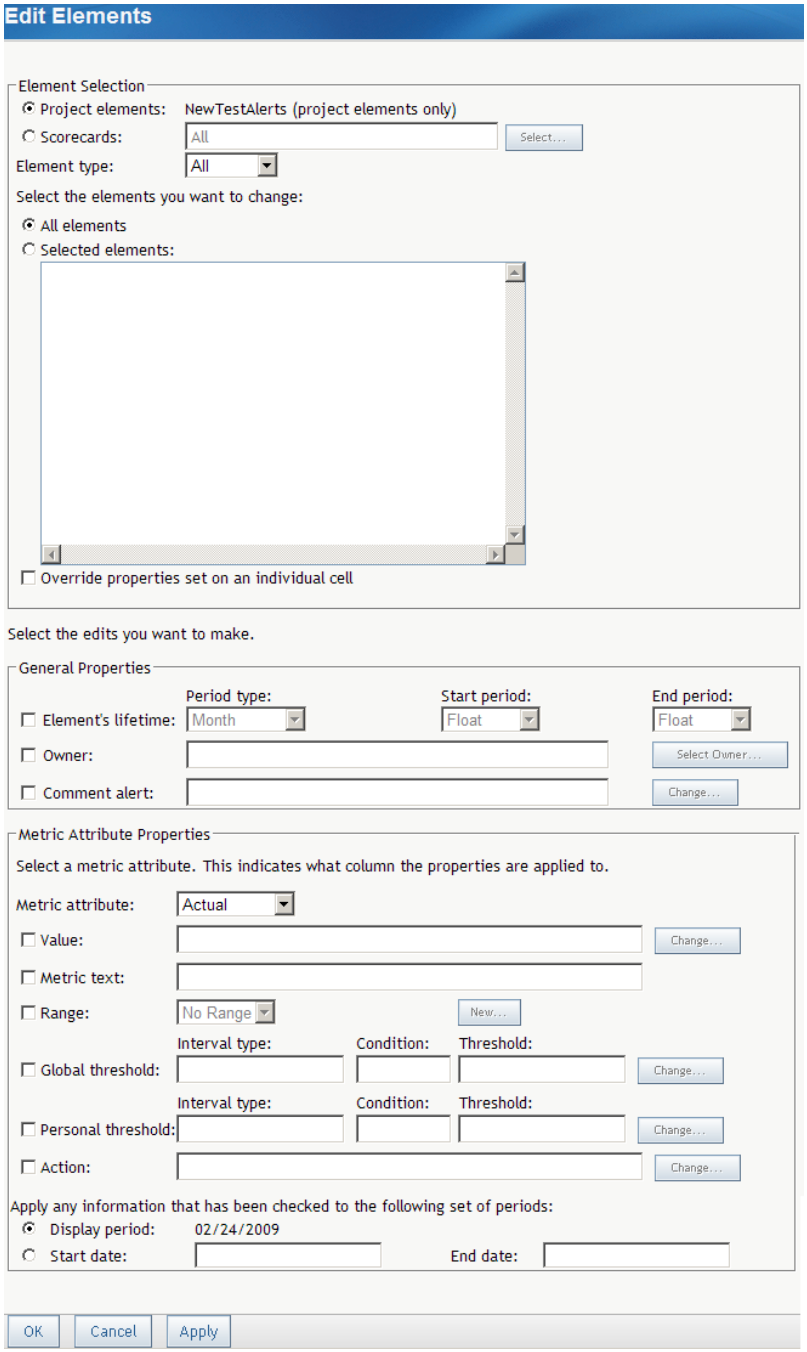
7. When you are finished editing the properties, click **OK**.

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.



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** drop-down list, select an element type.

4. To edit all elements, click **All elements**. Otherwise, to edit specific elements, click **Selected elements** and click 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** drop-down list.

   c. Select a start period and an end period from the **Start period** and **End period** drop-down lists.

   Note:

   - Select **Float** in the drop-down 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 127.

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 129.

9. To specify the column to which metric attribute properties are applied, select an attribute from the **Metric attribute** drop-down 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 **Entered value**.
Specify a predefined formula to apply to the metric value	Click **Formula definition**.
Define a new formula or modify a predefined formula to apply to the metric value	Click **Formula definition**.
Provide a measure on which the element value is based	Click **Measure**.

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** drop-down 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 109. If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see Appendix A2, "Configuring Java," on page 337.
14. (For measure) Complete the following steps:
    a. Click **Select Measure**. The Select Measure page appears.
    b. Select a category from the **Category** drop-down list and click **Go**.
    c. From the **Metric table** drop-down list, select the metric table on which the measure is based and click **Go**.
    d. From the **Value** drop-down list, select the value on which the measure is based.
    e. Select a member from each dimension.
    f. Select a measure name in the table of measures.
    g. If the measure has a drill-through directive that has been set for it, click **Enable drill-through action on measure**.
15. To change or supply text, click **Metric text** and type the text into the field.
16. To change or apply a range, click **Range**. Then, select a range from the drop-down list or click **New** to create a new range. For more information, see "Create a Range" on page 116.
17. 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 103.
18. 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 103.
19. To change the action that has been defined for multiple elements, click **Action** and click **Change**. The Action page appears. Then select one of the following actions from the **Action** drop-down list.

Action	Description
None	Takes no action.
Generic Redirection Directive	Opens the Web address that you specify. Type the Web address in the **URL** field. *Note:* If the Web address contains the ampersand symbol (&), replace that symbol with the following string: *&amp.*
Human Capital Management Home	Opens the Human Capital Management Web application.
Manage Documents	Opens the Document Manager.
Manage Forms	Opens the Form Manager.
Manage Strategy Management Scorecard Projects and Templates	Opens the Template and Project Manager.

Action	Description
New Strategy Management Scorecard Project	Starts the New Project wizard.
Open a Document	Opens a document that you specify in the Document Manager. Click the icon that is next to the **Document** field to select the document.

20. 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.

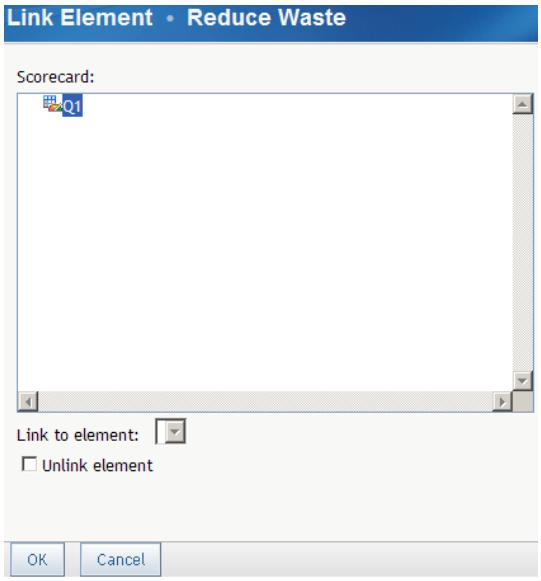
Link Elements

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** drop-down 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 129.

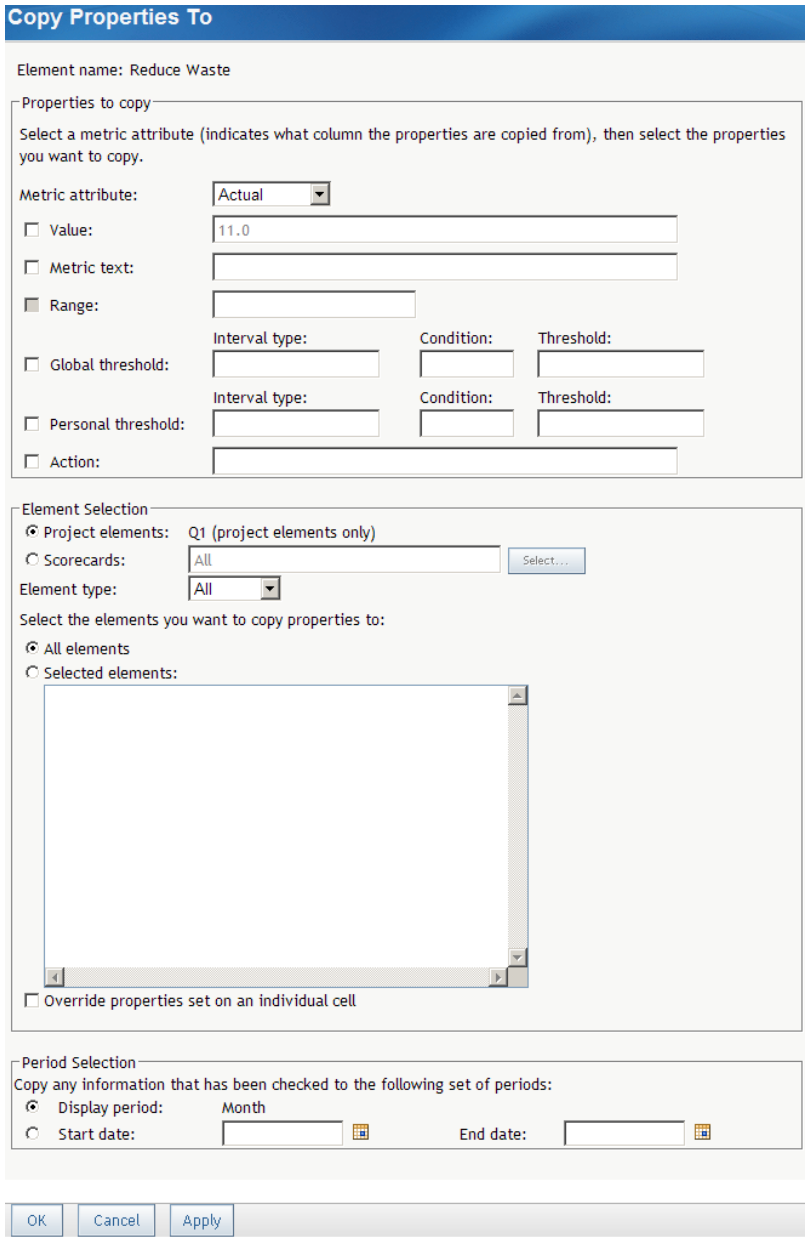
Copy Element Properties

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.



3. From the **Metric attribute** drop-down list, select a metric attribute.
4. Click **Value**, **Metric text**, **Range**, **Global threshold**, **Personal threshold**, and **Action** to copy these properties.

   Note: The fields to the right of these check boxes are unavailable.
5. To copy the properties to a project, click **Project elements**. Otherwise, to copy the properties to a scorecard, click **Scorecards** and click **Select**.

   To copy the properties to all scorecards, click **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** drop-down list, select an element type.
7. To copy the properties to all elements in the selected project or scorecards, click **All elements**. Otherwise, copy the properties only to selected elements, click **Selected elements** and click on the elements that you want to select.

8. To override existing properties, click **Override properties set on an individual cell**.
9. To copy the properties to the currently displayed period, click **Display period**. Otherwise, to specify the time period that you want to copy the properties to, click **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.

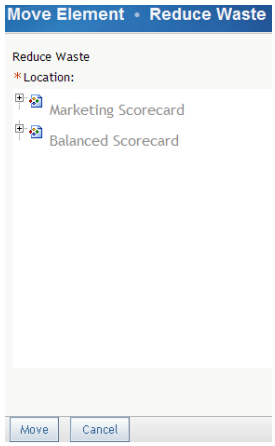
   Note: You can copy the element to more than one scorecard. An element cannot be copied to itself.
4. To change the name of the element when it is copied, type the name in the **Element name** field.
5. Click **Copy**.

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**.

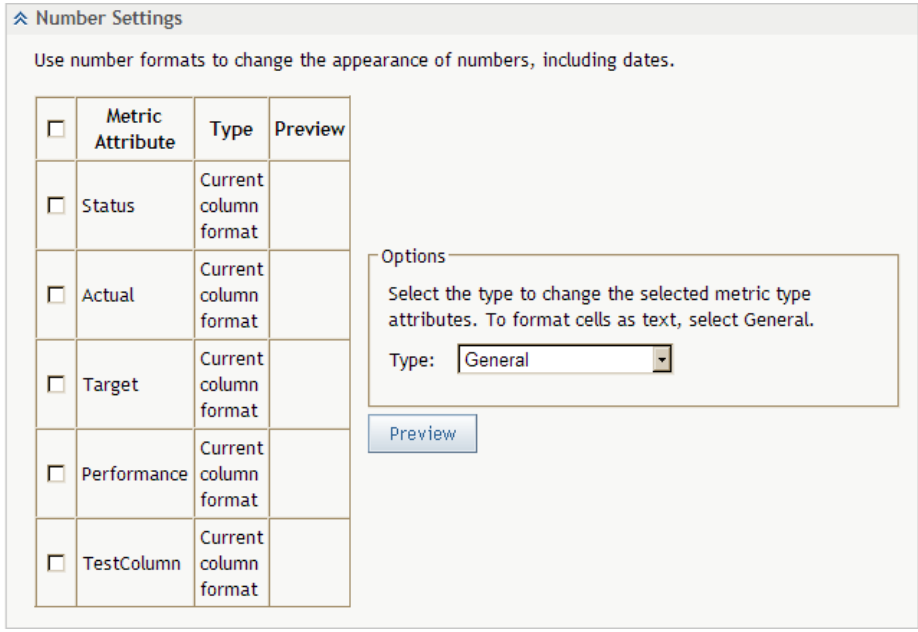
Note: Deleting an element that is used in a formula renders the formula invalid.

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.



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** drop-down list, select the number format to apply to the selected attribute:

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

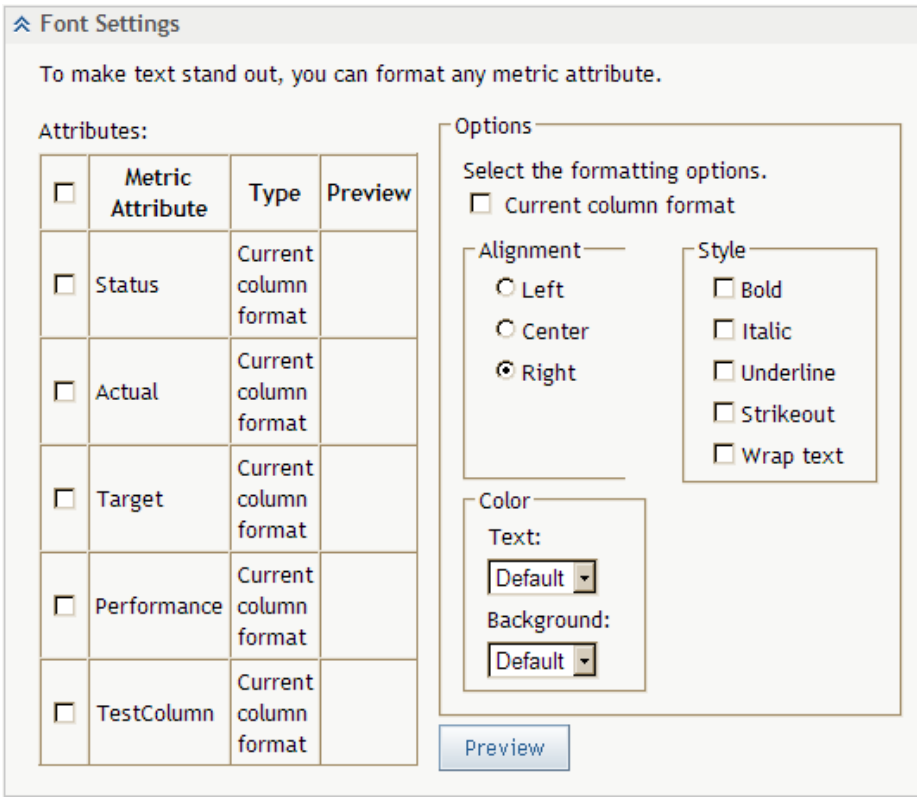
5. (For the **Currency** type) Complete the following steps:
   a. To use the locale that is specified by your preferences, click **Use the locale selected in your preferences**.
   b. To specify a different locale, click **Use this locale** and choose a locale from the drop-down list.
   c. From the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

down 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** drop-down list, select a common format.
  3. From the **Decimal places** drop-down 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** drop-down 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.



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.

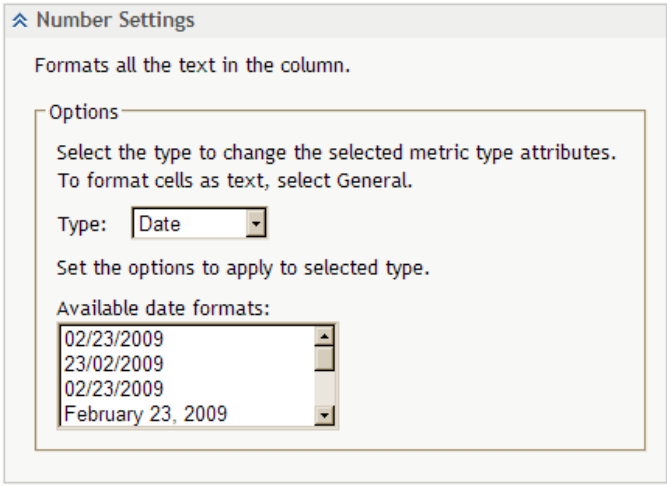
15. From the **Text** and **Background** drop-down lists, select a color for the text and background.
16. To view the font selection in the metric attribute table, click **Preview**.
17. Click **OK**.

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** drop-down list, select the number format to apply to the selected column:

Type	Description
General	Applies a text format.
Currency	Applies a currency format. An example is $1,234.10.
Number	Applies a numeric format.
Percentage	Applies a percentage format. An example is 100%.
Date	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 drop-down list.

c. From the **Decimal places** drop-down list, select a value.

6. (For the **Number** type) Complete the applicable steps.

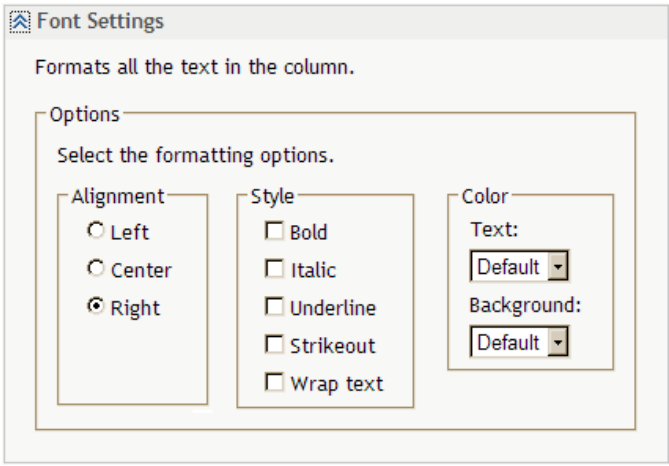
   - To use a numeric format other than the SAS format along with settings that are in your profile, click **Other** and click **Use the settings in your profile**.
   - To use a numeric format other than the SAS format along with settings different from those in your profile, click **Use these settings**. From the **Decimal places** drop-down 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** drop-down list, select a common format.
     3. From the **Decimal places** drop-down 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** drop-down 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.



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** drop-down 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**.

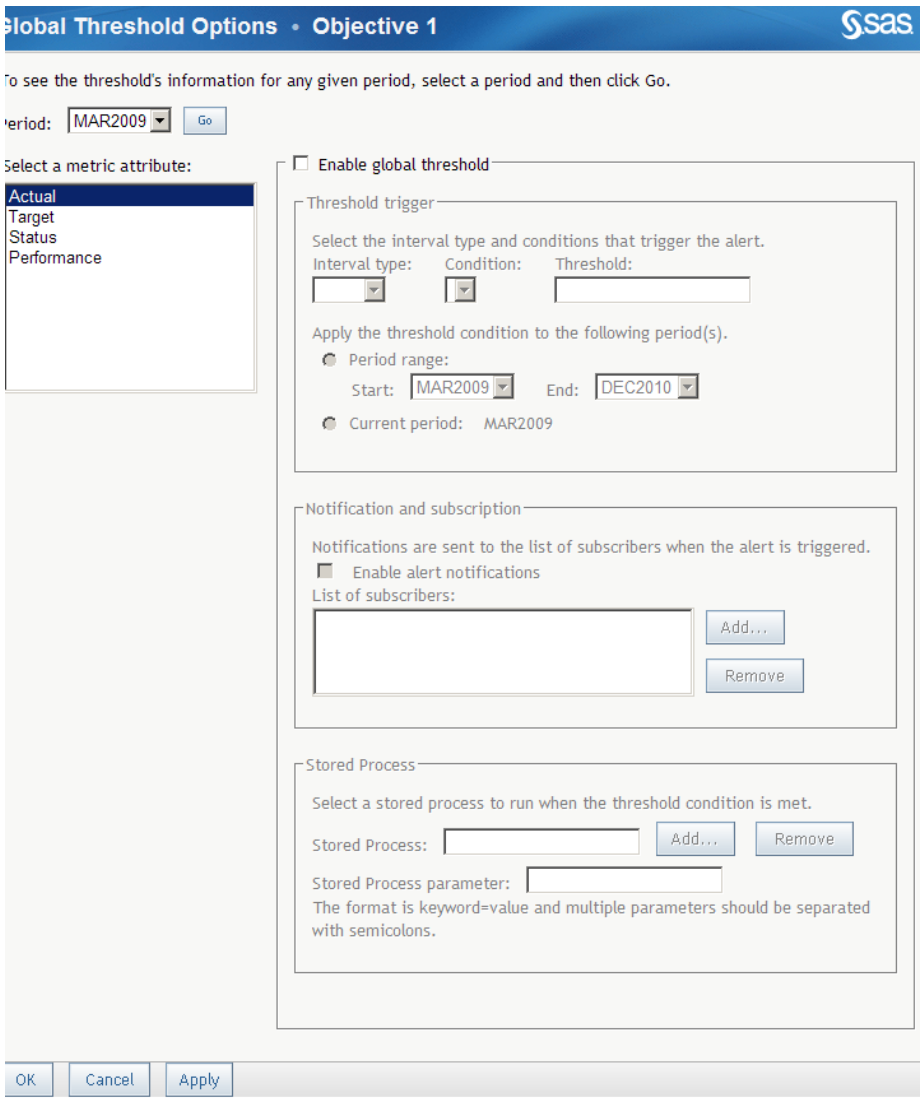
Set a Global or Personal Threshold

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.



4. To view threshold information for a specified period, select a period from the **Period** drop-down 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	Click **Enable global threshold**.
To activate a personal threshold	Click **Enable personal threshold**.

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** drop-down list.

      Note:

      - 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 116.

   b. Select an operator from the **Condition** drop-down 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** drop-down list.
   d. To specify the period of time to which the threshold applies, perform one of the following steps:
      - Click **Period range** and select a start period and end period from the **Start** and **End** drop-down 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.

      - Click **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, click **Enable alert notifications**. To add a user or user group to the list of subscribers to a global threshold, click **Add**. For more information, see "Add Users and User Groups" on page 128. To remove a user from the list of subscribers to a global threshold, click **Remove**.
For personal thresholds	To subscribe yourself so that you are notified when an alert is triggered, click the **Enable alert notifications and subscribe me**.

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**.

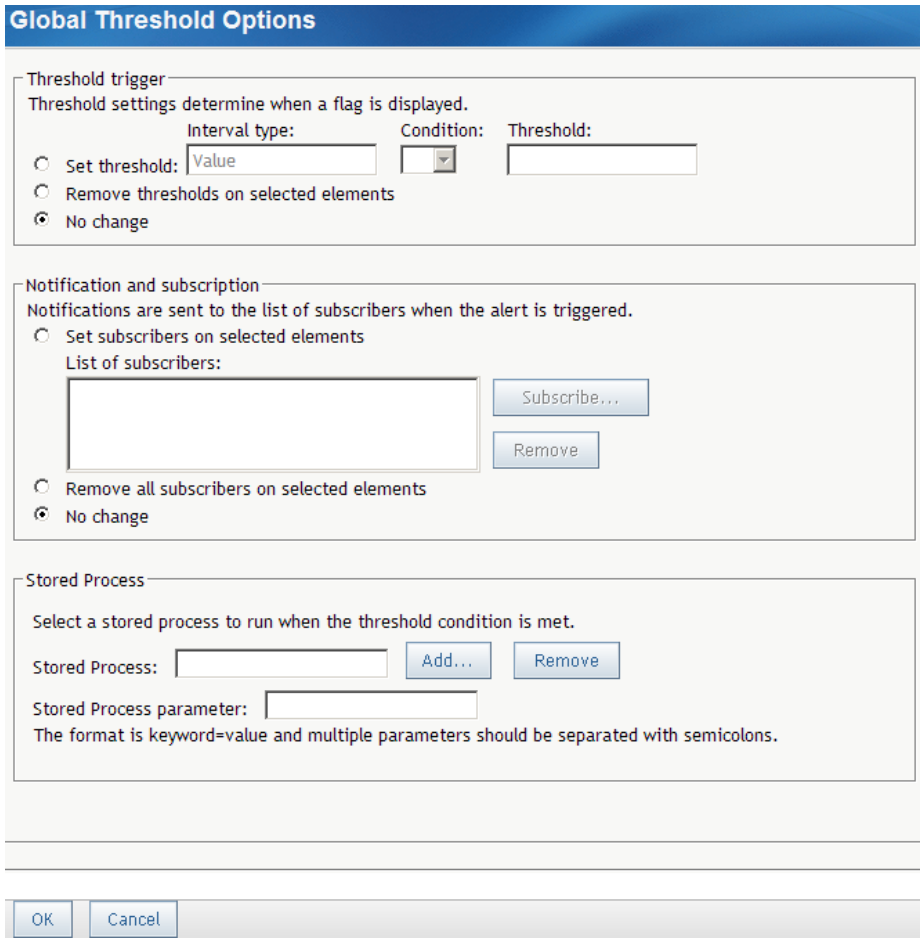
Edit a Global or Personal Threshold

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 **Global Threshold** and click **Change**.
To edit a personal threshold	Click **Personal Threshold** and click **Change**.

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



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** drop-down list.
     2. Select an operator from the **Condition** drop-down 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	• To add a user to the list of subscribers to a global threshold, click **Set subscribers on selected elements** and click **Subscribe**. For more information, see "Add Users and User Groups" on page 128. • To remove a user from the list of subscribers, click the user and click **Remove**. • To remove all subscribers from the selected elements, click **Remove all subscribers on selected elements**. • To make no change to elements with different notifications, click **No change**.
For personal thresholds	• To be notified, click **Enable alert notifications and subscribe me**. • To remove notification, click **Remove my alert notifications subscription on selected elements**. • To make no change to elements with different notifications, select **No change**.

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 145.
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

Working with Formulas

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:

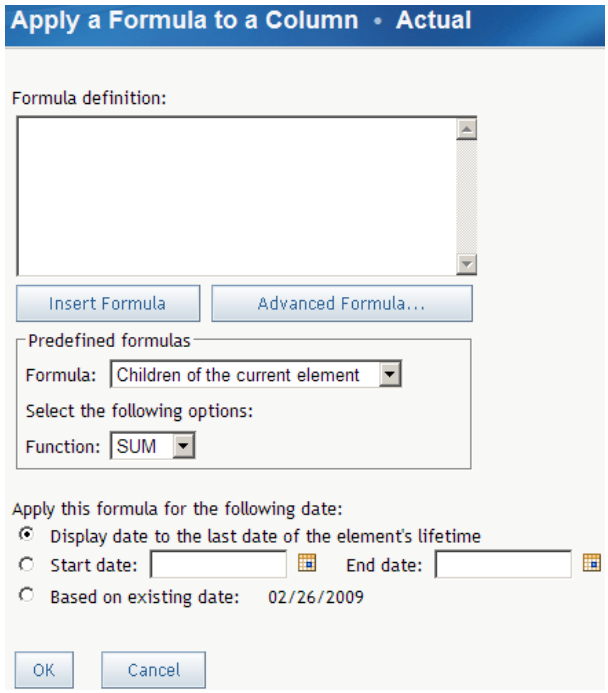
- Formulas can be applied only to columns that contain numeric values. Any calculation that cannot be computed appears as **#NUM!**.
- A formula on a cell always takes precedence over a column formula. Therefore, when you apply a formula to a column, any cells that already have a formula ignore the column 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 122.

   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** drop-down list.

   b. Select a function from the **Function** drop-down 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 109. If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see Appendix A2, "Configuring Java," on page 337. 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.

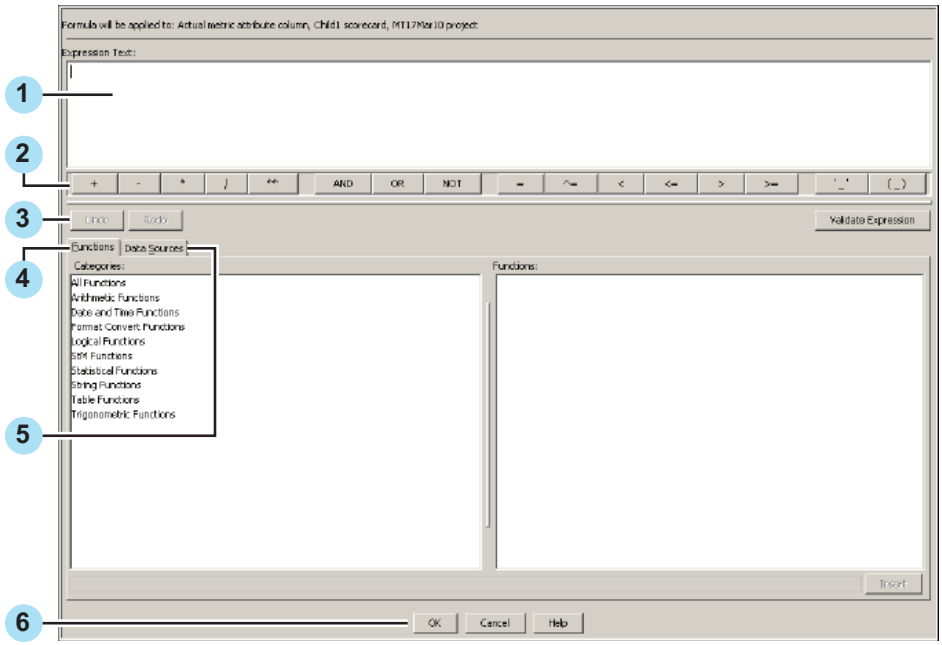
   c. To apply the formula to the date that is specified in the column selection definition, click **Based on existing date**.

   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 122.

Creating a Formula

Your First Look at the Formula Editor

Use the Formula Editor to build and edit formulas.



1 **Expression Text** field.

   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 110.

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 110.

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 111.

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 (JRE). For information about installing the JRE, see Appendix A2, "Configuring Java," on page 337.

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
AND OR NOT	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:

1. 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 A1, "Strategy Management Function Dictionary," on page 321.

2. In the **Functions** list, click a function.For information about Strategy Management functions, see Appendix A1, "Strategy Management Function Dictionary," on page 321.

   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.

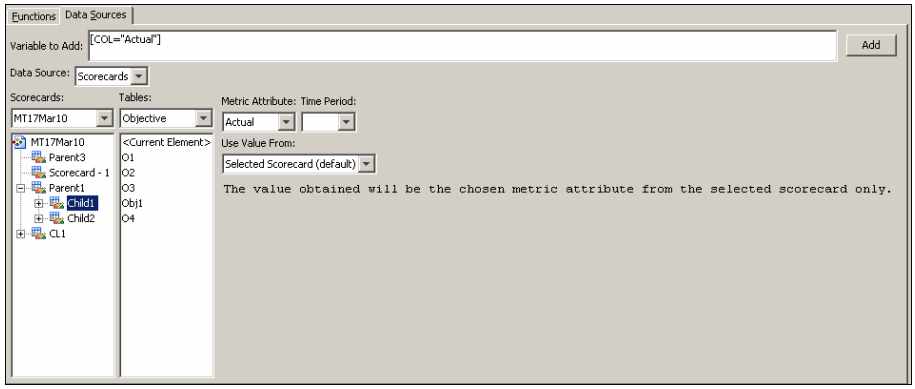
Special constants enable you to account for unresolved and missing values in a formula. The following special constants are supported by the Formula Editor:

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 11

Calculating a Project

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!**.

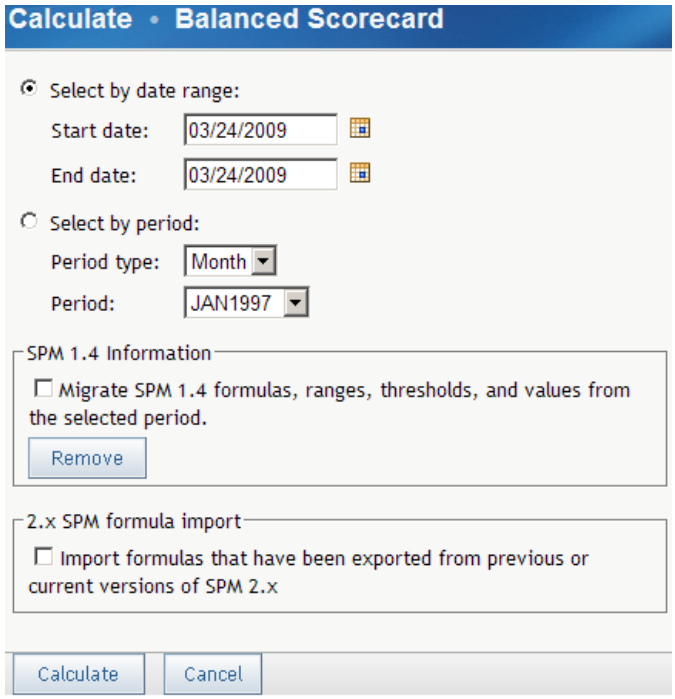
For information about formulas for columns, see "Apply a Formula to a Column" on page 107. For information about formulas for cells, see "Edit Metric Attributes" on page 83 concerning the formula-based method for editing metric attributes.

Calculate a Project

Note: The following task calculates all scorecards in a project. To calculate only one scorecard, see "Calculate a Scorecard" on page 72.

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 on 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** drop-down list, select a period type. Then, from the **Period** drop-down list, select a period.

4. If you have imported a project from SQL, 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 information, see "Export a Project to SQL" on page 70.

5. Click **Calculate**.

Chapter 12

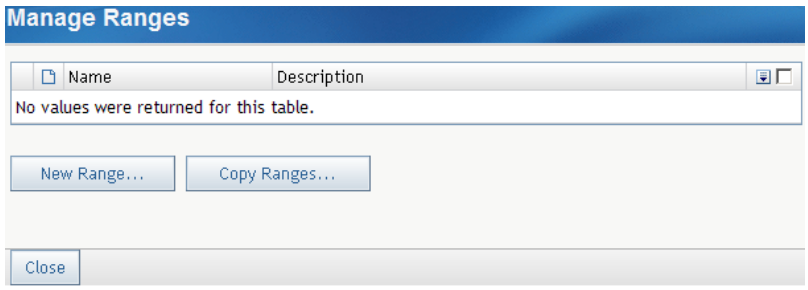
Working with Ranges

Overview

For a description of ranges, see Chapter 2, “How Do You Describe a Strategy?,” on page 11.

List Ranges

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



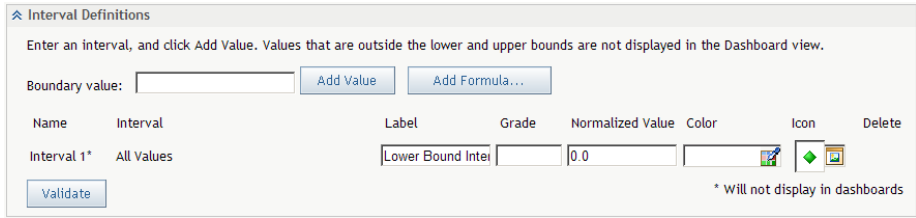
Create a Range

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 115.
2. Click **New Range**. The New Range page appears.
3. Expand the **General Settings** section.

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.



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.

   To create an interval, complete the applicable steps:

For an interval based on a specific value	Type a value for the lower bound of the range in the **Boundary value** field and click **Add Value**. The new interval appears in the table below the **Boundary value** field.

For an interval based on a formula	Click **Add Formula** and perform one of the following steps: • In the **Formula definition** field, type a formula. • Click **Advanced Formula** to open the Formula Editor. For more information, see "Creating a Formula" on page 109. If you are starting the Formula Editor for the first time, you must configure your system for Java. For more information, see Appendix A2, "Configuring Java," on page 337.

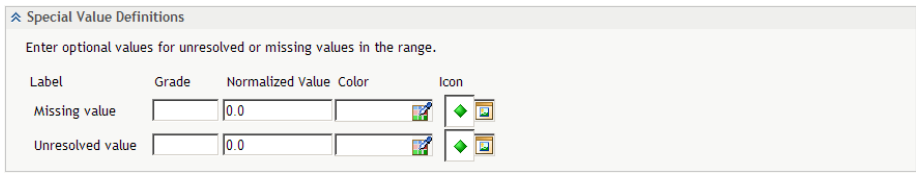
8. In the **Interval 1** row, type a label in the **Label** field for values that fall below the lower bound of the interval.
9. In the **Grade** field, type a letter grade that represents the interval.
10. In the **Normalized Value** field, type a value that represents the interval.
11. Click the icon 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 drop-down 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.



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 116.

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** drop-down list, select the name of the project that contains the existing range.
3. Click **Go**.
4. From the **Range** drop-down 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 116.

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** drop-down 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 122.

Chapter 13

Working with Column Selections

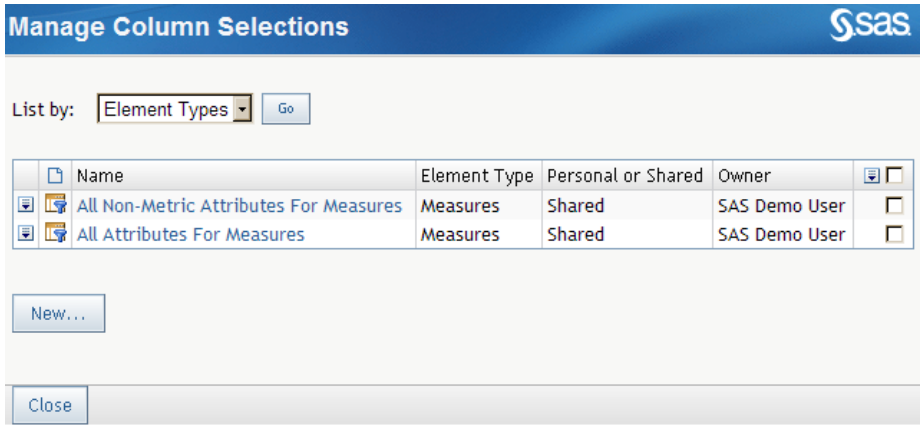
Overview

For a description of column selections, see Chapter 2, "How Do You Describe a Strategy?," on page 11.

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.



2. From the **List by** drop-down list, select which column selections to display in aggregate tables.
3. Click **Go**.

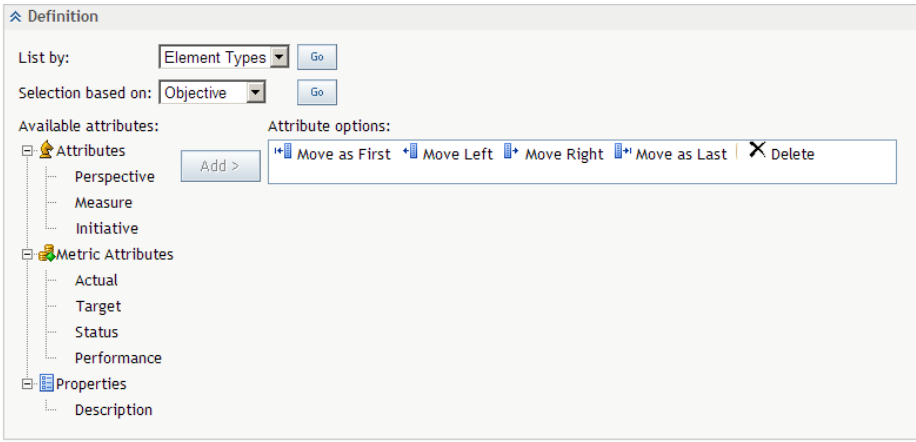
Create a Column Selection

To create a column selection, complete the following steps:

1. List column selections. For more information, see "List Column Selections" on page 121.
2. Click **New**. The New Column Selection page appears.
3. Expand the **General** section.

4. Type a name for the column selection in the **Column selection name** field.
5. (Optional) Type a description in the **Description** field.
6. 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.
7. 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** drop-down list, select one of the following options:

Element Types	Applies the column selection to elements in a table view.
General	Creates a column selection that is not connected to element types or associations. The **General** 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** drop-down 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**.

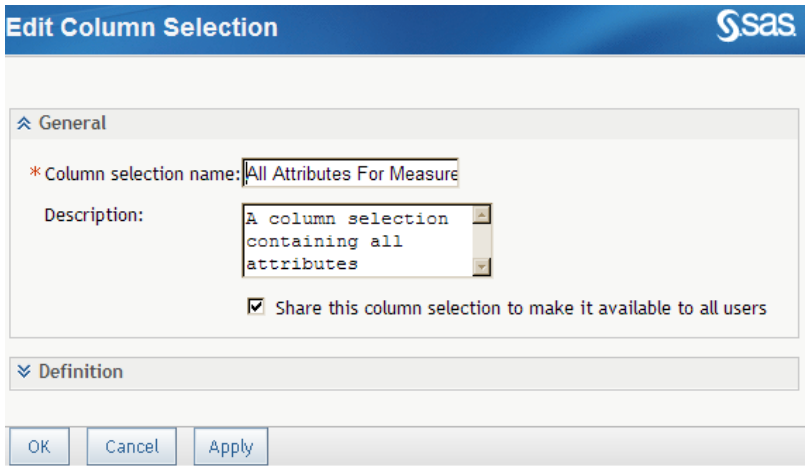
    e. To delete a column, click the check box that is next to the column name, and click **Delete**.

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 122.

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-name*`Copy`.

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** drop-down list.

   Note: The list includes only column selections based on element types and general column selections.
4. Select a column from the **Column selection** drop-down 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** drop-down list.

   Note: The list includes only column selections based on associations and general column selections.
4. Select a column from the **Column selection** drop-down list.
5. Click **Go**.

Chapter 14

Common Tasks

Display the Template and Project Manager Page

To display the Template and Project Manager page, perform one of the following steps:

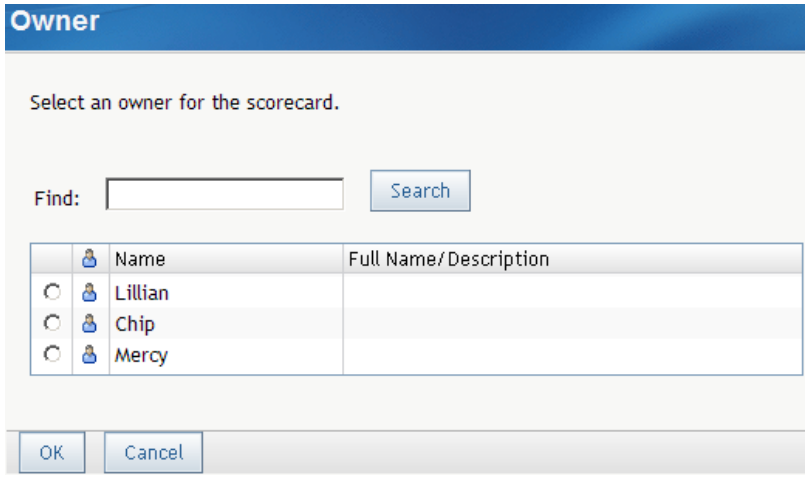
- If you are at the portal level, click **Manage Scorecard Projects**.

  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

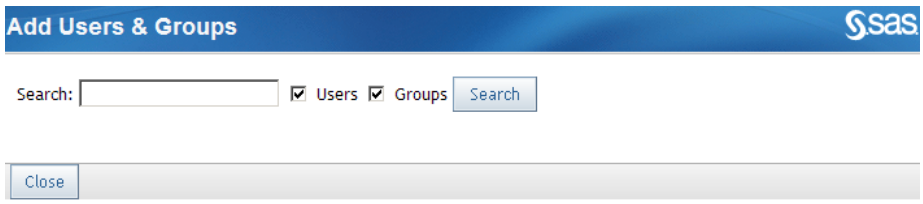
One of the properties of a template, project, scorecard, or element is its owner. To select or change the owner, open the Properties window for the template, project, scorecard, or element, and click **Select Owner**. The Owner window appears.



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.

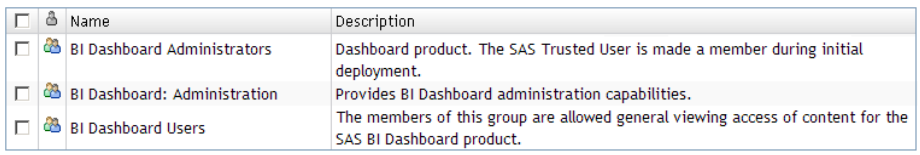
Add Users and User Groups

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.



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.



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:

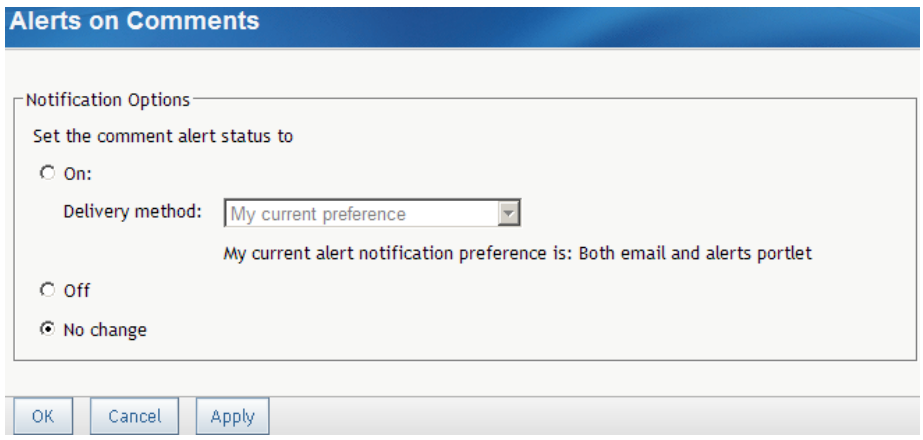
- E-mail
- Short Message Service (SMS) text message
- Via an alerts portlet that you have added to a portal page

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** drop-down 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** drop-down 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 53.
- Edit the properties of a project. For more information, see "Edit Project Properties" on page 60.
- Edit the properties of a scorecard. For more information, see "Edit Scorecard Properties" on page 75.
- Edit the properties of an element. For more information, see "Edit Element Properties" on page 86.

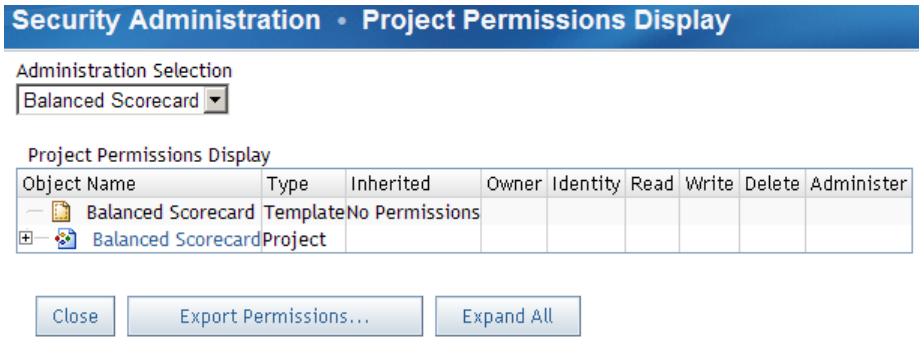
You can also set access permissions for multiple objects. For more information, see "Set Access Permissions for Multiple Objects" on page 130.

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.



2. From the **Administration Selection** drop-down 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:

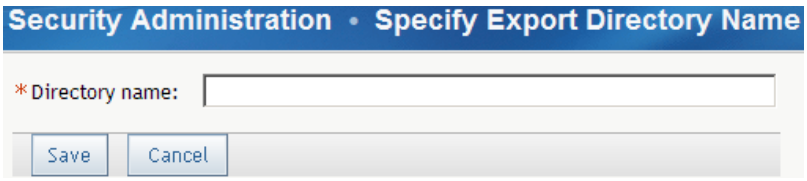
Permission type	Filename
Scorecard	<*Project-name*>_Scorecard_Permissions.csv
Element	<*Project-name*>_Element_Permissions.csv

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.



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

Chapter 15

What Is a View?

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 A3, "View SAS Strategy Management Data in SAS BI Dashboard," on page 339.

The views are available in the following ways:

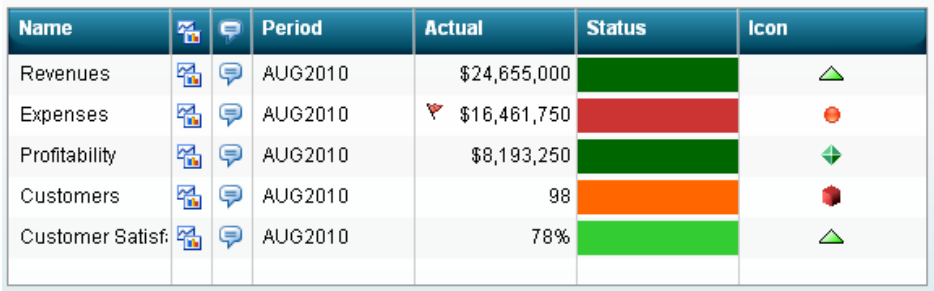
View	Builder	Classic-style Portlet	Enhanced-portlet Tile
Table	Yes	Yes	Yes
Aggregate	Yes	Yes	Yes
Association	Yes	Yes	Yes
Diagram	Yes	Yes	No
Gauge	No	Yes	Yes
Trend	Yes[1]	Yes[1]	Yes[2]

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 15.1 *Table Example*



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 15.2 *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 Satisfa	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 15.3 *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%	

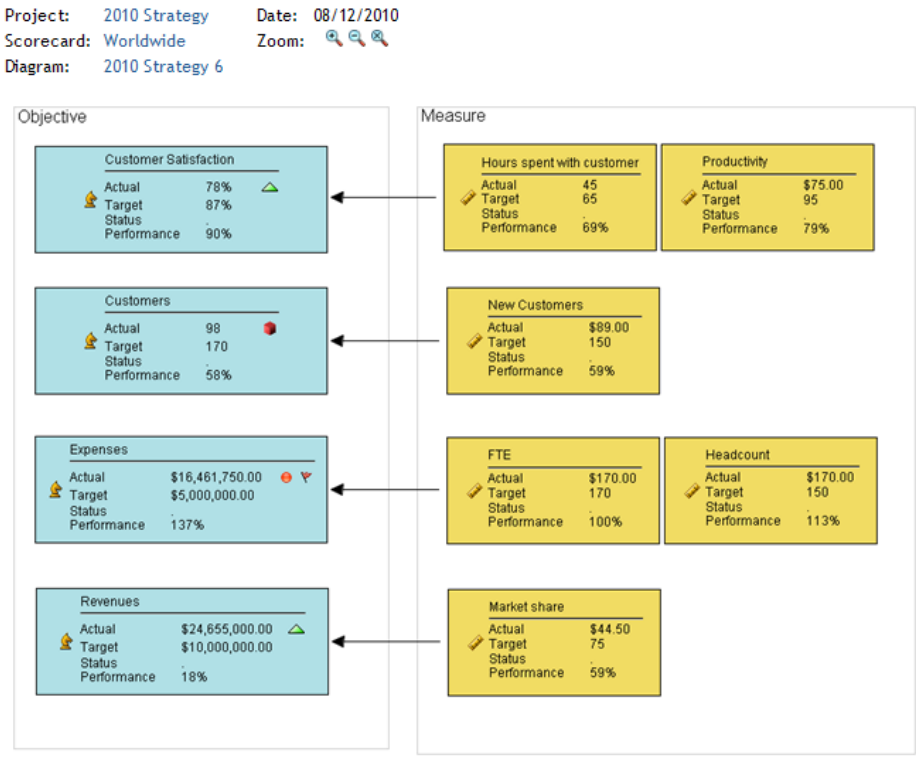
Diagram

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

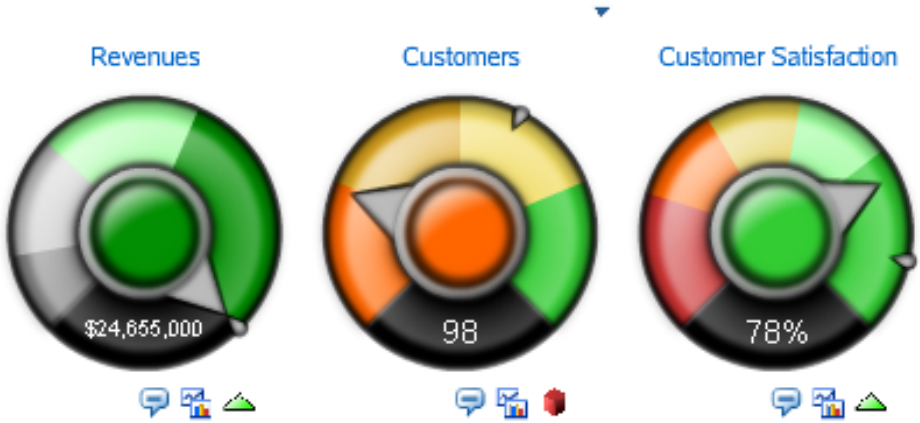


Gauge (Also Called Dashboard)

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 15.5 *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, 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 Figure 3.6 on page 26.
Enhanced-portlet option	The enhanced-portlet tiles for the table, association, 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 Figure 3.7 on page 27.

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 21, “Creating and Editing Trend Analysis Views,” on page 203.

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

- “Edit the Trend Analysis Tile Properties” on page 242
- Chapter 29, “Navigating and Viewing the Strategy Management Enhanced Portlet and Its Tiles,” on page 263

Figure 15.6 *Example of a Dynamic Trend Analysis in an Enhanced Portlet Tile*

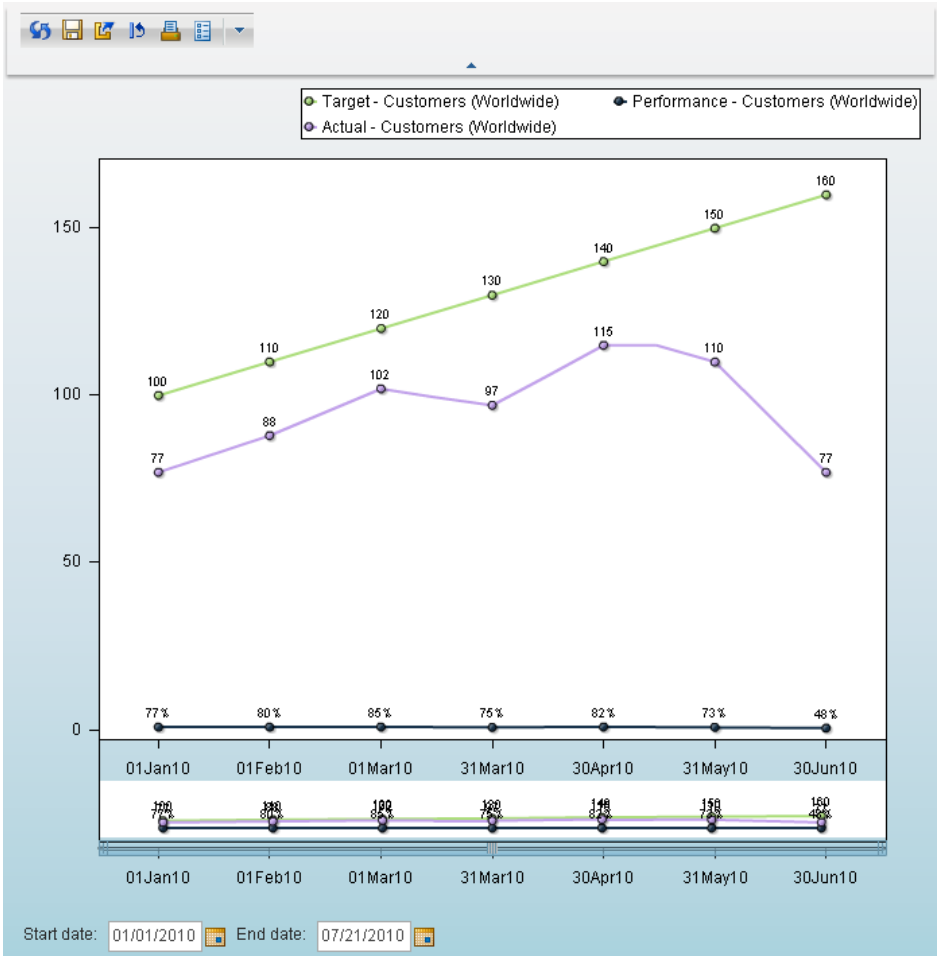
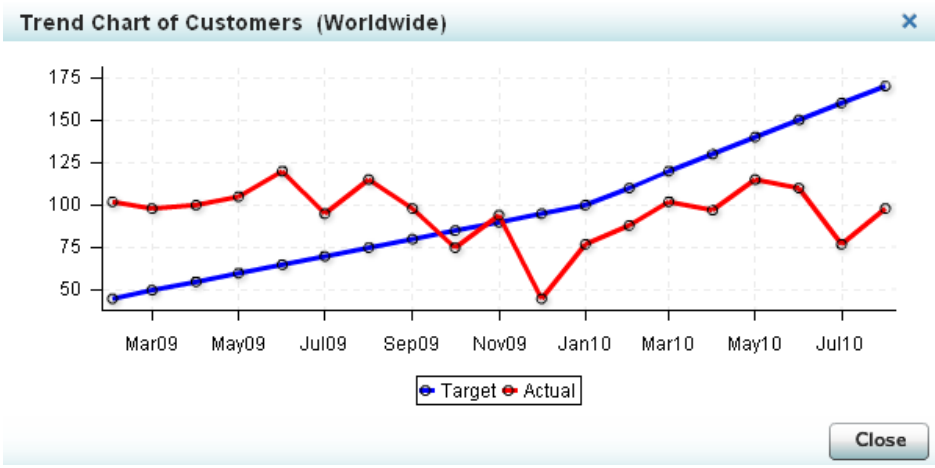


Figure 15.7 *Example of a Static Trend Chart in the Enhanced Portlet*



Chapter 16

Creating and Editing Table Views

Open a Table

To open a table, complete the following steps:

1. Open a scorecard. For more information, see "Open a Scorecard" on page 72.
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** drop-down 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** drop-down list.

   Column selections are defined in the project options. For more information, see "Create a Column Selection" on page 122.
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

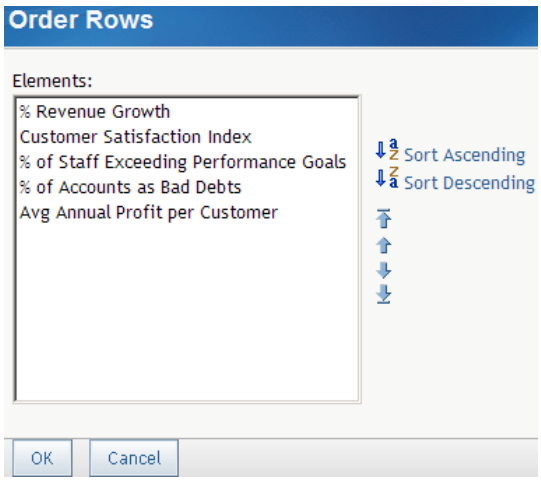
To sort the rows of data in a table according to the value of the column, click a column heading in the table to sort the rows by that column. The column used to sort the list contains either an up or down arrow in the column heading.

- 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.

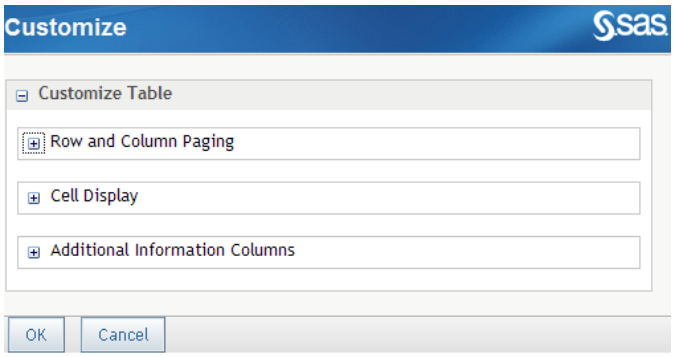
Customize a Scorecard Table

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** drop-down 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.
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 17

Creating and Editing Aggregate Views

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 59.
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** drop-down 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** drop-down list.

Column selections are defined in the project options. For more information, see "Create a Column Selection" on page 122.

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 18

Creating and Editing Association Views

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 59.
2. Click  in the toolbar.
3. Click **Manage Associations** in the toolbar. The Manage Associations page appears and displays a list of associations.

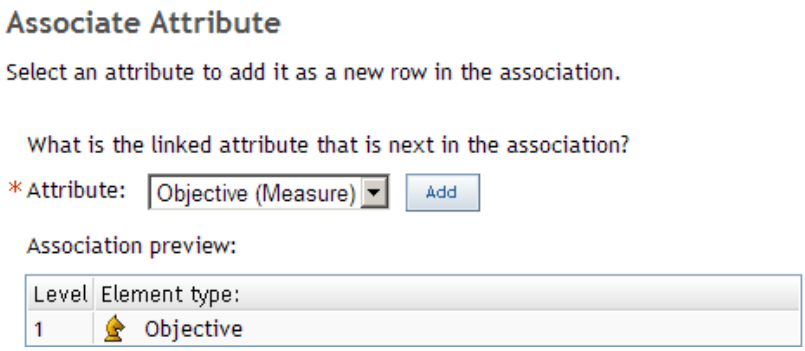
Create an Association

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** drop-down 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** drop-down list.
   b. Click **Add**. The attribute appears in the **Association preview** list.



   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 drop-down lists. The default value for each of these drop-down 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** drop-down list.
3. Select a column selection from the **Column selection** drop-down list. For more information, see "Create a Column Selection" on page 122.

   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 **Delete** 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** drop-down 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 drop-down 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 19

Creating and Editing Diagram Views

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

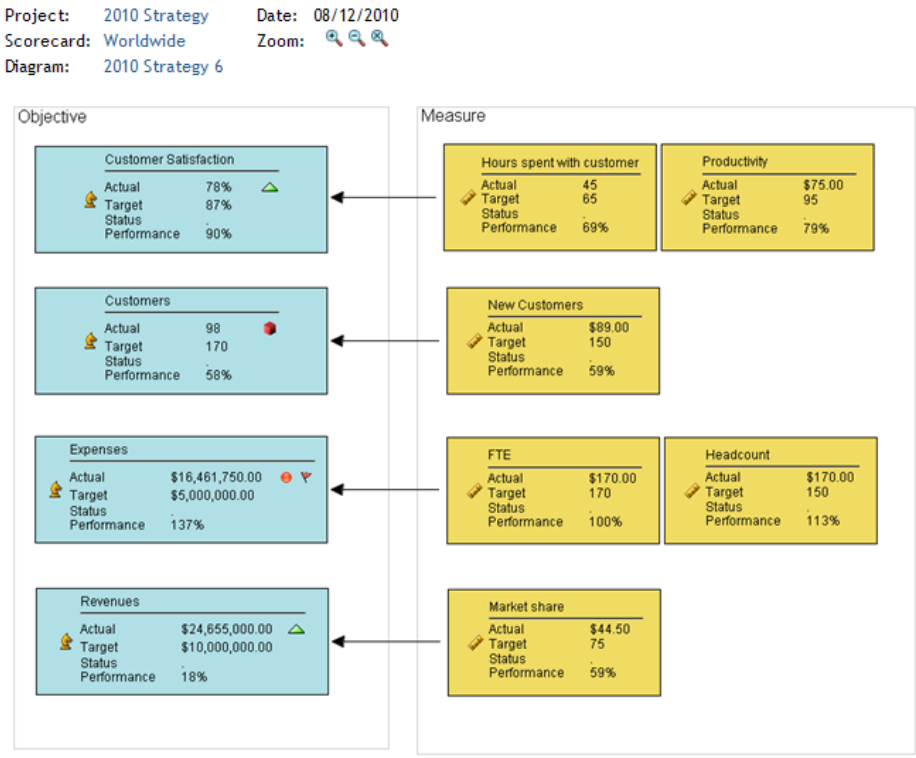


Diagram Components

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 159
- “Working with Data Nodes” on page 161
- “Working with Links” on page 167

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 169
- “Working with Lines” on page 175
- “Working with Sections” on page 178

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 184
- “Editing Diagram Settings” on page 185
- “Analyzing a Diagram to Validate a Strategy” on page 187
- “Managing a Diagram” on page 197
- “Viewing a Diagram” on page 198

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 157.

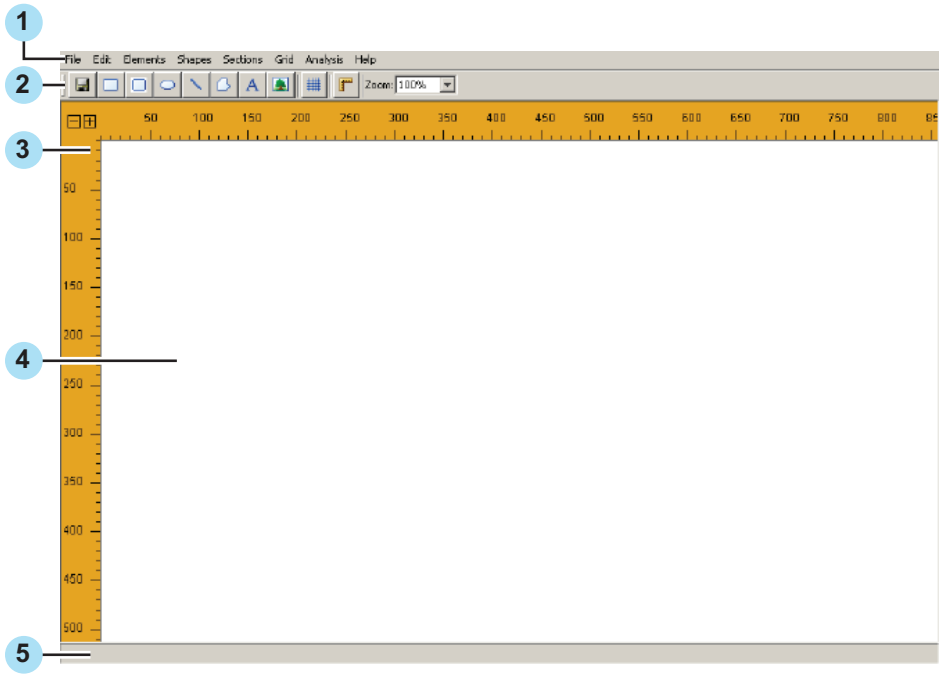
Working with Diagrams

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 19.2 *Diagram Editor Interface*



1 Menu bar

2 Toolbar. For a description of the toolbar buttons, see "The Toolbar" on page 157.

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 dialog box 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 Run-time Environment (JRE). For information about installing the JRE, see Appendix A2, "Configuring Java," on page 337.

To start the Diagram Editor, complete the following steps:

1. Open a project. For more information, see "Open a Project" on page 59.

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	"Add and Remove Data Nodes" on page 165
Edit element properties	"Edit Element Properties" on page 160
Hide an element	"Change How an Element Is Displayed" on page 160
Move an element	"Change How an Element Is Displayed" on page 160
Resize an element	"Change How an Element Is Displayed" on page 160
Edit data node properties	"Edit Data Node Properties" on page 161
Move a shape, text, or image	"Move a Shape, Text, or Image" on page 171
Edit the properties of a shape, text, or image	"Edit the Properties of a Shape, Text, or Image" on page 172
Resize a shape or image	"Resize a Shape or Image" on page 171

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 dialog box appears.
2. From the **Element types** drop-down list, select a type.

3. From the **Period types** drop-down 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.

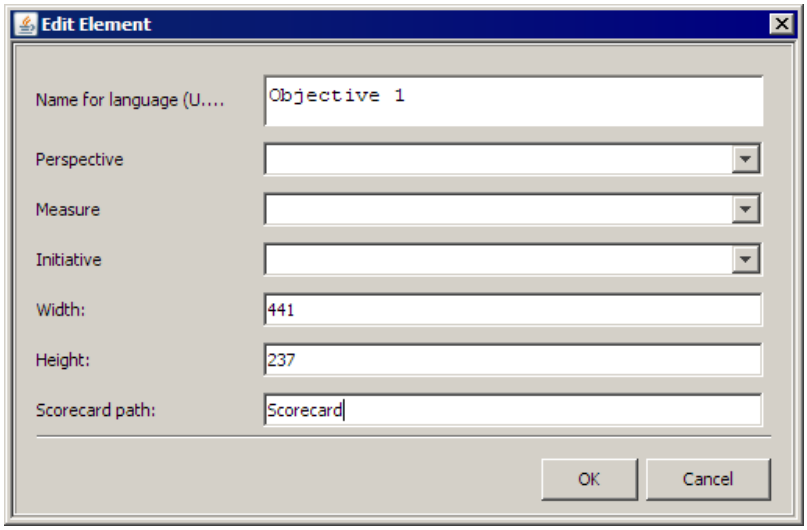
To select the date for an element, complete the following steps:

1. Right-click an element and click **Set Date**. The Set Date dialog box 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 dialog box 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 drop-down 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 dialog box, 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 169.

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.

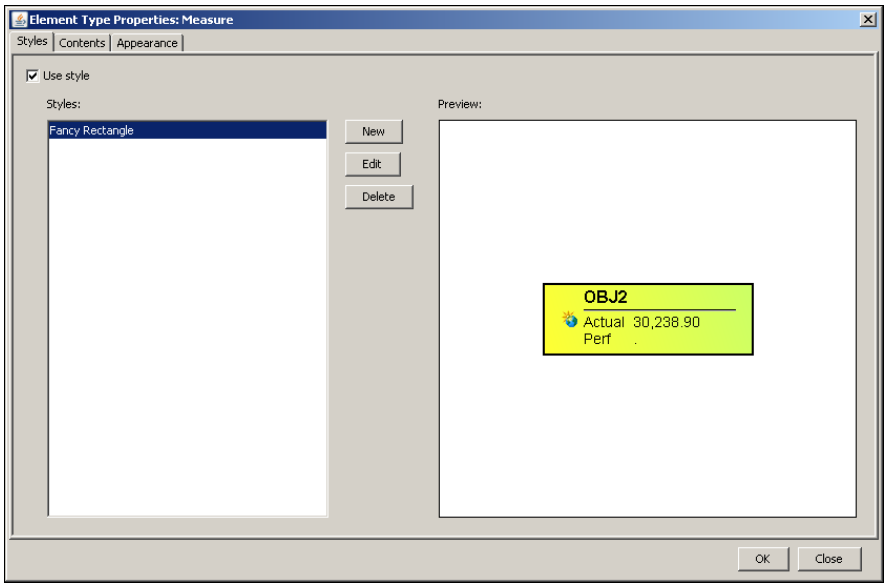
- To move a single node, drag the node to a new location. Any links that connect to the moved node move, stretch, or shrink accordingly.
- To move as a fixed formation node and all nodes that link to it or from it, hold down the SHIFT key and drag the assembly of nodes to a new location. Any links to 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 dialog box 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.

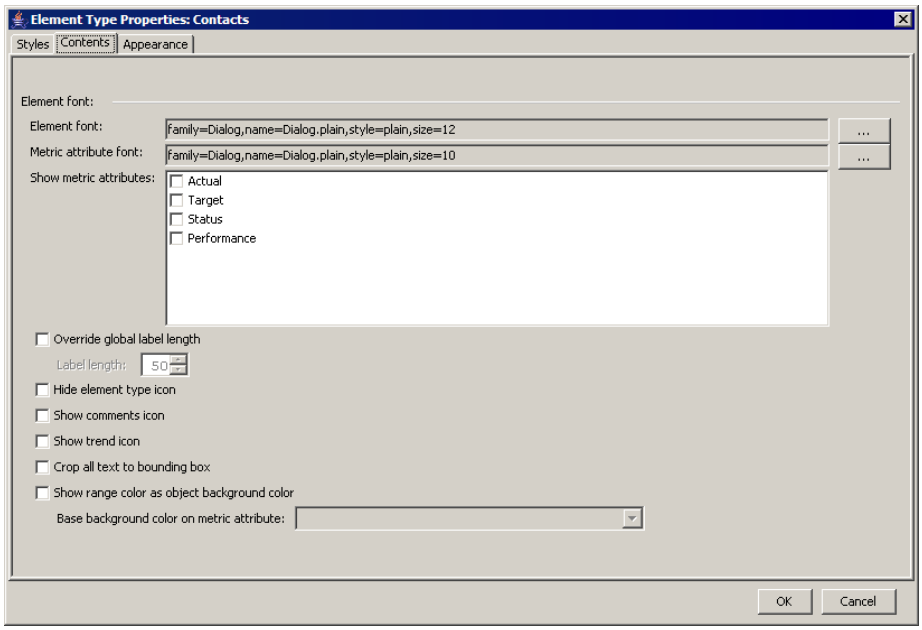
   c. To create or edit a style, complete the applicable step:

      - To create a style, click **New**. The Element Type Properties: New Style dialog box appears.
      - To edit a style, select a style and click **Edit**. The Element Type Properties: Edit Style dialog box appears.

      Note: The Element Type Properties: Edit Style dialog box is identical to the Element Type Properties: New Style dialog box.

   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 dialog box appears.

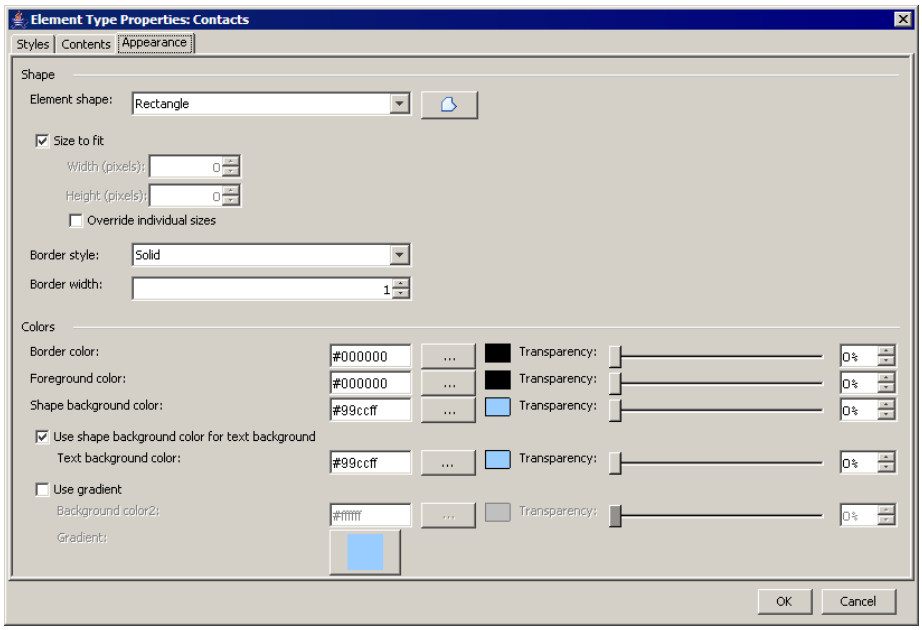
   b. Select a font, font style, and font size.

      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** drop-down 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** drop-down list, select a shape.

b. To select a scalable vector graphic (SVG) drawing to display with the element type, click  . The Select Drawing dialog box 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** drop-down 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 dialog box appears.

f. Click the image of a gradient pattern to use and then click **OK**.

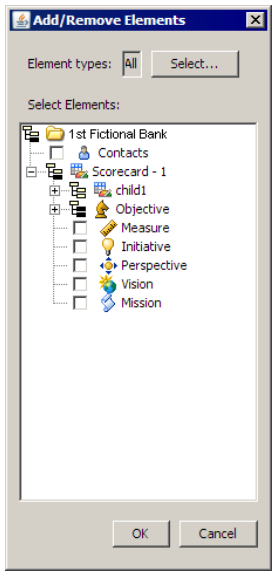
17. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

Add and Remove Data Nodes

You can determine which data nodes are displayed in the diagram and which data nodes are not displayed.

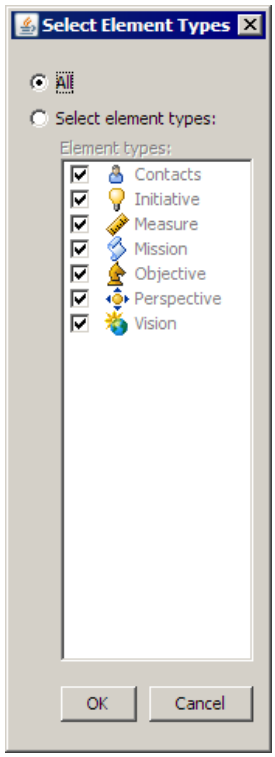
To select the elements for display as data nodes, complete the following steps:

1. Select **Elements** ⇨ **Add/Remove**. The Add/Remove Elements dialog box 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 dialog box appears.



3. Select the element types to display and click **OK**.
4. In the Add/Remove Elements dialog box, 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.

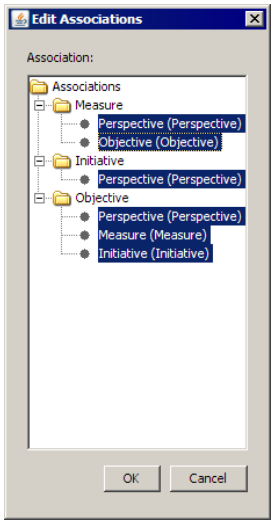
To create a link, hold down the CTRL key and drag the mouse pointer from one node to another. If the source node has an attribute of the type of the target node, the target node allows an association and the mouse pointer changes to a green check mark. Release the mouse button to add a link between the 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 dialog box appears and displays a list of all of the selectable associations. The currently selected associations are highlighted.

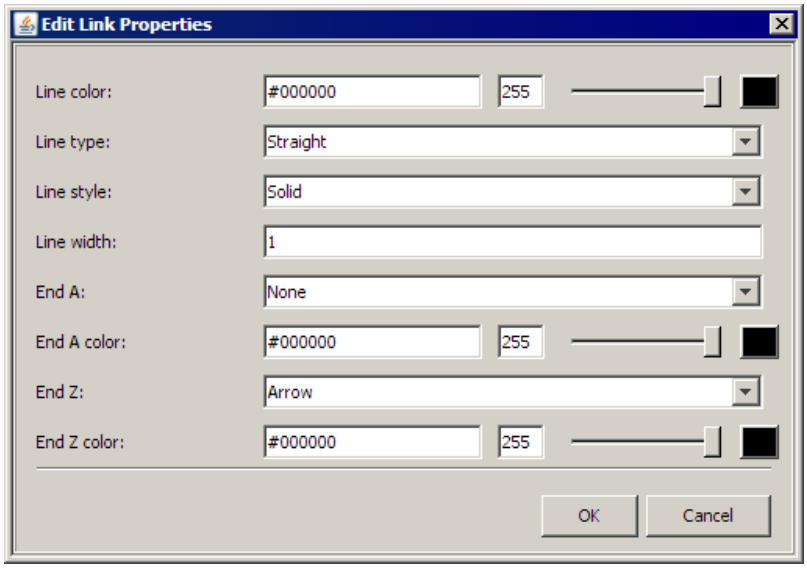


2. Click any item in the **Association** list to select it or to deselect it.
3. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

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 dialog box 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** drop-down list, select the type of line to use.
5. From the **Line style** drop-down 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** drop-down 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 dialog box 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 172.

Create an Image

To create an image, complete the following steps:

1. Click  . The Select Image dialog box 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 184.

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 172.

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 dialog box 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 dialog box 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** drop-down 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 dialog box 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** drop-down list, select a value to control the horizontal position of any associated text.

    b. From the **Y alignment** drop-down list, select a value to control the vertical position of any associated text.

    c. From the **Text orientation** drop-down 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 dialog box:

```
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 dialog box 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.

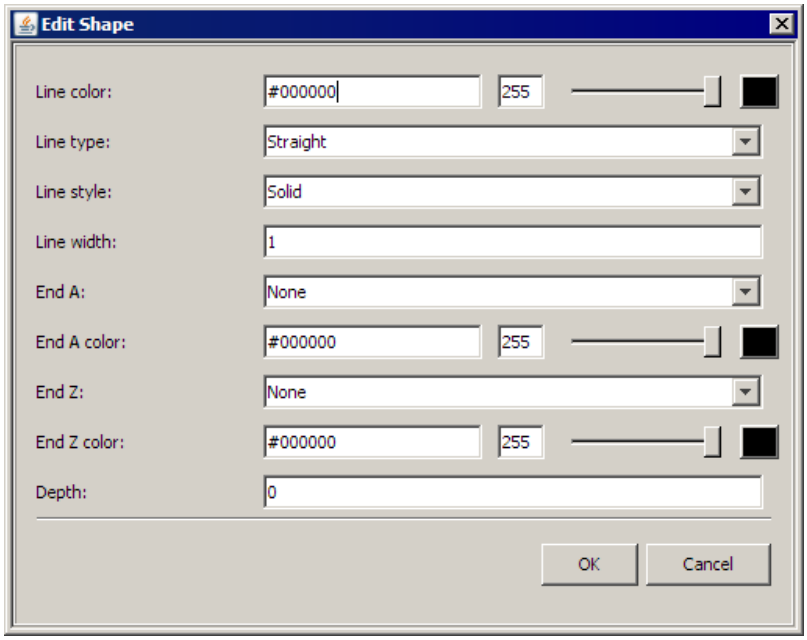
Add a Line

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 dialog box appears.



3. From the **Line Type** drop-down 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

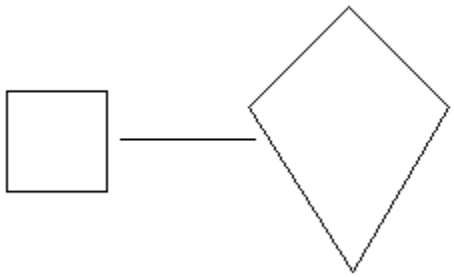
You can reshape a curved line in the following ways:

- 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.



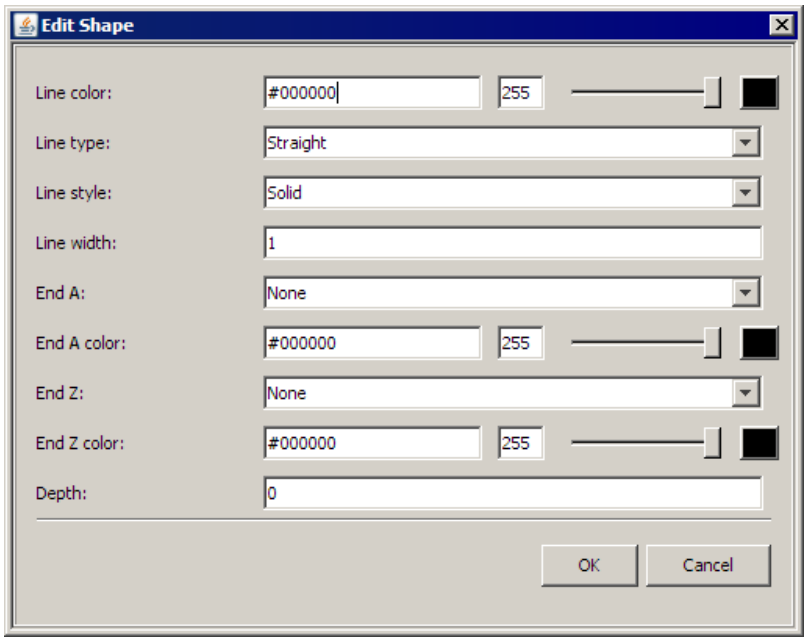
To break an attachment between an endpoint of a line and a container, complete the following steps:

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 dialog box 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** drop-down list, select the type of line.
5. From the **Line style** drop-down 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** drop-down 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.

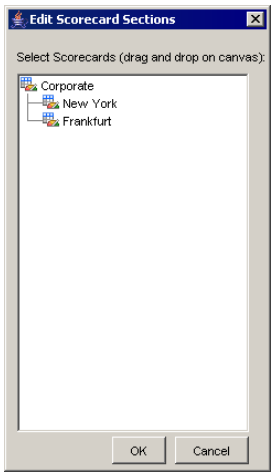
Add a Project Section to a Diagram

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 dialog box appears.

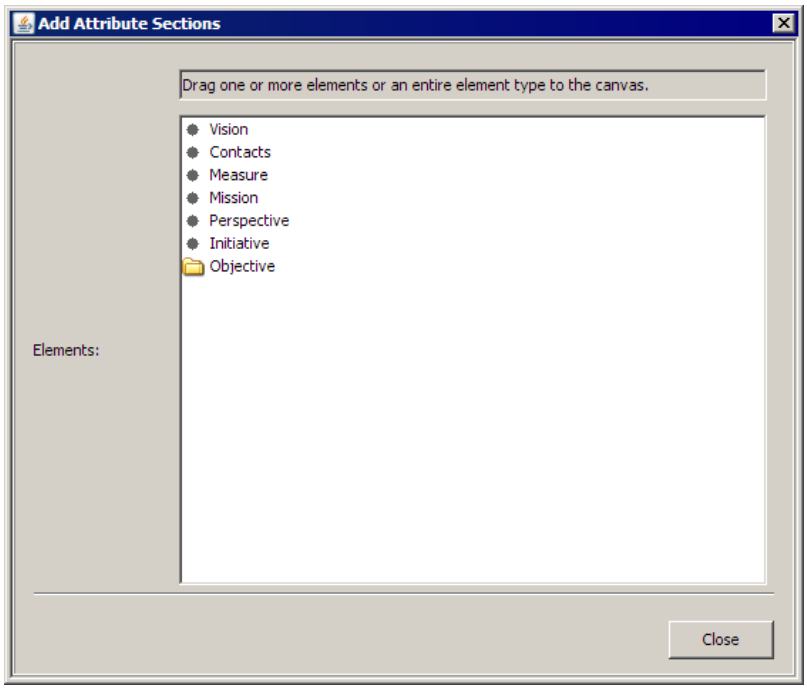


2. Drag a scorecard from the dialog box onto the diagram. A section is created that has the name of the scorecard. You can also drag a parent scorecard onto a diagram to create a scorecard section for each child scorecard in the parent scorecard.

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 dialog box appears. Attributes for the element types in the scorecard are available.



2. Drag an attribute from the dialog box 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:

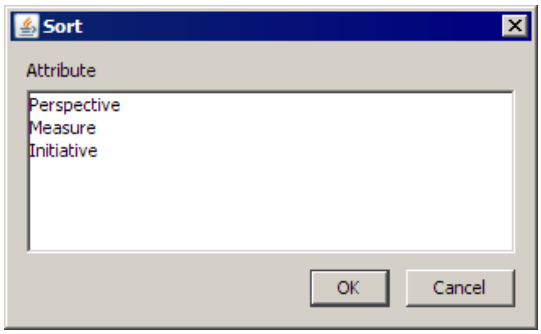
1. Click the section. Handles appear at the corners.
2. Drag a handle to a new location.

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 dialog box 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**

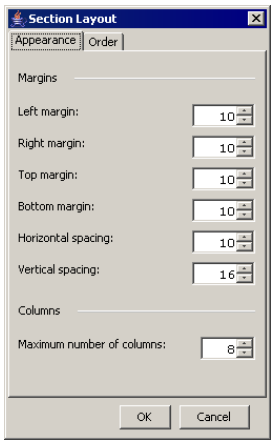
Nodes are grouped together in their respective sections: project nodes are grouped into the project section and scorecard nodes into their scorecard sections. If you sort data nodes into sections and then change some of the data that affects the result of the sort operation, the diagram is not automatically 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

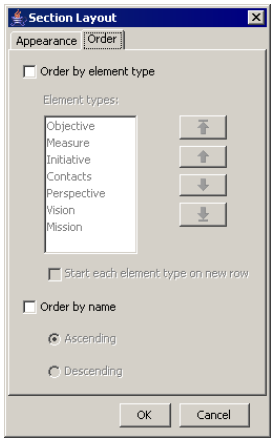
As you group data nodes in a section, the data nodes might become poorly spaced and difficult to read.

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 dialog box 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

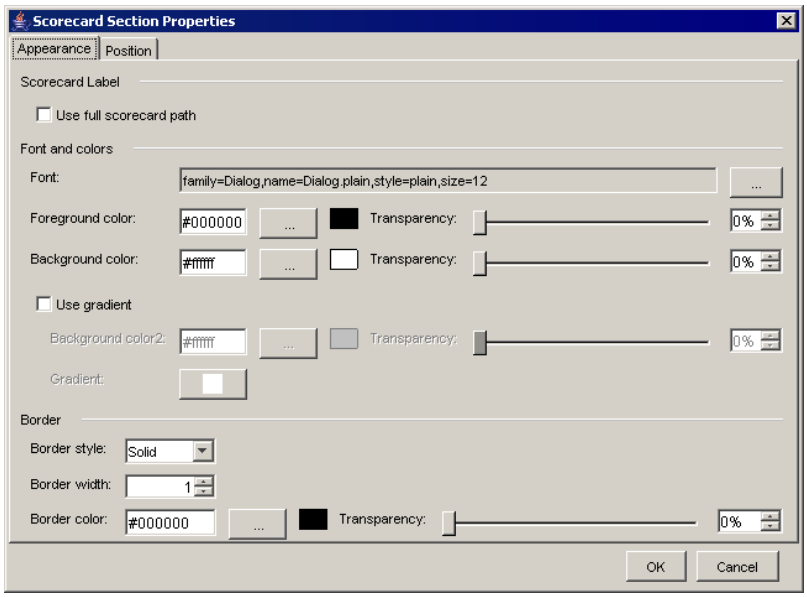
You edit the properties of an attribute section the same way you edit the properties of a shape, text, or image. For more information, see "Edit the Properties of a Shape, Text, or Image" on page 172.

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 dialog box 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 dialog box 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 dialog box 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** drop-down list, select a style.

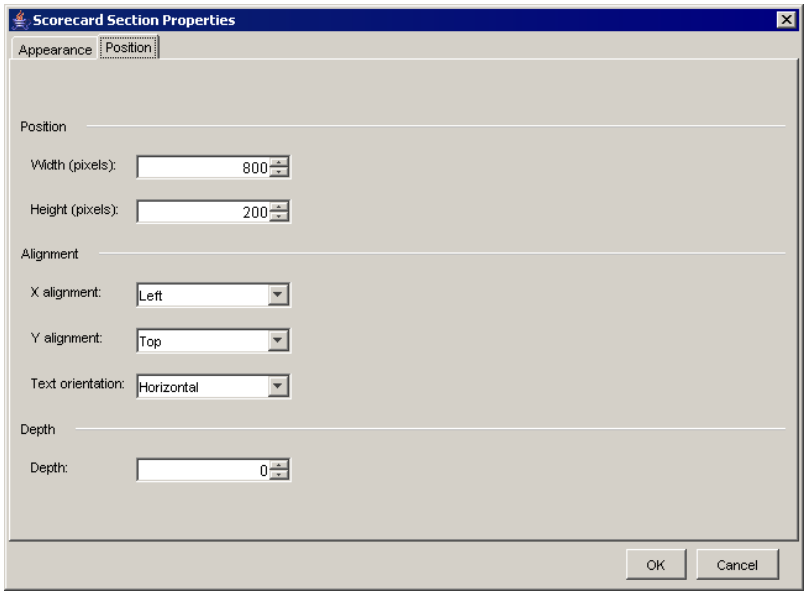
   b. Type the number of pixels in the **Border width** field.

   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** drop-down list, select a value to control the horizontal position of any associated text.

    b. From the **Y alignment** drop-down list, select a value to control the vertical position of any associated text.

    c. From the **Text orientation** drop-down 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.

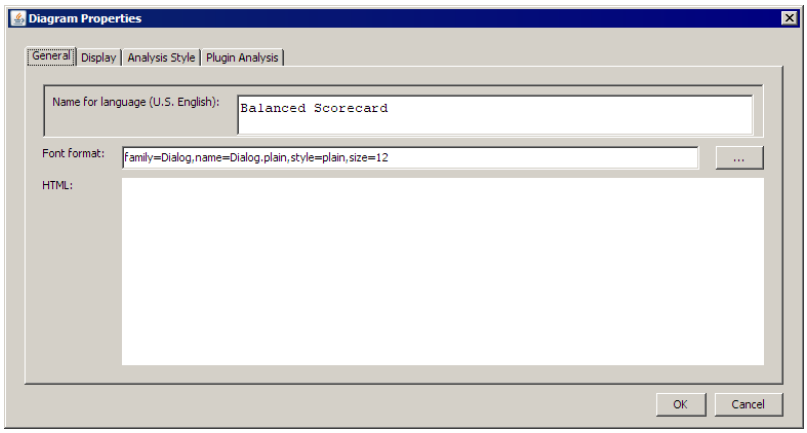
Preview a Diagram in HTML

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 dialog box 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 dialog box 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:

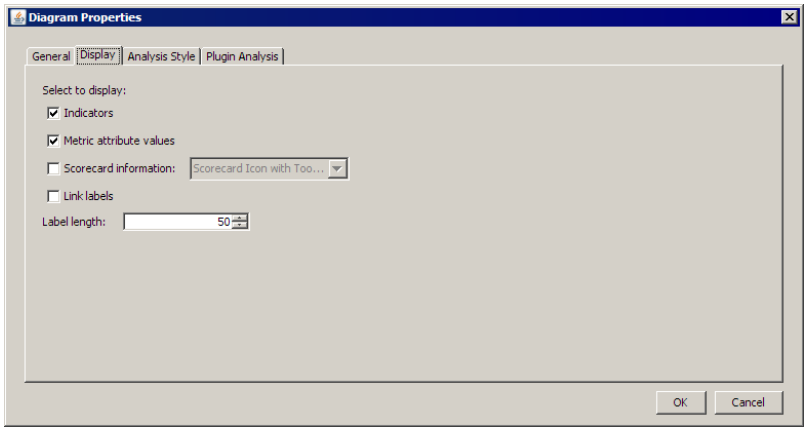
```
onmouseover="JavaScript:
alert('Revenue Growth')"
```

and whenever a user moves the mouse pointer over this shape, text, or image, the following message appears in a dialog box:

```
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.

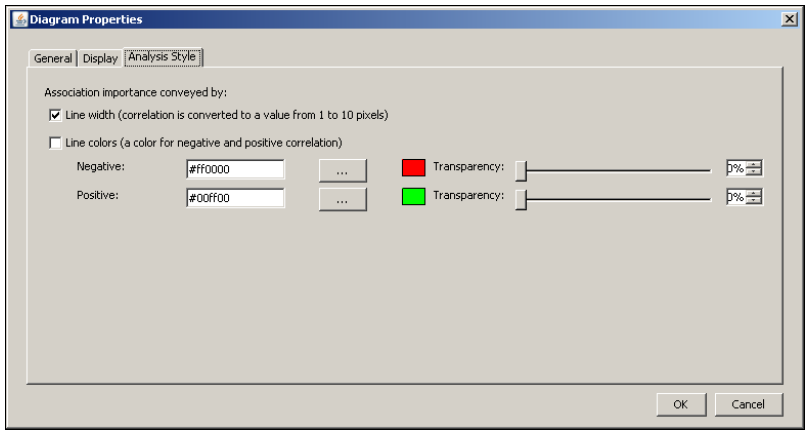
c. Click **Scorecard information** to specify that certain scorecard information is displayed. Select the information to display from the drop-down list.

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:

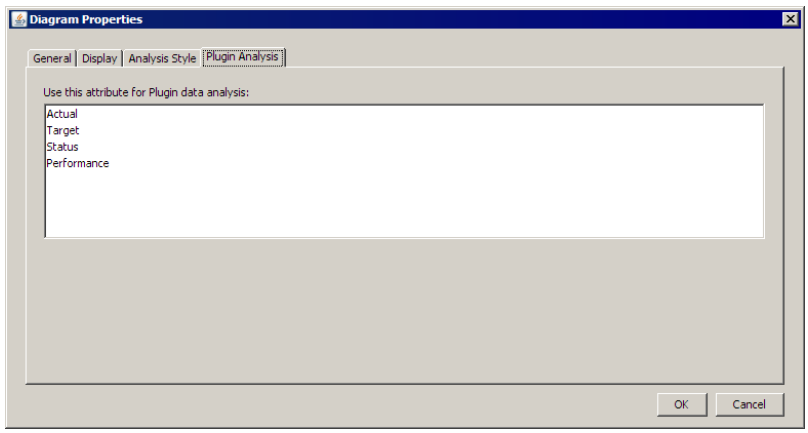


a. Click **Line width** to specify that the line width varies according to the correlation value. Correlation values range from -1.0 to 1.0. The line representing a value in this range would be between 0 and 10 pixels wide.

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. Click the **Plug-in Analysis** tab to specify an attribute to use for analysis.



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 190.

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

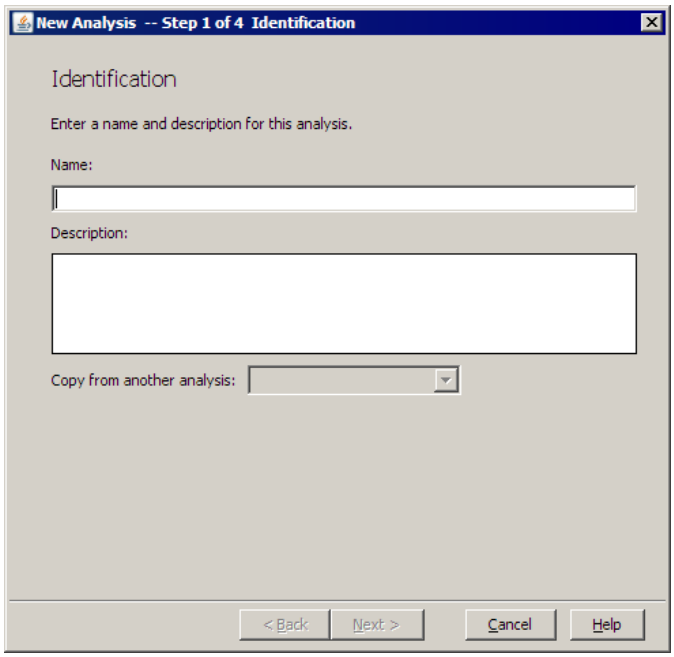
When you create an analysis definition, you set the properties required for the analysis. Later, you run the analysis. The analysis definition is saved to the SAS Strategy Management server so that it can be used in the future.

Before you create an analysis, the following conditions must be met:

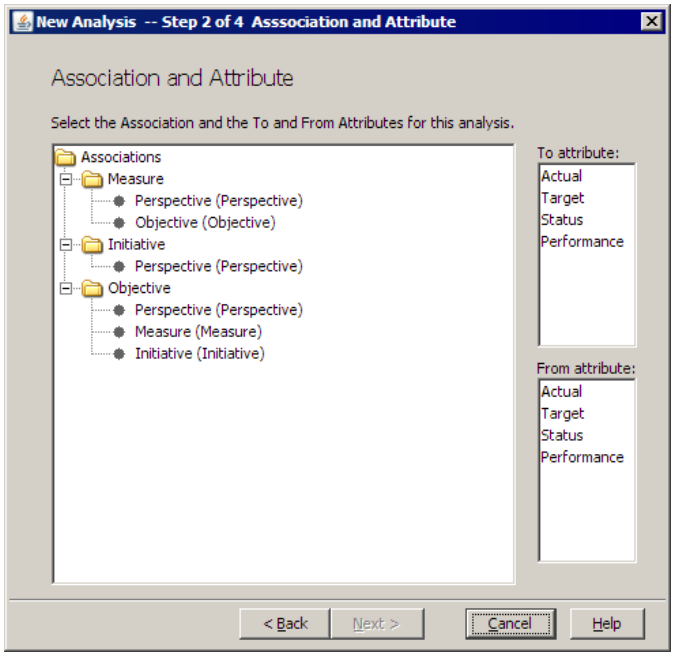
- You must have an association selected. Click **Elements** ⇨ **Association**. In the Edit Association dialog box, you must have the association to use in the analysis selected for display.
- You must have the metric attributes on which the analysis is based selected. In the Diagram Editor, right-click the element and click **Element Type Properties**. In the Properties dialog box, 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:

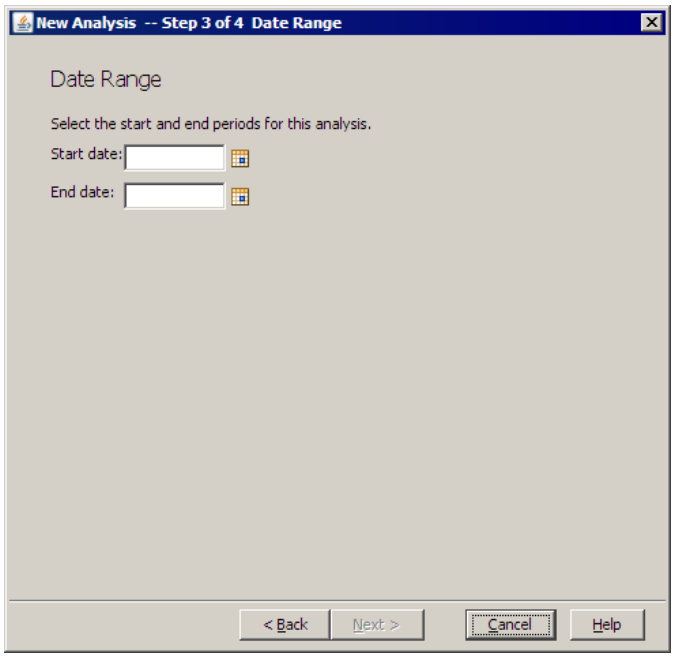
1. Click **Analysis** ⇨ **New** The New Analysis wizard appears.



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.



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.

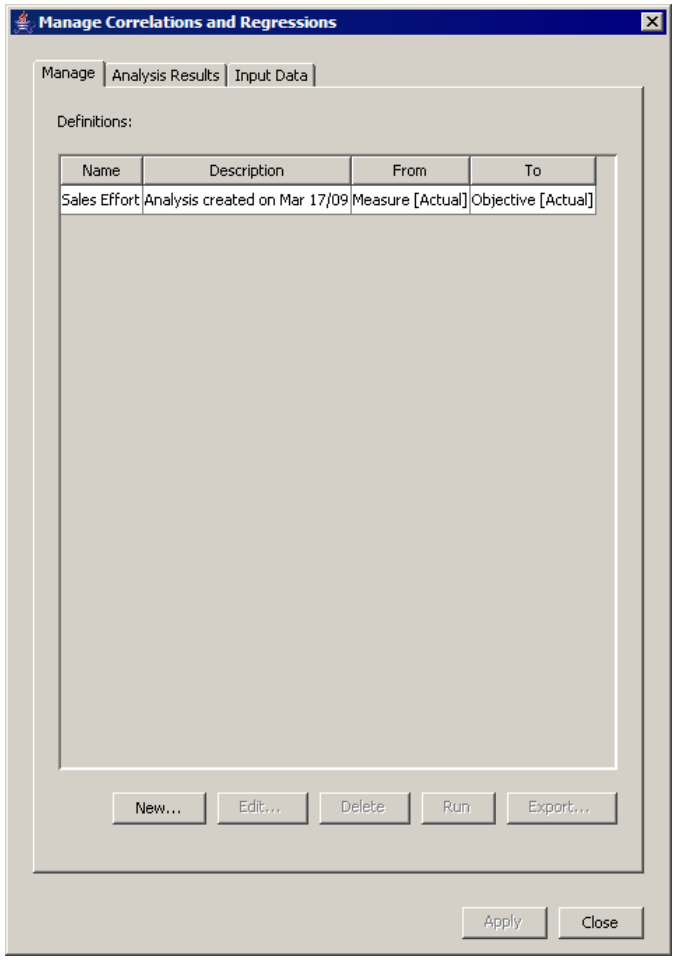


10. Click **Next**.
11. On the Summary of Selections page, review your choices. To make changes, click **Back**.
12. Click **Finish** to save your selections and exit. Click **Cancel** to exit without saving your selections.

Manage Analysis Definitions

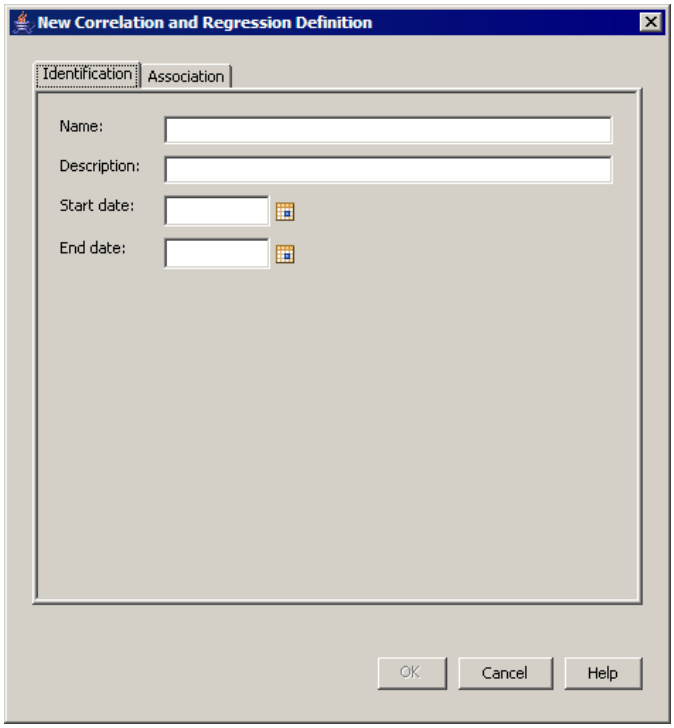
To manage analysis definitions, complete the following steps:

1. Click **Analysis** ⇨ **Edit**. The Manage Correlations and Regressions dialog box appears.



2. To create a new analysis definition, complete the following steps:

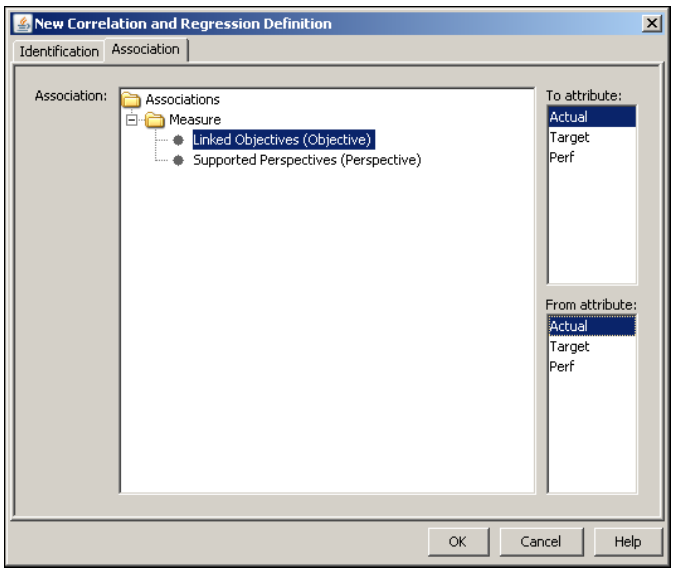
   a. On the **Manage** tab, click **New**. The New Correlation and Regression Definition dialog box appears.



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.

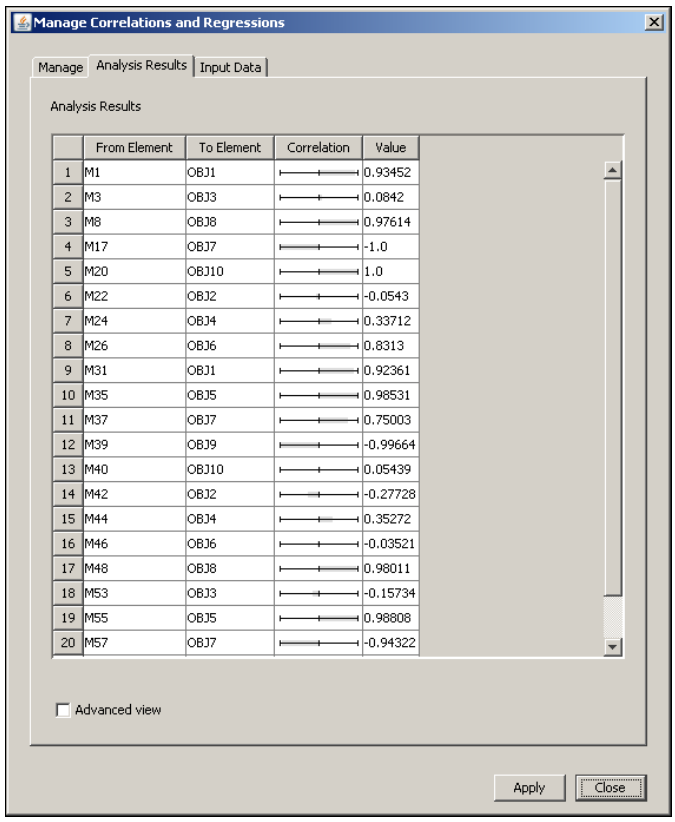
3. Click **OK** to save your changes and exit. Click **Cancel** to exit without saving any changes.

4. In the New Correlation and Regression Definition dialog box you can perform the following additional tasks:

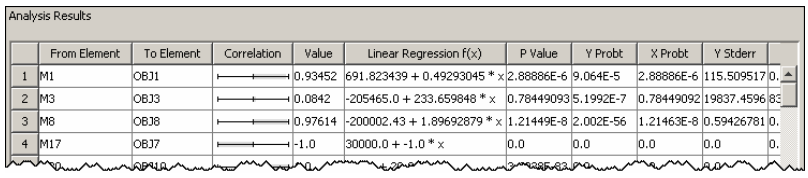
- To edit an analysis, select an analysis definition and click **Edit**.
- To delete an analysis, select an analysis definition and click **Delete**.
- To run an analysis, select an analysis definition and click **Run**.
- To export the analysis results to a comma-separated value (CSV) file, first run 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**.

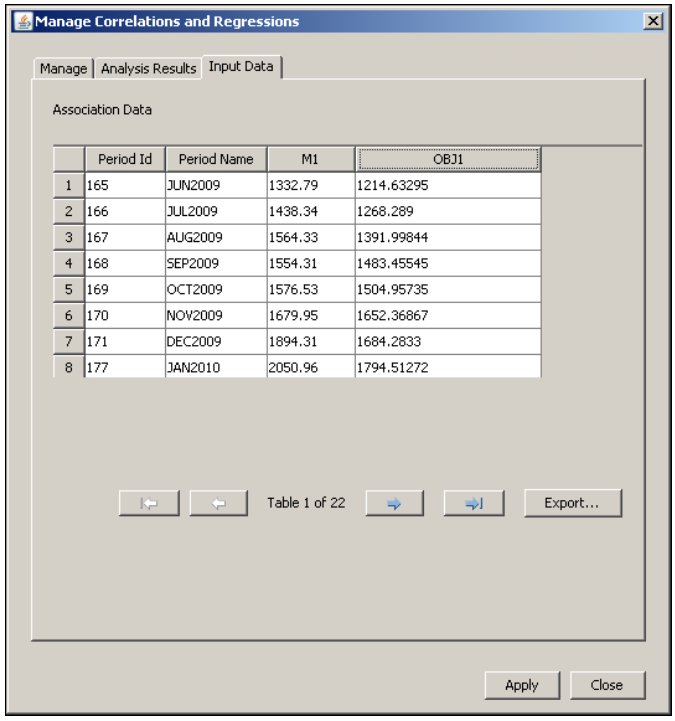
5. To view the analysis results after running an analysis, click the **Analysis Results** tab.



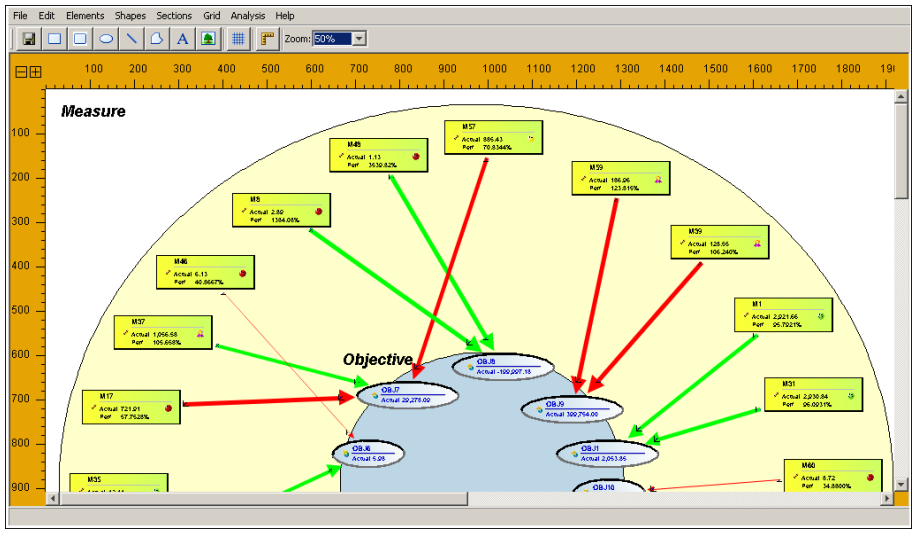
6. To view more detailed information about the results, click **Advanced view**.



7. To view the input data used in the analysis, click the **Input Data** tab.



8. Click **Export** to export only the currently displayed analysis.
9. Click **Apply** to apply the analysis to the diagram that is displayed in the editor. The correlation is applied and the output appears.

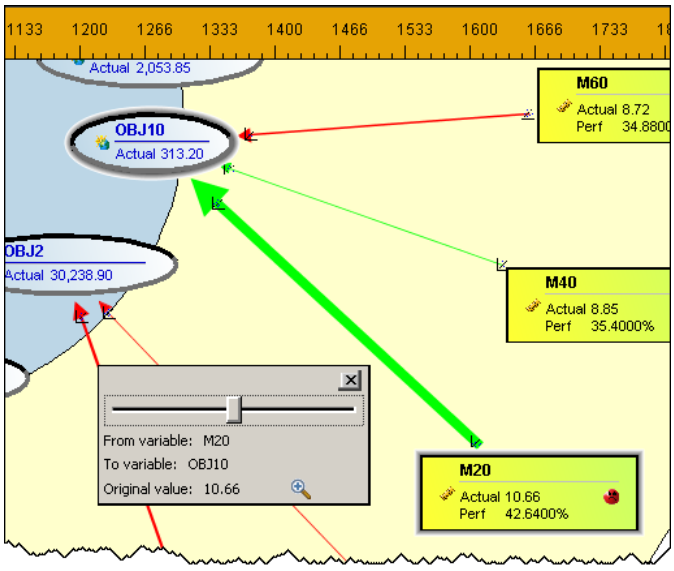


The changes made to the diagram are saved. When you exit the Diagram Editor, the changes are retained.

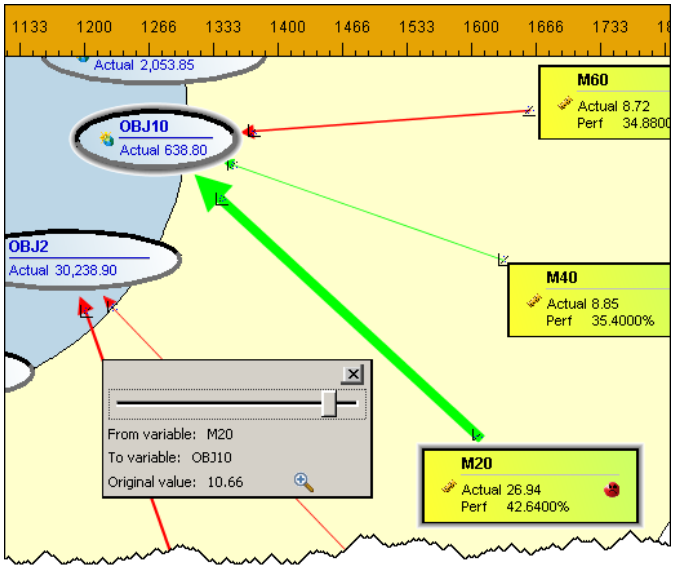
Analyze the Correlation Between Two Elements

To see the effects of the relationship between two elements, complete the following steps:

1. 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.



2. 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.

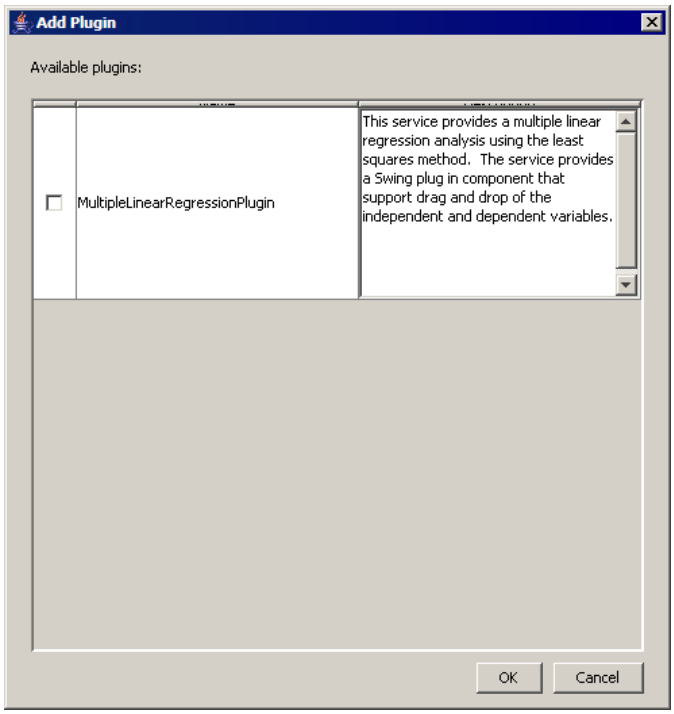


3. Click  to view more information about the statistical relationship.
4. When you are finished, click **X** to remove the slider.

Add an Analysis Plug-in

To add an analysis plug-in, complete the following steps:

1. Specify the plug-in analysis settings by selecting a metric attribute for analysis. For more information, see "Editing Diagram Settings" on page 185.
2. Click **Analysis** ⇨ **Add Plug-in**. The Add Plug-in dialog box appears.



3. Select the check mark next to one or more analysis plug-ins.
4. Click **OK**. The Add Plug-in dialog box closes, and, if needed, a dialog box 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 dialog box 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 dialog box 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.

   Note: 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:

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 63.

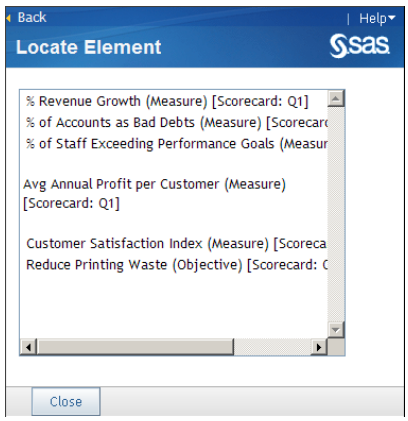
To change the position of the diagram in order to view other areas, press the Alt key and drag the mouse pointer over the diagram. The diagram moves in the same direction as the mouse pointer.

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 63.

To locate elements in a diagram, complete the following steps:

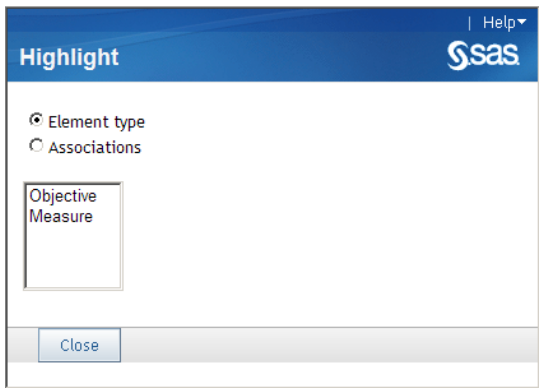
1. Click  . The Locate Element dialog box appears.



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.

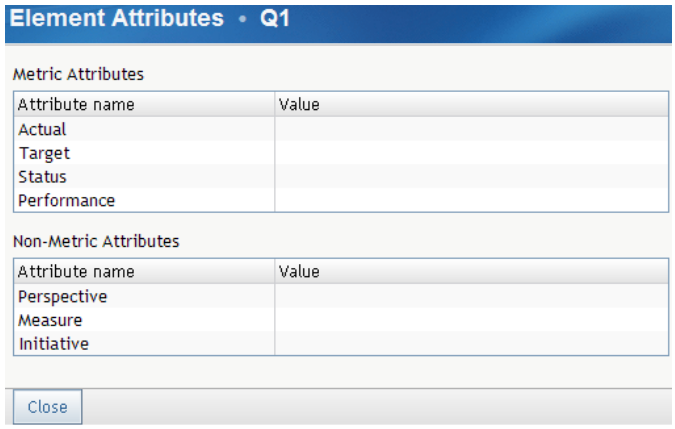


2. Select the element types or associations that you want to highlight.

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.



Chapter 20

Creating and Editing Gauge (Also Called Dashboard) Views

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 253.
- "Edit the Gauge View Tile Properties" on page 239.

Chapter 21

Creating and Editing Trend Analysis Views

Overview

This trend analysis view uses the Trend Analysis page. This page is accessed by views that are displayed using:

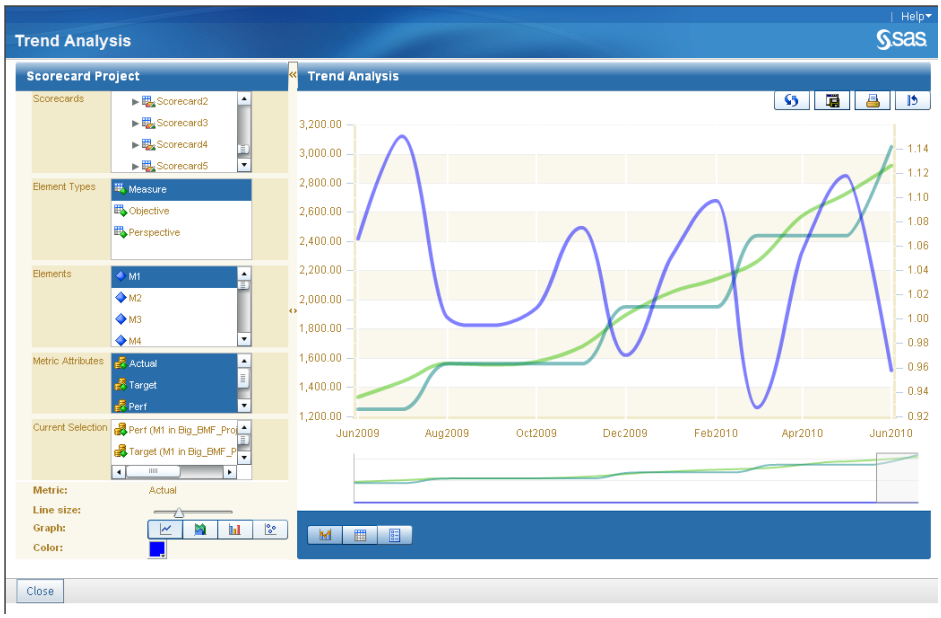
- SAS Strategy Management Builder
- Strategy Management classic-style portlets

For information about other types of trend analysis provided by SAS Strategy Management, see "Trend Analysis" on page 25.

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 59.
2. Click  on the toolbar.
3. Click  to the left of an element and click **Show Trend Analysis**. The Trend Analysis page appears.



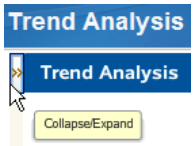
Note: If the table view has been customized to display the Trend Analysis page, you can also click on the toolbar. For information, see "Customize a Scorecard Table" on page 145.

4. To close the Trend Analysis page, click **Close** in the bottom left corner.

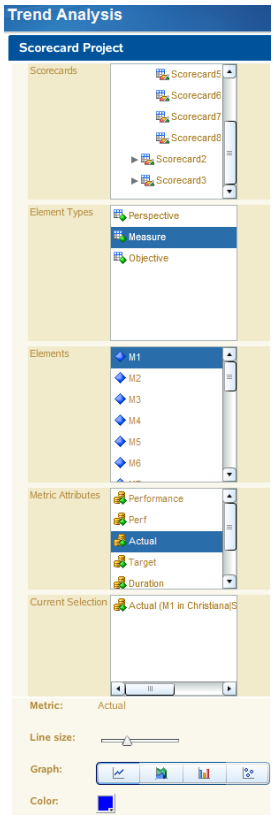
Select the Metric Attributes to Analyze

To select one or more metric attributes to analyze, complete the following steps:

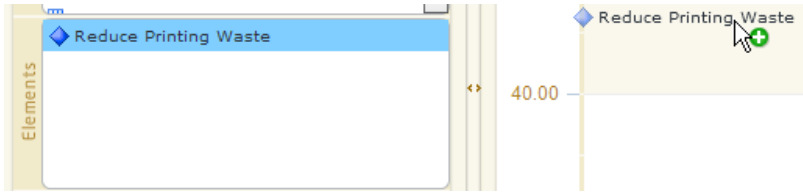
1. Expand the left pane of the Trend Analysis page.



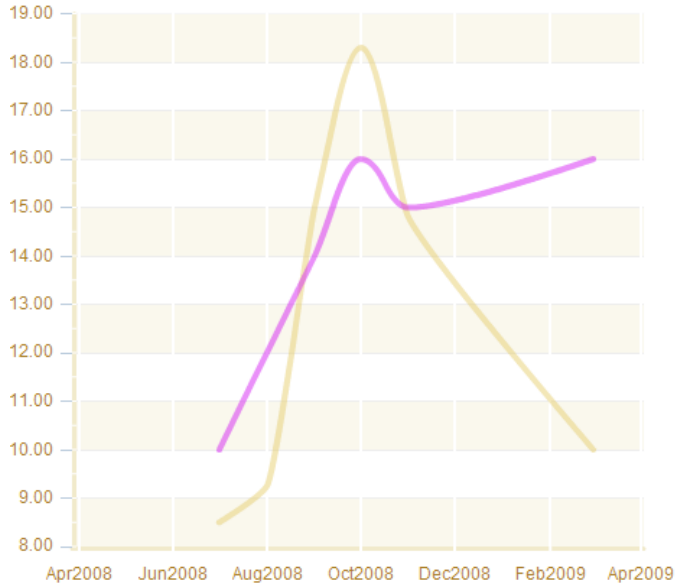
The left pane expands.



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:

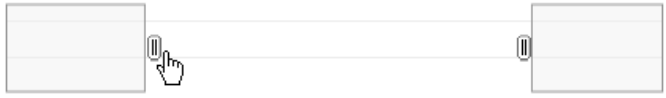
1. In the **Current Selection** section, select an attribute.
2. Below the **Current Selection** section, specify the line size, type of graph, and color.

   Note: As you specify each property, the display is updated.

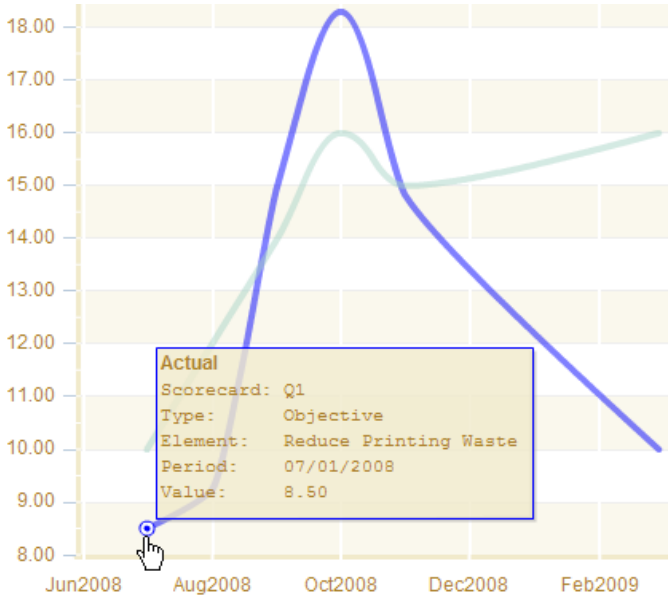
Navigate a Trend Analysis

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.



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.

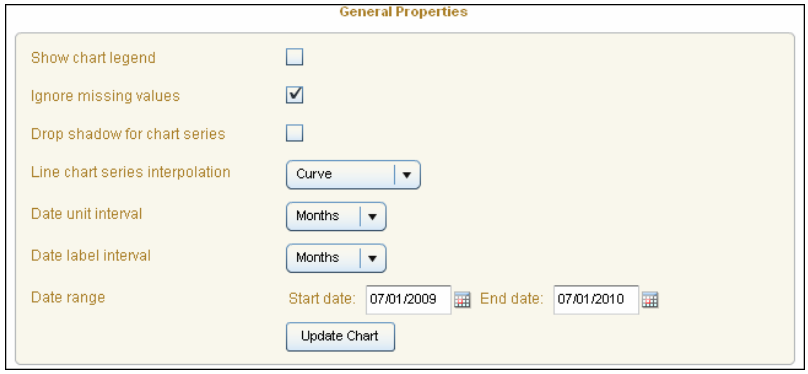
Customize the Trend Analysis

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 .
2. To return the view to a chart, click .
3. To change the properties of the display, click . The **General Properties** section appears.



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.
7. Click **Update Chart**.
8. To reload data for the selected time period, click . The customizations are displayed.

Chapter 22

Managing Views

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 63. 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 63. You can set the options for the following types of views:

- Table
- Aggregate

- Association
- Diagram
- Trend Analysis

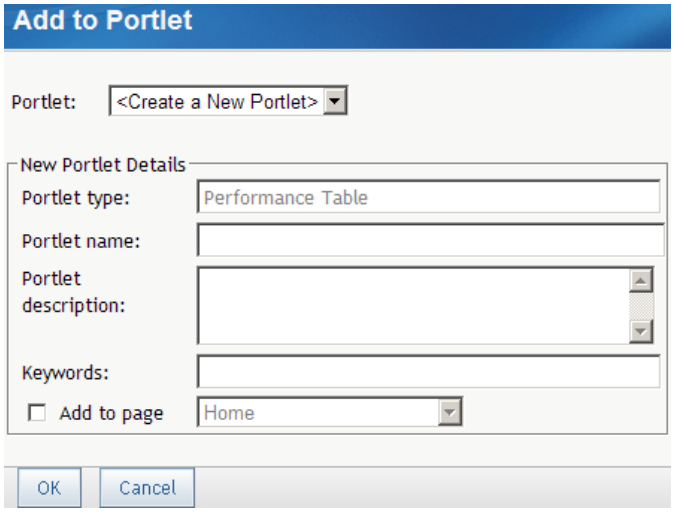
Save a View to a Portlet

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** drop-down 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** drop-down 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** drop-down 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 drop-down 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 63. 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 59 or "Open a Scorecard" on page 72.
2. Display a view.
3. Click  . A dialog box 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 59 or "Open a Scorecard" on page 72.
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**.

If a Microsoft Internet Explorer run-time 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 dialog box 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 clicked, these links can open other information, such as documents or 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 211.

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 59 or "Open a Scorecard" on page 72.
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 Actions page appears.
3. In the **Metric attribute** drop-down list, select the metric attribute to use.
4. In the **Actual Action** section, click **Actual Action**.
5. In the **Action** drop-down list, select **Generic redirection directive**. The **Parameters** section appears.
6. Paste the Web address of the view into the **URL** field.
7. 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 59 or "Open a Scorecard" on page 72.
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 Actions page appears.
3. In the **Metric attribute** drop-down list, select the metric attribute to use.
4. In the **Actual Action** section, click **Actual Action**.
5. In the **Action** drop-down list, select **Open a document**. The **Parameters** section appears.
6. Click the ellipse (...) icon to the right of the **Document** field to navigate to and select the document.
7. 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

Chapter 23

Overview of Portlet Types

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:

- You cannot display diagram views in an enhanced-portlet tile.
- The trend view implementations differ between the classic and enhanced portlets. For more information, see "Trend Analysis" on page 25.

Chapter 24

Creating a Portlet

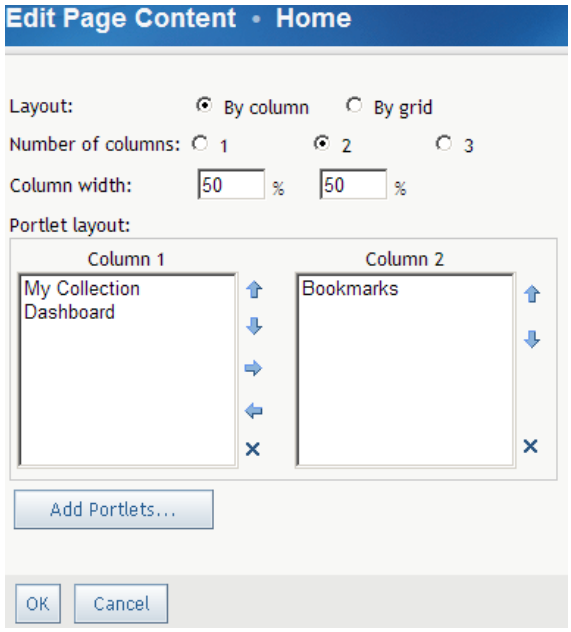
Overview

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 33.

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.



3. Click **Add Portlets**. The Add Portlets to Page page appears.
4. From the **Portlet type** drop-down 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.

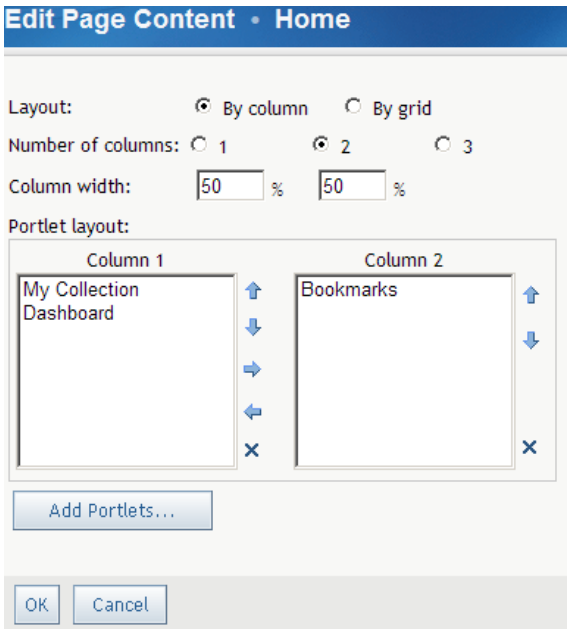
You must edit the portlet to customize it and make it usable.

- For information about editing enhanced-style portlets, see Chapter 26, “Editing a Strategy Management Enhanced Portlet and Its Tiles,” on page 229.
- For information about editing classic-style portlets, see Chapter 27, “Editing Classic-Style Portlets,” on page 247.

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.

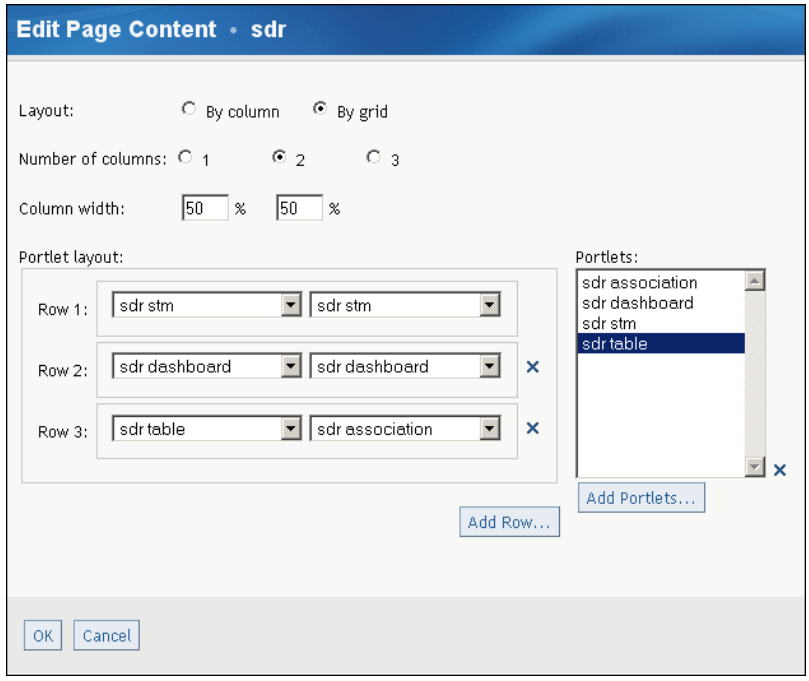


3. For the layout, click **By column** to lay out the portlets in columns. Click **By grid** to lay out the portlets using a grid.

   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 drop-down 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 drop-down list for that row. Click **Add Row** to add more rows to the page.

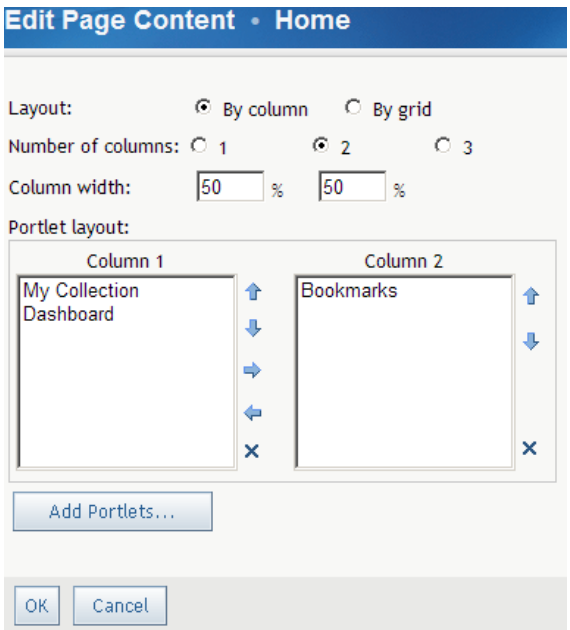


7. Click **OK**. The new portlet layout is saved.

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.



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.

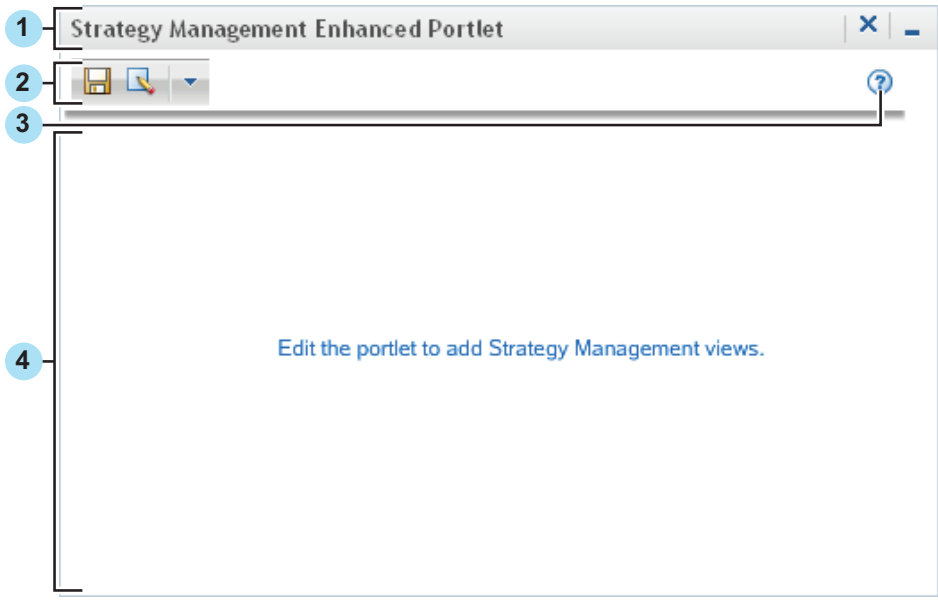
Chapter 25

The Strategy Management Enhanced Portlet Interface

Your First Look at the Strategy Management Enhanced Portlet Interface

When first created, the Strategy Management enhanced portlet provides the following interface:

Figure 25.1 *Strategy Management Enhanced Portlet Interface*



1 Title bar. It displays a customized portlet title and the Maximize and Restore icons.

2 Toolbar

3 Help for the Strategy Management enhanced portlet

4 Content area. One or more tiles appear in this area.

The Toolbar

The toolbar provides the following actions:

- Click  to save the layout configuration of the tiles within the portlet.

  Note: This button is not available for business users.

- Click  to edit the portlet settings. For more information, see "Edit the Strategy Management Enhanced Portlet" on page 229.

  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.
- The toolbar also provides a drop-down list for available actions.

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 Strategy Management views in a tile:

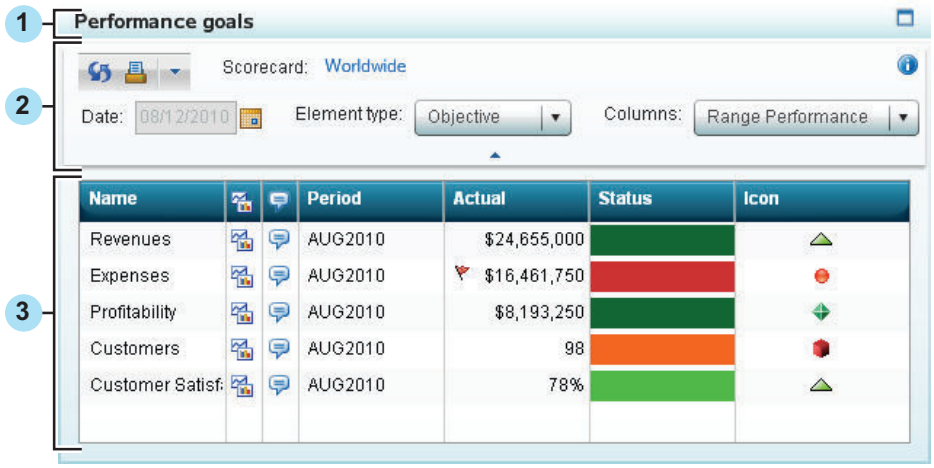
- table
- aggregate
- association
- gauge

In the 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 25.2 Tile Interface Example



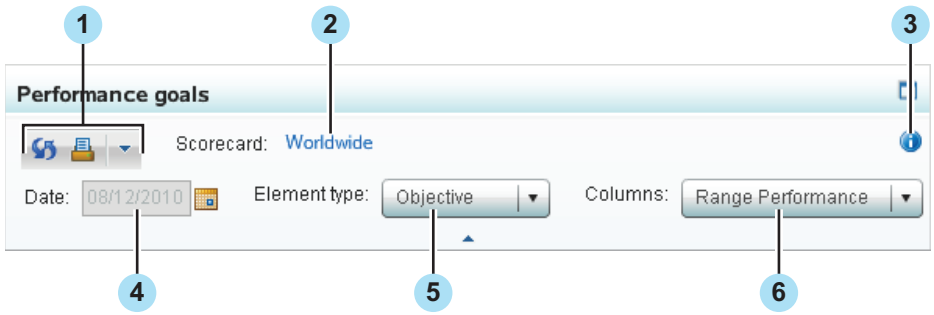
1 Title bar. It displays a customized tile title and the Maximize and Restore icons.

2 The tile bar.

3 Content area. The tile data appears in this area.

The Tile Bar

You can customize whether the tile bar is open by default. Users can close and open the tile bar by clicking the tile bar arrow. Depending on the type of tile, one or more of the following features appear in the tile bar:



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 the 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.

4 Date. You can enable business users to change the date. In this example, the date feature is disabled.

5 **Element type** drop-down list. Using this drop-down list, business users can control their view of the tile data. You customize whether this drop-down list is available for

business users, what selections are available in the list, and which selection is the default.

6 **Columns** drop-down list. Using this drop-down list, business users can control their view of the tile data. You customize whether this drop-down list is available for business users, what selections are available in the list, and which selection is the default.

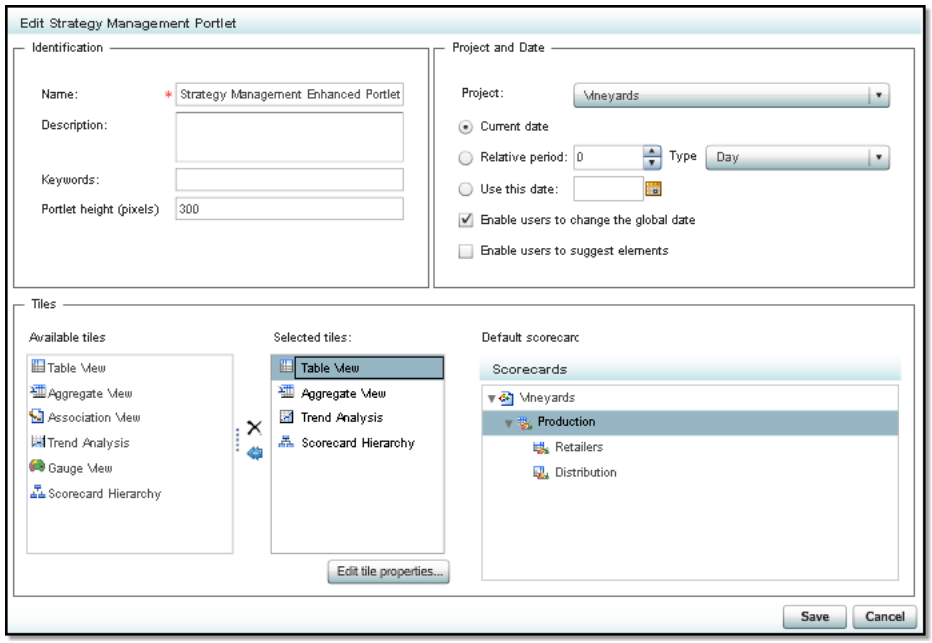
Chapter 26

Editing a Strategy Management Enhanced Portlet and Its Tiles

Edit the Strategy Management Enhanced Portlet

When you edit the Strategy Management enhanced portlet, you can add tiles to display in the portlet and specify global settings that affect the tiles. To edit the Strategy Management enhanced portlet, complete the following steps:

1. Click  in the portlet. The Edit Strategy Management Portlet page appears.



2. In the **Identification** section, complete the following steps:

   a. Edit the portlet name.

   b. Edit the portlet description. A description can make similar portlets easier to identify.

   c. Edit the keywords. Keywords can make a portlet search successful. Make sure you develop a list of keywords and use the keywords consistently.

   d. 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:

   a. In the **Project** drop-down list, select the project that you want to view in the portlet.

      Note: You must specify the project before you can define any tiles.

   b. To specify the date to use in the portlet, complete the following steps:

      - To specify the current date, click **Current date**.
      - To specify a date relative to the current date, click **Relative period**, type or select a value in the field, and then select a value from the **Type** drop-down 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, click **Use this date**. Then type a date in the field or click  to choose a date from the calendar.

   c. Click **Enable users to change the global date** to give business users a way to change the global date while working in the portlet. The date change does not persist from one session to the next.

   d. Click **Enable users to suggest elements** to give business users a way to communicate to you any suggestions about adding elements to the strategy.

Note: The **Allow Suggested Elements** setting must also be selected in the template that is associated with the project used to create this portlet.

4. In the **Tiles** section, complete the following steps to specify the tiles to add, as well as the properties for each selected tile.

   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 .
      - 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 type 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 click **Edit Tile Properties**. For more information, see the following sections:

Tile	Section
Table	"Edit the Table View Tile Properties" on page 233
Aggregate	"Edit the Aggregate View Tile Properties" on page 235
Association	"Edit the Association View Tile Properties" on page 237
Gauge	"Edit the Gauge View Tile Properties" on page 239
Scorecard hierarchy	"The Scorecard Hierarchy Tile and Synchronization" on page 232 *Note:* The scorecard hierarchy tile does not have any properties that can be edited. The **Edit Tile Properties** button is unavailable.
Trend analysis	"Edit the Trend Analysis Tile Properties" on page 242

   f. Select the scorecard that you want to use as the default from the **Default scorecard** tree.

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 further changes to the Strategy Management enhanced portlet from within the portlet itself. For more information, see "Configure the Tile Layout in the Enhanced Portlet" on page 243.

Edit the Strategy Management Enhanced Tiles

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 made when navigating in the scorecard hierarchy tile
- the date used by the tile
- the exploration controls that are available for your business user, as well as whether the tile bar and toolbar are displayed
- which buttons are displayed in the tile data
- other tile-specific features

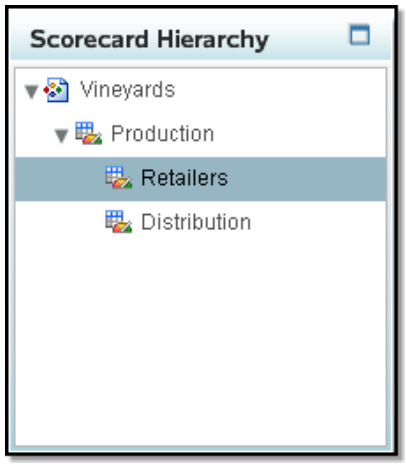
To understand what you can configure and customize, you must understand the features of a tile. For detailed descriptions, see "Your First Look at a Tile" on page 226.

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 the business user cannot change the date setting when exploring the data in that tile.

The Scorecard Hierarchy Tile and Synchronization

If you add a scorecard hierarchy tile to the Strategy Management portlet, you can customize any table, aggregate, association, or gauge tile to dynamically synchronize their data with the current selection in the scorecard hierarchy tile. For example, you have a table that displays the data for Distribution, but you want to view data for another scorecard. In the scorecard hierarchy tile below, you can click Retailers:



When you make this selection in the scorecard hierarchy tile, the data in the table tile automatically displays the data for Retailers.

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 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**.

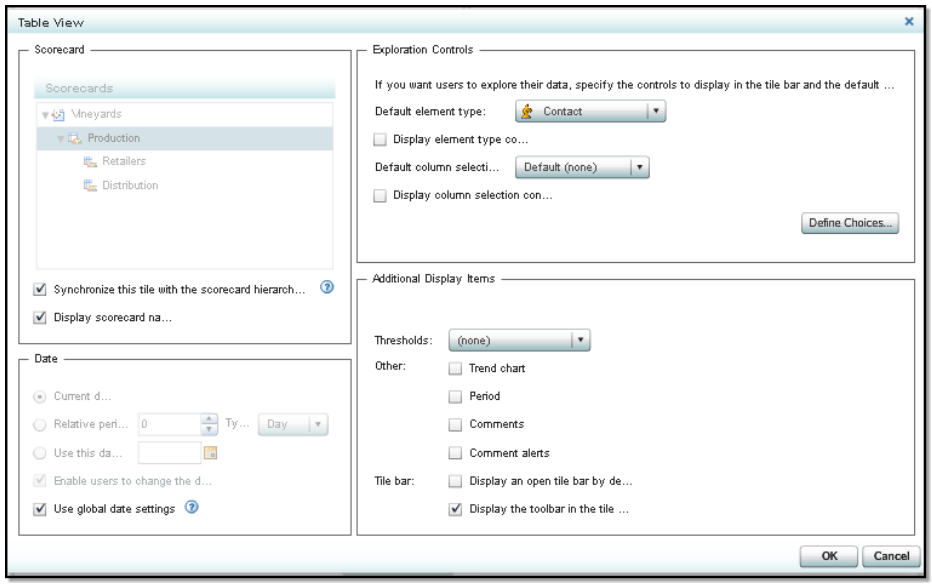
Note:

1. This option is available only for table, aggregate, association, and gauge tiles.
2. A portlet can include only one scorecard hierarchy tile.

TIP You can create two identical tiles with the same data, but customize only one to synchronize. Doing so provides the business user 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**.



To edit the table view tile, complete the following steps:

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 to view in this tile from the **Scorecard** tree.
   - If you do want the data in this tile to be synchronized with any selections made in the scorecard hierarchy tile, click **Synchronize this tile with the scorecard hierarchy tile**. For more information, see "The Scorecard Hierarchy Tile and Synchronization" on page 232.
   - If you want the scorecard name to appear in the tile bar, click **Display scorecard name**. The scorecard name is a link that opens the scorecard in the Strategy Management Builder.

2. In the **Date** section, specify the applicable options:
   - To specify the current date, click **Current date**.
   - To specify a date relative to the current date, click **Relative period**, type or select a value in the field, and then select a value from the **Type** drop-down list.
   - To always use a specified date, click **Use this date**. Then type 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 working in the tile, click **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 in the Strategy Management portlet Properties page, click **Use global date settings**.

     Note: Selecting this option disables all other date settings for this tile. For more information, see "Global Date and Local Date Options" on page 232.
3. In the **Exploration Controls** section, you can specify whether drop-down lists of selections are available for business users to control their view of the tile data. The drop-down lists appear in the tile bar.
   - In the **Default element type** drop-down list, select the element type that you want to appear as the default selection in the **Element type** drop-down list in the tile bar.

     Note: If you do not select the **Display element type control** option, the default element type selection is the only element type available for this tile.
   - Click **Display element type control** to display the **Element type** drop-down list in the tile bar.
   - In the **Default column selection** drop-down list, select the column that you want to appear as the default selection in the **Columns** drop-down list in the tile bar.

     Note: If you do not select the **Display column selection control** option, the default column selection is the only column selection available for this tile.
   - If you want the **Columns** drop-down list to appear in the tile bar for business users, click **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 selection. In the tree, you can select the choices that you want the drop-down lists to provide to your business user.
4. In the **Additional Display Options** section, specify the applicable options:
   - In the **Thresholds** drop-down list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or none 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. *Note:* 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.

Indicator	Icon	Description
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.

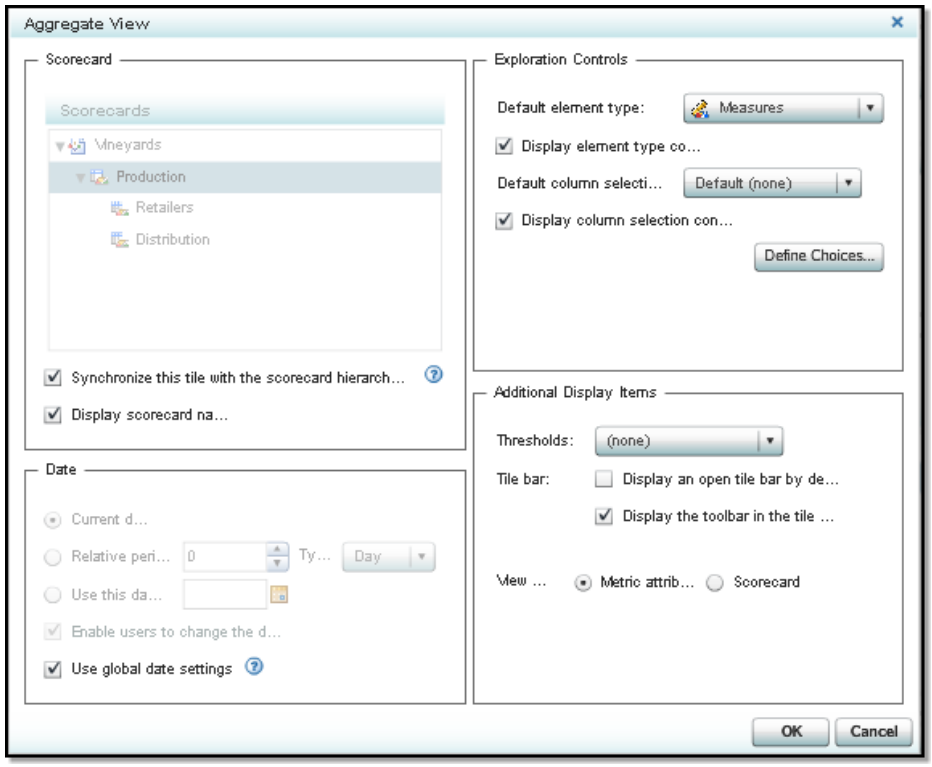
- If you want the tile bar open by default, click **Display an open tile bar by default**. The business user can collapse the tile bar if they do not want to view it.
- If you want the toolbar to appear in the tile bar, click **Display the toolbar in the tile bar**.

  Note: If you do not display the toolbar, business users do not have access to these tools, including 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**.



To edit the aggregate view tile, complete the following steps:

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 to view in this tile from the **Scorecard** tree.
- If you do want the data in this tile to be synchronized with any selections made in the scorecard hierarchy tile, click **Synchronize this tile with the scorecard hierarchy tile**. For more information, see "The Scorecard Hierarchy Tile and Synchronization" on page 232.
- If you want the scorecard name to appear in the tile bar, click **Display scorecard name**. The scorecard name is a link that opens the scorecard in the Strategy Management Builder.

2. In the **Date** section, specify the applicable options:
   - To specify the current date, click **Current date**.
   - To specify a date relative to the current date, click **Relative period**, type or select a value in the field, and then select a value from the **Type** drop-down list.
   - To always use a specified date, click **Use this date**. Then type 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 working in the tile, click **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 in the Strategy Management portlet Properties page, click **Use global date settings**.

     Note: Selecting this option disables all other date settings for this tile. For more information, see "Global Date and Local Date Options" on page 232.
3. In the **Exploration Controls** section, you can specify whether drop-down lists of selections are available for business users to control their view of the tile data. The drop-down lists appear in the tile bar.
   - In the **Default element type** drop-down list, select the element type that you want to appear as the default selection in the **Element type** drop-down list in the tile bar.

     Note: If you do not select the **Display element type control** option, the default element type selection is the only element type available for this tile.
   - Click **Display element type control** to display the **Element type** drop-down list in the tile bar.
   - In the **Default column selection** drop-down list, select the column that you want to appear as the default selection in the **Columns** drop-down list in the tile bar.

     Note: If you do not select the **Display column selection control** option, the default column selection is the only column selection available for this tile.
   - If you want the **Columns** drop-down list to appear in the tile bar for business users, click **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 selection. In the tree, you can select the choices that you want the drop-down lists to provide to your business user.
4. In the **Additional Display Options** section, specify the applicable options:
   - In the **Thresholds** drop-down list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or none to appear in the tile content.

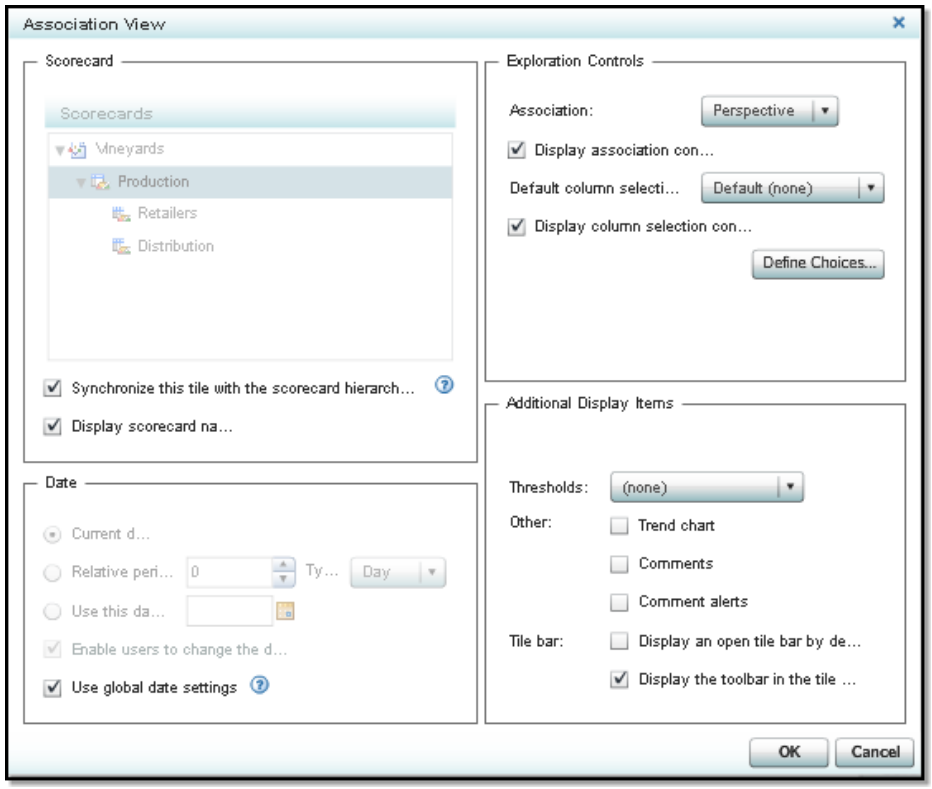
- If you want the tile bar open by default, click **Display an open tile bar by default**. The business user can collapse the tile bar if they do not want to view it.
- If you want the toolbar to appear in the tile bar, click **Display the toolbar in the tile bar**.

  Note: If you do not display the toolbar, business users do not have access to these tools, including Print.
- Select whether the default view of the aggregate data is 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**.



To edit the association view tile, complete the following steps:

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 to view in this tile from the **Scorecard** tree.
   - If you do want the data in this tile to be synchronized with any selections made in the scorecard hierarchy tile, click **Synchronize this tile with the scorecard hierarchy tile**. For more information, see "The Scorecard Hierarchy Tile and Synchronization" on page 232.

- If you want the scorecard name to appear in the tile bar, click **Display scorecard name**. The scorecard name is a link that opens the scorecard in the Strategy Management Builder.

2. In the **Date** section, specify the applicable options:
   - To specify the current date, click **Current date**.
   - To specify a date relative to the current date, click **Relative period**, type or select a value in the field, and then select a value from the **Type** drop-down list.
   - To always use a specified date, click **Use this date**. Then type 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 working in the tile, click **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 in the Strategy Management portlet Properties page, click **Use global date settings**.

     Note: Selecting this option disables all other date settings for this tile. For more information, see "Global Date and Local Date Options" on page 232.

3. In the **Exploration Controls** section, you can specify whether drop-down lists of selections are available for business users to control their view of the tile data. The drop-down lists appear in the tile bar.
   - In the **Association** drop-down list, select the association that you want to appear as the default selection in the **Association** drop-down list in the tile bar.
   - Click **Display association control** to display the **Association** drop-down list in the tile bar.
   - In the **Default column selection** drop-down list, select the column that you want to appear as the default selection in the **Columns** drop-down list in the tile bar.

     Note: If you do not select the **Display column selection control** option, the default column selection is the only column selection available for this tile.
   - If you want the **Columns** drop-down list to appear in the tile bar for business users, click **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 selection. In the tree, you can select the choices that you want the drop-down lists to provide to your business user.

4. In the **Additional Display Options** section, specify the applicable options:
   - In the **Thresholds** drop-down list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or none 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. *Note:* 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.

Indicator	Icon	Description
Comments alerts		If comment alerts are set, indicates that comments are available about the data.

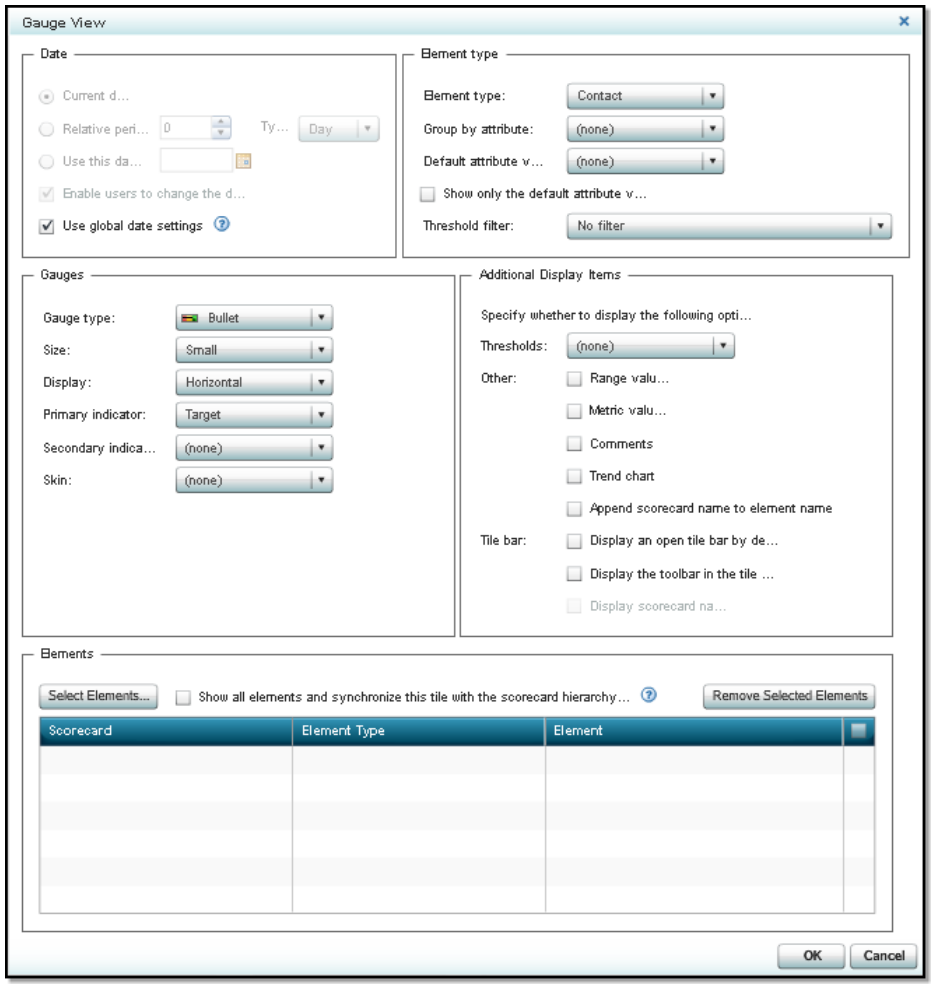
- If you want the tile bar open by default, click **Display an open tile bar by default**. The business user can collapse the tile bar if they do not want to view it.
- If you want the toolbar to appear in the tile bar, click **Display the toolbar in the tile bar**.

  Note: If you do not display the toolbar, business users do not have access to these tools, including Print.

5. 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**.



To edit the gauge view tile, complete the following steps:

1. In the **Date** section, specify the applicable options:
   - To specify the current date, click **Current date**.
   - To specify a date relative to the current date, click **Relative period**, type or select a value in the field, and then select a value from the **Type** drop-down list.
   - To always use a specified date, click **Use this date**. Then type 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 working in the tile, click **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 in the Strategy Management portlet Properties page, click **Use global date settings**.

     Note: Selecting this option disables all other date settings for this tile. For more information, see "Global Date and Local Date Options" on page 232.
2. In the **Element type** section, complete the following steps:
   a. In the **Element type** drop-down list, select the element type that you want the gauge to use.
   b. (Optional) In the **Group by attribute** drop-down 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.
   c. (Optional) In the **Default attribute value** drop-down list, select the default value to use for the attribute that you selected in the previous step.

      Note: In step 2b, the selected attribute is an element type. The values in the **Default attribute value** drop-down list are elements defined by this element type.
   d. Click **Show only the default attribute value** if that is desired.
   e. In the **Threshold filter** drop-down list, specify how you want to filter the thresholds.
3. In the **Gauges** section, complete the following steps:
   a. In the **Gauge type** drop-down list, select the type of gauge that you want to display in the tile.

      Note: The options available in this section vary depending on the gauge type selected.
   b. In the **Size** drop-down list, select whether you want the gauge to be small, medium, or large in size.

      Note: The available selections vary depending on the gauge type 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, half, three quarter, or full circle.
   c. In the **Display** drop-down list, further refine how you want the gauges to appear in the tile.
   d. In the **Primary indicator** drop-down 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 SAS Strategy Management Builder.

e. In the **Secondary indicator** drop-down list, select the element that you want to display as the secondary indicator.

f. In the **Skin** drop-down list, select the skin or display theme that you want the gauge to use.

4. In the **Additional Display Options** section, specify the applicable options:

   - In the **Thresholds** drop-down list, select whether you want global threshold indicators, personal threshold indicators, both indicators, or none to appear in the tile content.
   - If you want the gauge to display the lower and upper range values of the gauge, click **Range values**.

     Note: These values are defined in Strategy Management Builder when you define the dashboard view.
   - If you want the primary indicator value to appear with the gauge, click **Metric value**.
   - If you want to provides a way for users to view and make comments about the gauge, click **Comments action**.
   - If you want to provide a noninteractive trend chart view of the data, click **Trend chart**.

     Note: Do not confuse the noninteractive trend chart with the interactive trend analysis tile.
   - If you want the scorecard and element names appended in the gauge, click **Append scorecard name to element name**.
   - If you want the tile bar open by default, click **Display an open tile bar by default**. The user can collapse the tile bar 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 bar**.

     Note: If you do not display the toolbar, business users do not have access to these tools, including Print.
   - If you want the scorecard name to appear in the tile bar, click **Display scorecard name**. The scorecard name is a link that opens the scorecard in the Strategy Management Builder.

5. In the **Elements** section, make the applicable selections:

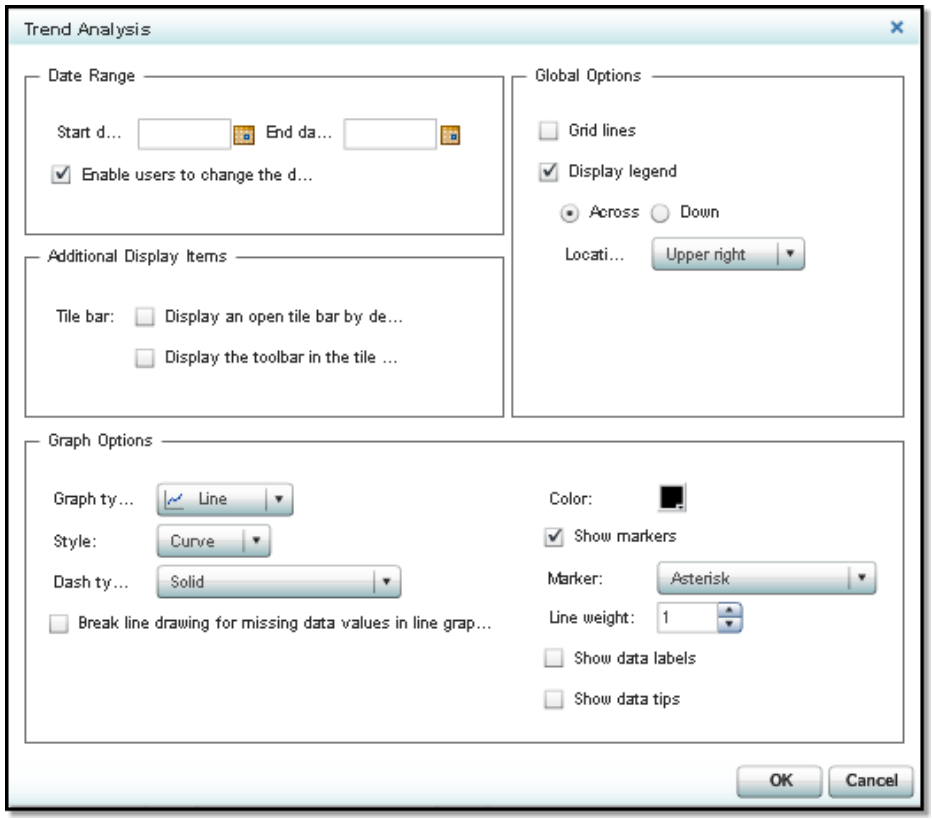
   - If you want all elements to appear in the tile and for the tile to synchronize data to synchronize with the scorecard hierarchy tile, click **Show all elements and synchronize this tile with the scorecard hierarchy tile**.
   - If you want only some elements to appear in the tile, click **Select Elements**. In the Select Elements window, make your selections and click **OK**.

     To remove an element, select 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**.



To edit the trend analysis tile, complete the following steps:

1. In the **Data Range** section, specify the start 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 working in the tile, click **Enable users to change the date**. The date change does not persist from one session to the next.
2. In the **Graph Options** section, specify how you want the graph to be drawn:
   a. In the **Graph type** drop-down list, select the type of graph that you want to display the trend analysis. Available selections are line, band, bar, and scatter.
   b. Select the applicable options for the chosen graph type. Options vary depending on the selected graph type.

Graph Type	Available Options
All types	• Click the Color icon to select the color of the selected graph type. • If you want each data value labeled in the graph, click **Show data labels**.
Line	• In the **Style** drop-down list, select the style of line that you want to use. • In the **Dash type** drop-down list, select the type of dash that you want to draw the line. • If you want the line drawn in the graph to break each time a data value is missing, click **Break line drawing for missing data values in line graphs**. • In the **Weight** drop-down list, select the thickness to use when drawing the line graph. • If you want data tips to appear in the line graph, click **Show data tips**. • If you want markers to appear in the graph, click **Show markers**. When selected, you can select the type of marker that you want the graph to use from the **Marker** drop-down list.
Band	If you want markers to appear in the graph, click **Show markers**. When selected, you can select the type of marker that you want the graph to use from the **Marker** drop-down list.
Scatter	In the **Marker** drop-down list, select the type of marker that you want the graph to use.

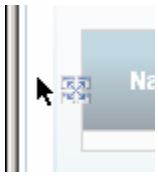
3. In the **Global Options** section, specify the applicable options:
   - If you want grid lines to appear in the trend analysis, click **Grid lines**.
   - If you want to the labels on the axis to appear in the trend analysis, click **Show axis labels**.
   - If you want to display the legend in the trend analysis, click **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 running the height of the tile. In the **Location** drop-down list, select the location in the tile to display the legend.
4. 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:

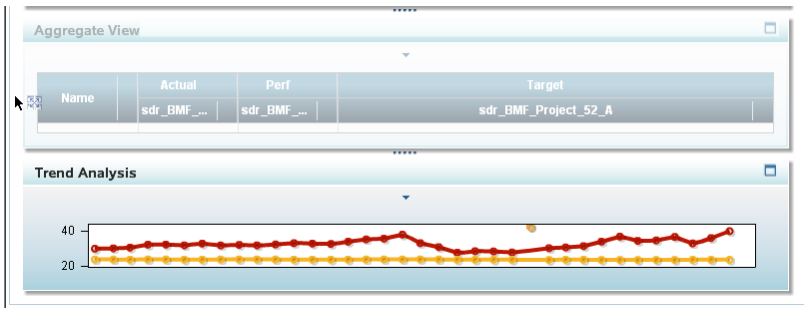
- Select a tile. Click the tile to select it.
- Rearrange the tiles. Click a title bar of the tile and drag the tile to the new location in the portlet. If there are other tiles in the portlet, they automatically move to make room for the tile.

- Resize a tile. Hover on the tile border to display handles. Click the handles and drag to resize the tile.
- Arrange the tiles in columns or rows. Click a tile and drag it near the portlet border. Drop the tile while the mouse pointer is hovering within another tile near the border. The following partial display shows the mouse pointer and the accompanying icon that indicates you are dragging a tile:

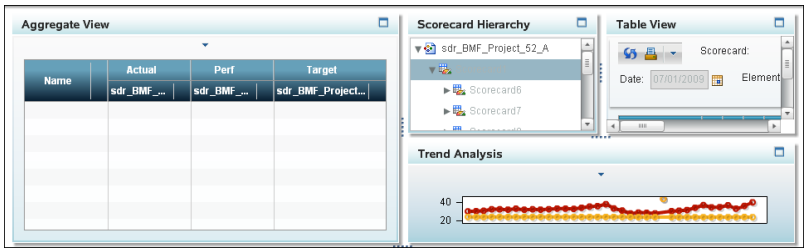


Do not drag the tile too close to the portlet border or outside the portlet border. If you drag too close to the portlet border, a red circle with an X appears. The following partial display shows the mouse pointer and the accompanying icon that indicates you are dragging a tile too close to the portlet border:

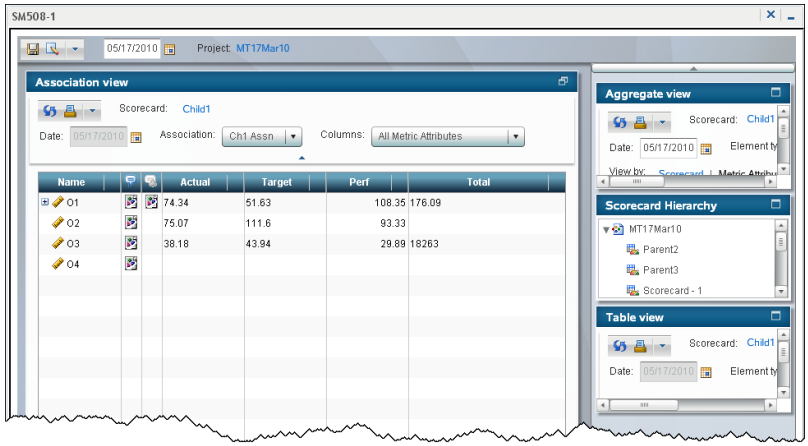
For example, if you want to move a tile to create a column in the left side of the portlet, drag the tile left to the portlet border.



Drop the tile near the border but with the mouse pointer hovering within the tile currently located in that area. The affected tiles are rearranged to create a column.



- Maximize a tile. Click the Maximize icon on the title bar. The tile is sized as large as possible while still providing a pane in which to display any other tiles in the portlet.



You can click the Maximize icon on any of the tiles in the right pane and the affected tile exchanges places with the currently maximized tile. To return all of the tiles to their previous sizes and locations, click the Restore icon in the maximized tile.

When your tile layout is complete, click to save the layout configuration. The configured layout is used when the business user views the portlet.

Note:

- The maximized layout with the right pane cannot be saved.
- Business users can change the portlet layout, but they cannot save the layout. Any changes that a business user makes are lost when the portlet or portal page is refreshed or when the portal page is closed.

Delete a Tile

To delete a tile in the Strategy Management enhanced portlet, complete the following steps:

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 27

Editing Classic-Style Portlets

Overview

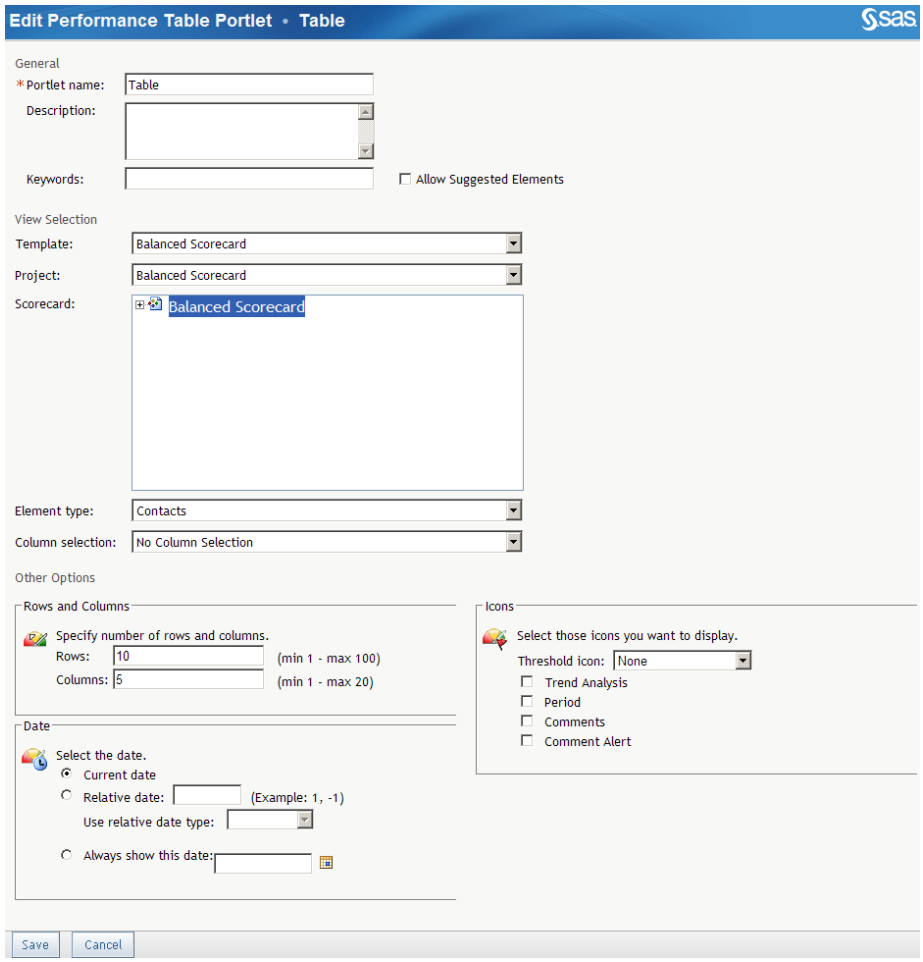
The Strategy Management enhanced portlet provides tiles that have the same functionality as the classic-style portlets described in this section, except for the diagram portlet. The diagram portlet is only available as a classic-style portlet. The tiles provide enhanced functionality and interactive features for business users. For more information about the enhanced portlet, its tiles, and their enhanced features, see Chapter 26, "Editing a Strategy Management Enhanced Portlet and Its Tiles," on page 229.

Note: For information about editing the data entry portlet, see "Edit a Performance Data Entry Portlet" on page 291.

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.



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** drop-down list, select a template.

   b. From the **Project** drop-down list, select a project.

   c. From the **Scorecard** list, select a scorecard or a project.

   d. From the **Element type** drop-down list, select an element type.

   e. From the **Column selection** drop-down 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** drop-down 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** drop-down list.
   b. (Optional) Select one or more additional icon to display.

      Note: Selections vary depending on the portlet type.

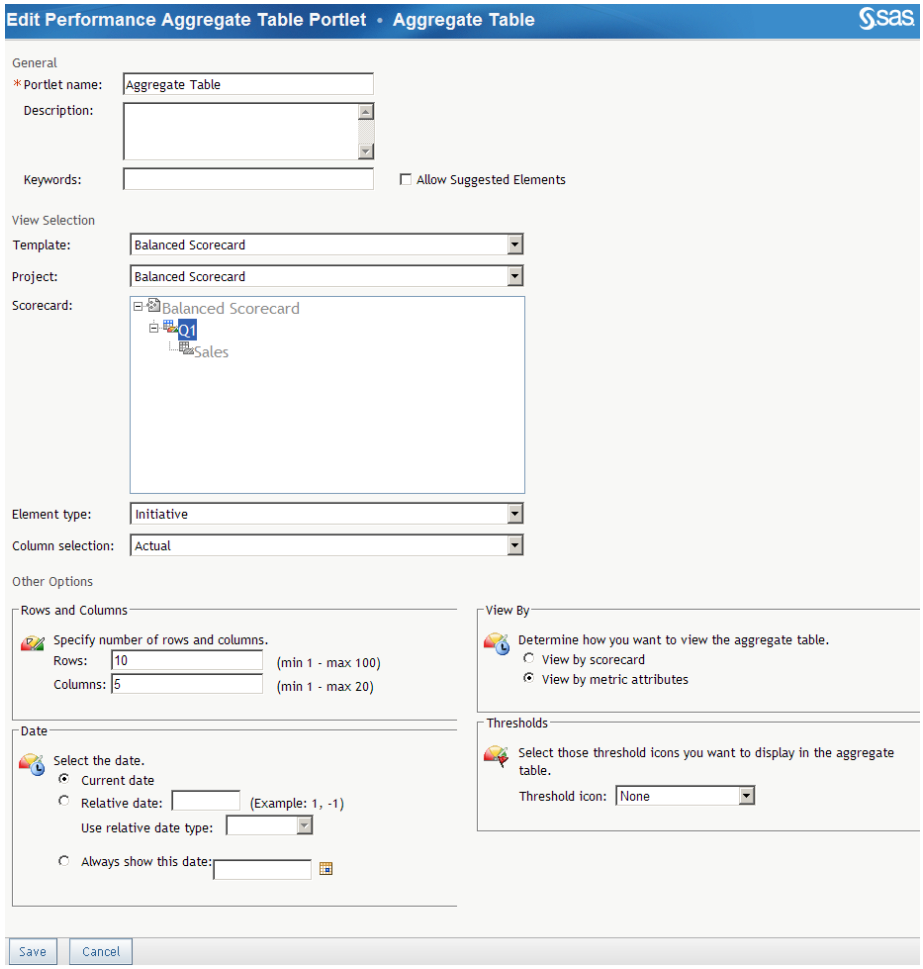
Icon	Description
Trend analysis	Opens a noninteractive trend chart view of the data. *Note:* Do not confuse the noninteractive trend chart with the interactive trend analysis tile.
Comment	Provides a way for users to make comments about the data.
Comment alert	If comment alerts are set, indicates that comments are available about the data.
Period	Displays the period of time for which the element data was collected.

6. 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.



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** drop-down list, select a template.

   b. From the **Project** drop-down 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** drop-down list, select an element type.

   e. From the **Column selection** drop-down 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** drop-down 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**.

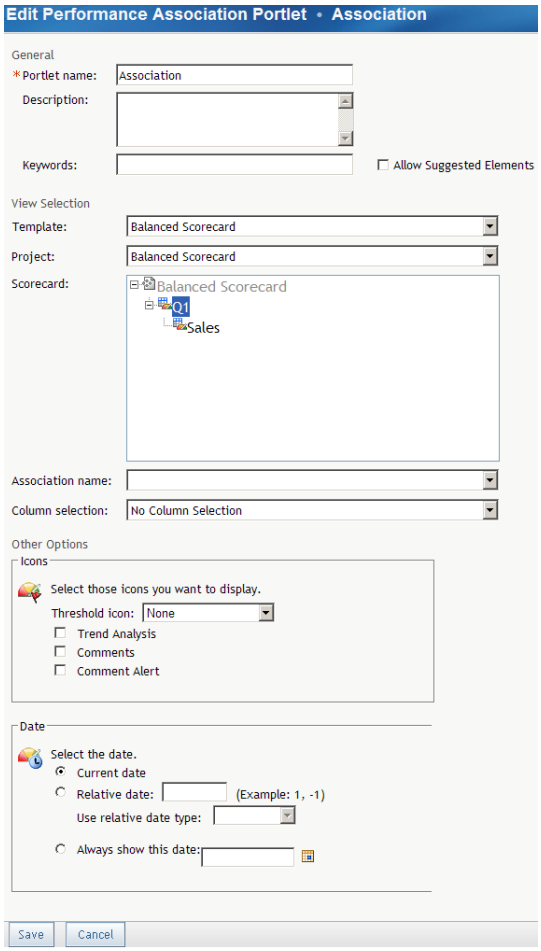
d. To specify which threshold icons appear in the aggregate table, in the **Threshold** section, select the icon from the **Threshold icon** drop-down list.

5. 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.



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** drop-down list, select a template.

   b. From the **Project** drop-down list, select a project.

   c. From the **Scorecard** list, select a scorecard.

   d. From the **Association name** drop-down list, select an association.

      Note: Associations are not available at the project level.

   e. From the **Column selection** drop-down 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** drop-down list.

   b. (Optional) Select one or more additional icon to display.

      Note: Selections vary depending on the portlet type.

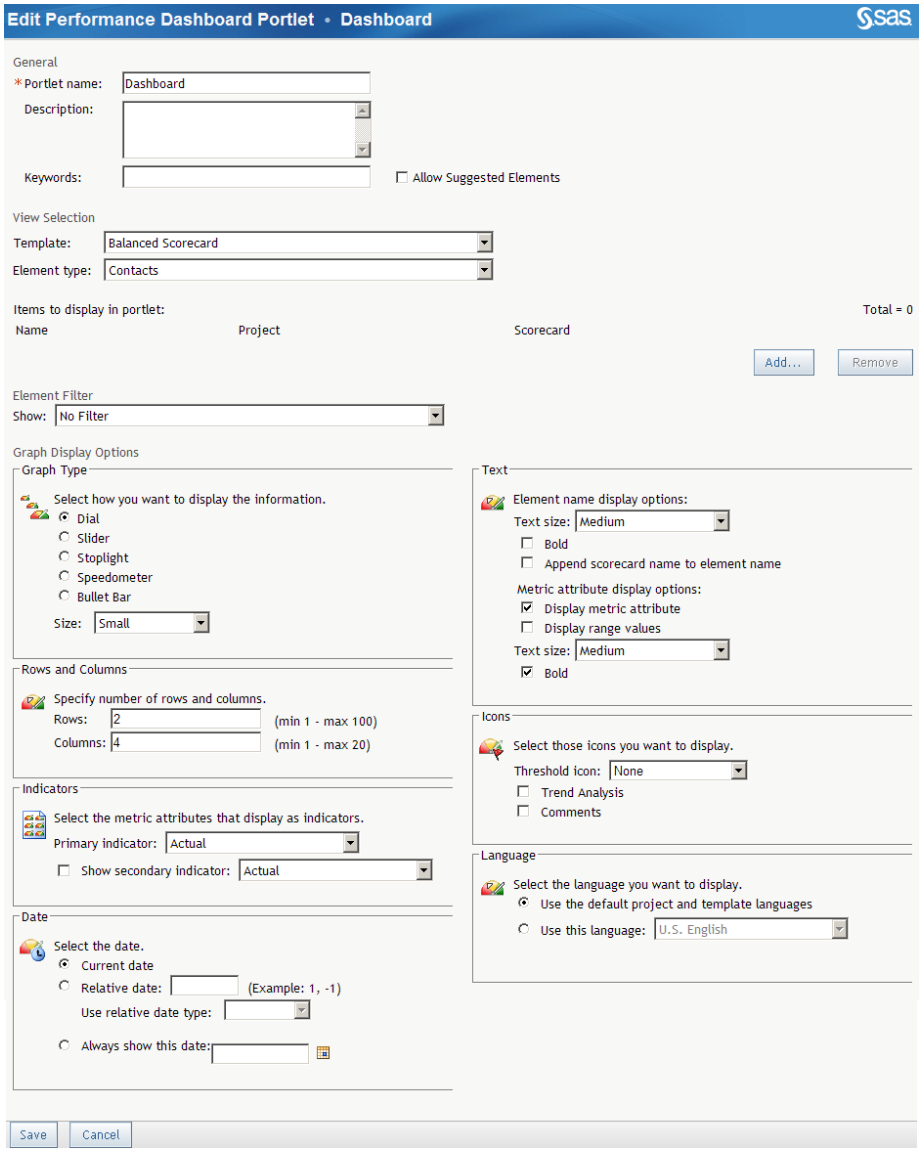
Icon	Description
Trend analysis	Opens a noninteractive trend chart view of the data. *Note:* Do not confuse the noninteractive trend chart with the interactive trend analysis tile.
Comment	Provides a way for users to make comments about the data.
Comment alert	If comment alerts are set, indicates that 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** drop-down 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. 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.



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. 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** drop-down 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 101.

   To specify the threshold condition, select a filter from the **Show** drop-down 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** drop-down list.

   b. If you want to display a secondary indicator, click **Show secondary indicator** and select an indicator from the drop-down 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** drop-down 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** drop-down 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** drop-down 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** drop-down list.

    b. (Optional) Select one or more additional icon to display.

       Note: Selections vary depending on the portlet type.

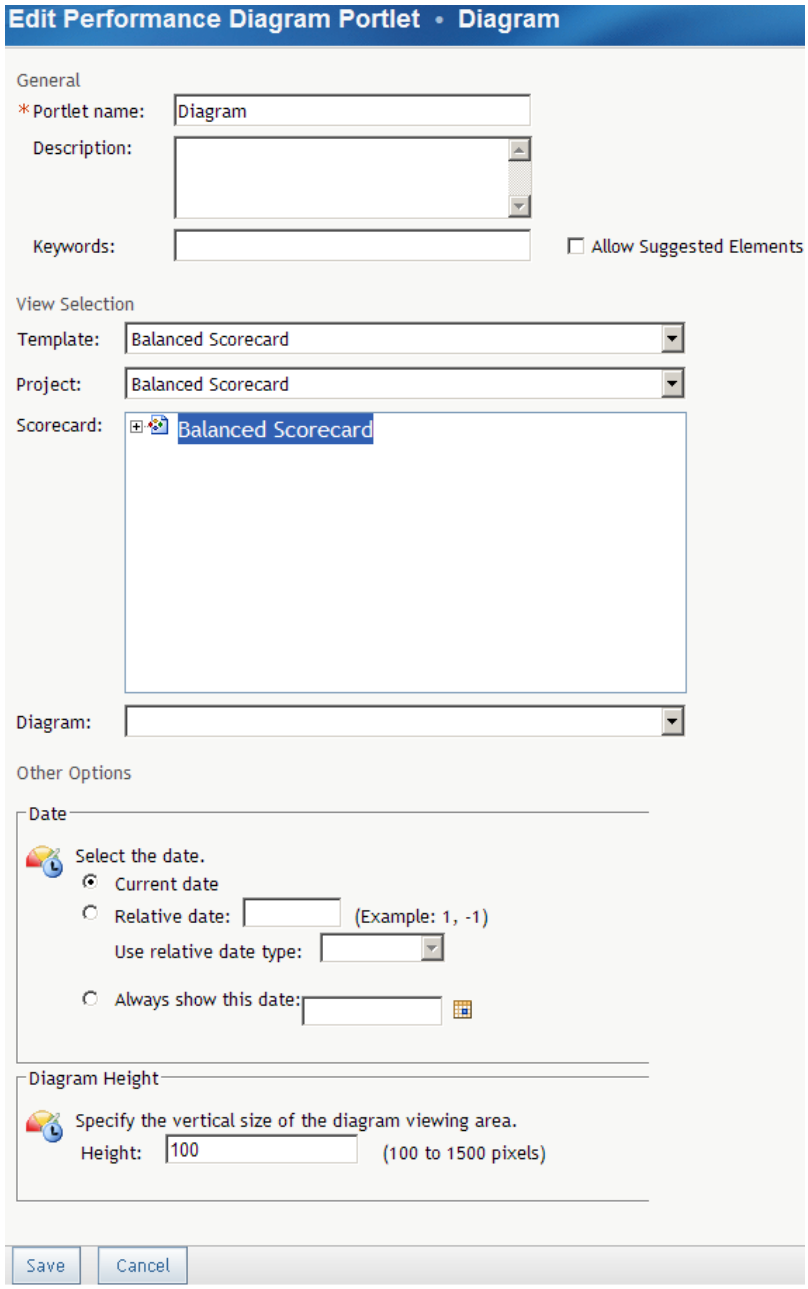
Icon	Description
Trend analysis	Opens a noninteractive trend chart view of the data. *Note:* Do not confuse the noninteractive trend chart with the interactive trend analysis tile.
Comment	Provides a way for users to make comments about the data.
Comment alert	If comment alerts are set, indicates that 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. 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.



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** drop-down list, select a template.

   b. From the **Project** drop-down list, select a project.

   c. From the **Scorecard** list, select a scorecard or a project.

   d. From the **Diagram** drop-down 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** drop-down 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.

Part 5

Viewing and Navigating Content in Portlets

Chapter 28

Access Your Strategy Management Portlets

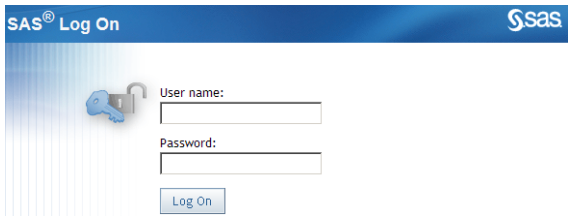
Log On to the SAS Information Delivery Portal

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. Type your user name 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 29

Navigating and Viewing the Strategy Management Enhanced Portlet and Its Tiles

Your First Look at the SAS Strategy Management Enhanced Portlet

The SAS Strategy Management enhanced portlet appears on your portal page.

Figure 29.1 *SAS Strategy Management Enhanced Portlet*

1 Title bar. Click the X to close the portlet or click the _ to minimize the portlet.

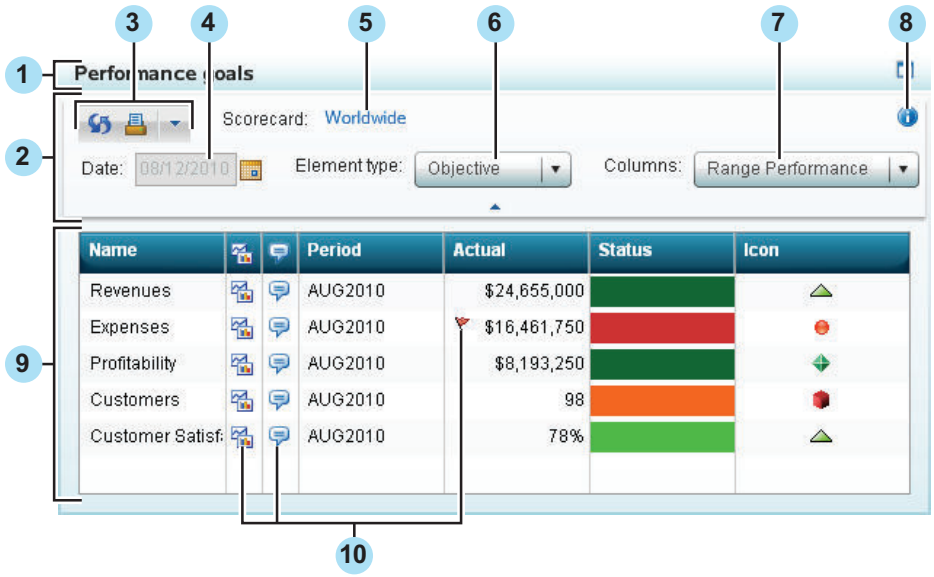
2 Toolbar. The portlet toolbar provides the and buttons. For more information , see "Suggest a New Element to Add to the Strategy" on page 268.

The toolbar also provides the Help icon. Click to view the *SAS Strategy Management: Enhanced Portlet Quick Start Guide*.

3 Portlet content area

A Strategy Management portlet can contain one or more tiles. The scorecard modeler can customize the interface of each tile. The following example describes available features for a tile. However, due to customization, your tiles might not have all of these features.

Figure 29.2 *Tile Interface Example*



1 The tile title bar provides the Maximize ( ) and Restore ( ) buttons.

2 The tile bar. For more information, see "Open and Close the Tile Bar" on page 267.

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 269.

5 The scorecard name. For more information, see "View the Scorecard in the Strategy Management Builder" on page 270.

6 **Element type** drop-down list. For more information, see "Change the Element Type" on page 269.

7 **Columns** drop-down list. For more information, see "Change the Column Selection" on page 269.

8 Information icon. Click this icon to view a short tip or other information about the tile.

9 Content area. The tile data appears in this area.

10 Icon. 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 273.

  Note: Do not confuse the noninteractive trend chart with the interactive trend 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 271.

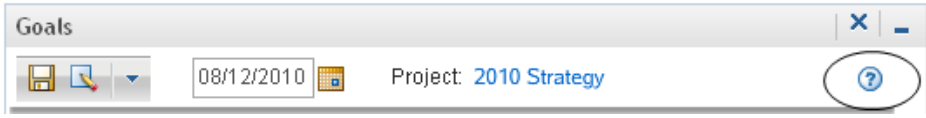
- Period. Click this icon to view the period of time for which the element data was collected.

- Comments action . Click this icon to make comments about the information. For more information, see "View and Create Comments" on page 272.

- Comment alerts . Click this icon to view comments about the information.

Access Help

The toolbar provides the Help icon .



Click to view the *SAS Strategy Management: Enhanced Portlet Quick Start Guide*.

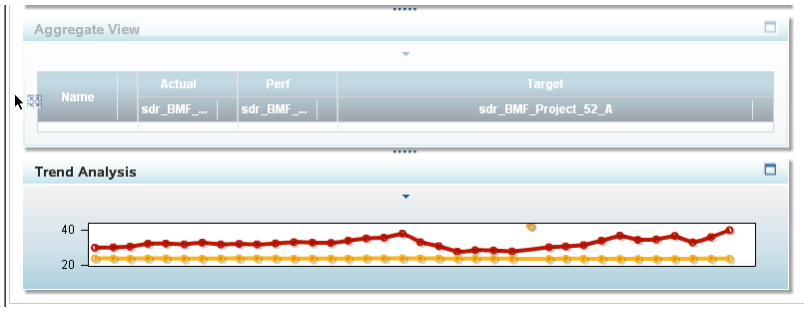
Change the Layout of the Tiles

When you view a Strategy Management enhanced portlet and its tiles, you can change their layout in the following ways:

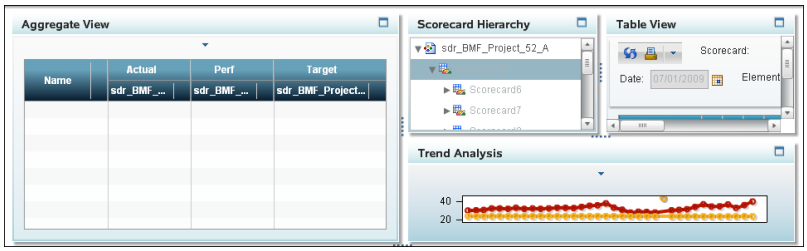
- Select a tile. Click the tile to select it.
- Rearrange the tiles. Click a title bar of the tile and drag the tile to the new location in the portlet. If there are other tiles in the portlet, they automatically move to make room for the tile.
- Resize a tile. Hover on the tile border to display handles. Click the handles and drag to resize the tile.
- Arrange the tiles in columns or rows. Click a tile and drag it near the portlet border. Drop the tile while the mouse pointer is hovering within another tile near the border. The following partial display shows the mouse pointer and the accompanying icon that indicates you are dragging a tile:

Do not drag the tile too close to the portlet border or outside the portlet border. If you drag too close to the portlet border, a red circle with an X appears. The following partial display shows the mouse pointer and the accompanying icon that indicates you are dragging a tile too close to the portlet border:

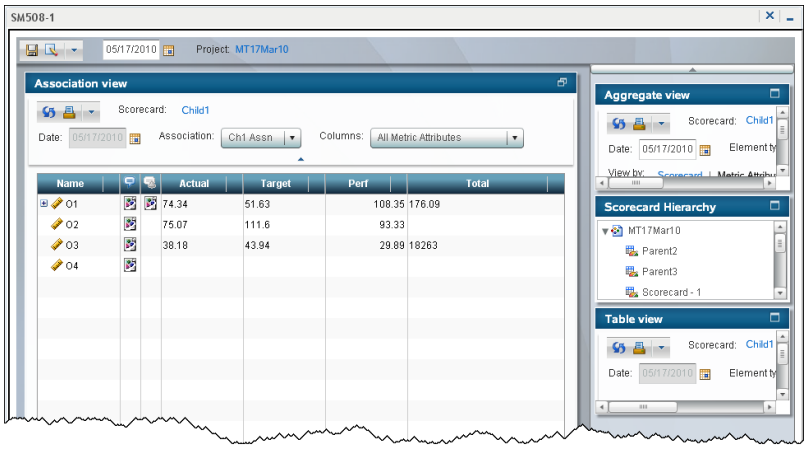
For example, if you want to move a tile to create a column in the left side of the portlet, drag the tile left to the portlet border.



Drop the tile near the border but with the mouse pointer hovering within the tile currently located in that area. The affected tiles are rearranged to create a column.



- Maximize a tile. Click the Maximize icon on the title bar. The tile is sized as large as possible while still providing a pane in which to display any other tiles in the portlet.



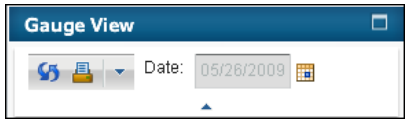
You can click the Maximize icon on any of the tiles in the right pane and the affected tile exchanges places with the currently maximized tile. To return all of the tiles to their previous sizes and locations, click the Restore icon in the maximized tile.

Note: You cannot save the layout. Any changes that you make are lost when the portlet or portal page is refreshed or when the portal page is closed.

Open and Close the Tile Bar

To close the tile bar, click ▲. The tile bar closes.

To open the tile bar, click ▼. The tile bar opens.



Print a Tile

Note: Due to customization, a tile might not display a toolbar and the **Print** button is not available.

To print a tile, complete the following steps:

1. Click in the tile toolbar. The Print Tile dialog box 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 bar and its buttons and controls, click **Do not print tile bar**.
5. If you want to print information identifying the scorecard, click **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 and 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 and 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, perform the following steps:

1. In the tile toolbar, click .
2. In the Suggest New Elements dialog box, type a name and, optionally, a description.
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 from 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 used by a tile, type a date in the **Date** field or click in the tile 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.
- 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** drop-down list to make a new selection.

Note: Due to customization, the **Element type** drop-down list might not be available.

Change the Column Selection

To change the column selection, click the **Column** drop-down list to make a new selection.

Note: Due to customization, the **Column** drop-down list might not be available.

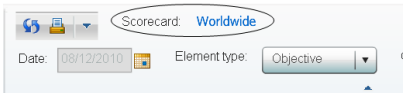
Change the Association

To change the association in an association tile, click the **Association** drop-down list to make a new selection.

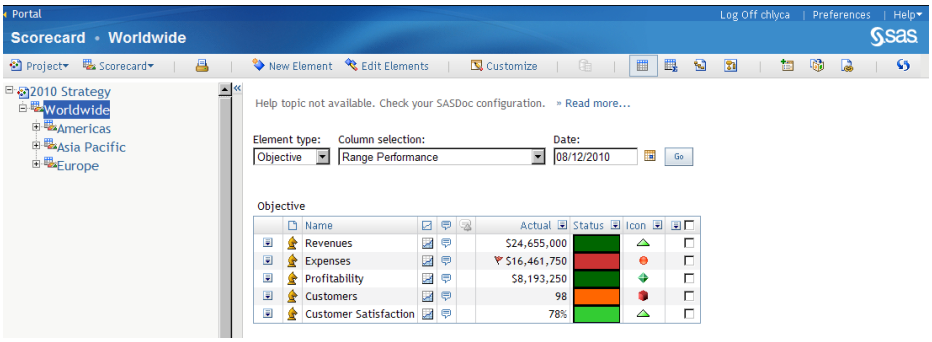
Note: Due to customization, the **Association** drop-down list might not be available.

View the Scorecard in the Strategy Management Builder

The tile bar provides a link to the scorecard.



When you click the scorecard name in the tile bar , the scorecard is opened 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

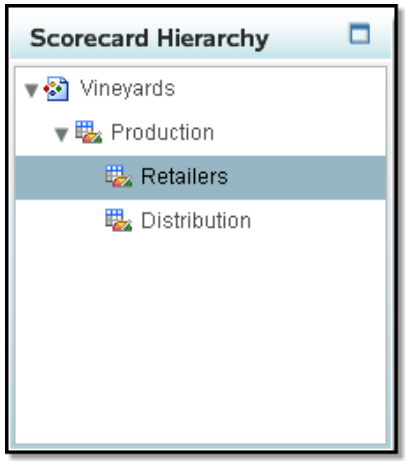
When a tile displays its data in columns, you can click the column headings to sort the data.

Rearrange Columns

You can change the order of the columns in a table. Click a column heading and 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*.



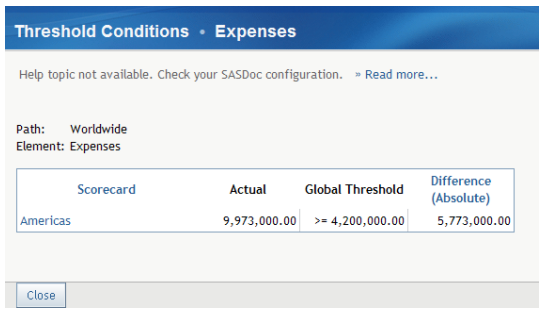
For example, a table tile displays data for Distribution. If you click Retailers in the scorecard hierarchy tile, the table tile displays data for Retailers. If a portlet contains a scorecard hierarchy tile, remember the following considerations:

- Only table, aggregate, association, and gauge tiles can be synchronized with the scorecard hierarchy tile. Synchronization does not affect trend 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 Conditions window appears.



If the threshold flag is set at the parent scorecard level, you can click the child scorecard name to navigate to that scorecard. If the threshold flag is at the child scorecard level, the scorecard name appears as a link. You can click that link to open the scorecard. To exit the window, click **Close**.

Note: Thresholds can also generate alerts. You can receive alerts as e-mail, Short Message Service (SMS) text messages, and in an alert portlet on a portal page.

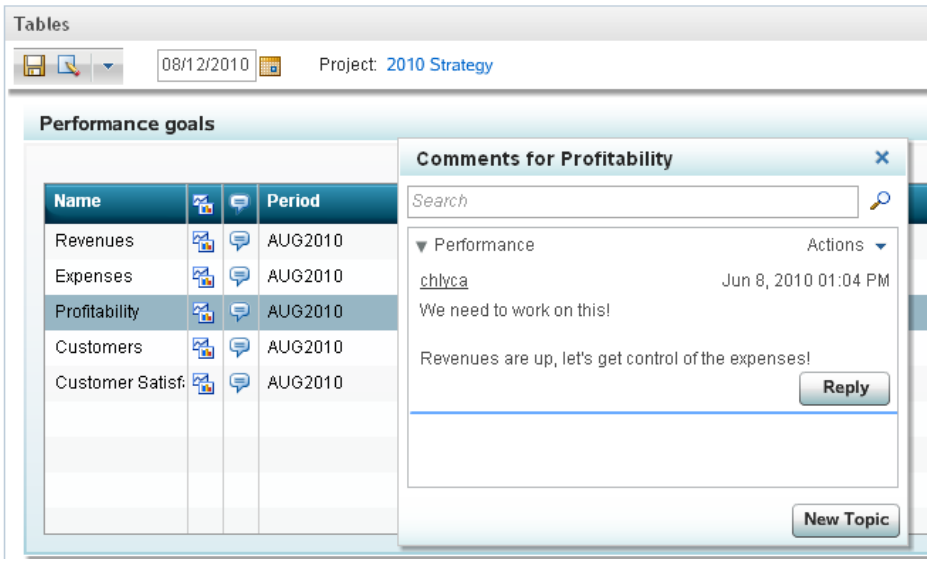
View and Create Comments

Note: Due to customization, the comment feature, and comment alerts might not be available.

If a 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 appears with the affected data.

To make a comment, complete the following steps:

1. In the applicable row, click . The Comments window appears.



   If there are existing comments about this element, the comments appear in this window.

2. If a comment belongs to you, you can click to edit the comment or click to delete the comment.
3. Click **New Topic** to make a comment about a new topic.
4. In the New Topic window, type a topic name and a comment.
5. (Optional) Click **Attachment** to attach a file to the comment. Select one or more files to attach and click **Open**.

   Note: To delete the attachment from the comment, click in the New Topic window.
6. Click **Save** 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. 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.

- You cannot delete comments.

To reply to a comment, complete the following steps:

1. In the applicable row, click .
2. In the Comments window, expand the topic thread of comments.
3. Locate the comment that you want to reply to and click **Reply**.
4. In the response window, type a comment.
5. (Optional) Click **Attachment** to attach a file to the comment. Select one or more files to attach and click **Open**.

   Note: To delete the attachment from the comment, click in the New Topic window.
6. Click **OK** to save and post your reply. The comment is added to the thread of comments.

Sort Comments

Note:

- Due to customization, the comment feature might not be available.
- You cannot delete comments.

To sort comments, in the Comments window, click **Actions** ⇨ **Sort and Filter** and select the way that you want to sort the comments. The comment list is sorted.

Search Through Comments

Note:

- Due to customization, the comment feature might not be available.
- You cannot delete comments.

To search comments, in the Comments window, complete the following steps:

1. 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 an entire comment, click **Show This Topic**.
4. To view the result list again, click **Back to Search Results**.
5. To view the Comments window again, click **Return to Comments**.

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 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, aggregate view, 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 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, click in the tile toolbar. A Save dialog box appears. Navigate to the location where you want to save the file. Type a name in the **File name** field and click **Save**.

Note: Due to customization, a tile might not display a toolbar.

Change Trend Analysis Property Settings

To change the style setting in a trend analysis tile, complete the following steps:

1. In the tile bar, click . The Graph Properties dialog box appears.

   Note: Due to customization, a tile might not display a toolbar.

2. In the list at the top of the dialog box, click the value that you want to edit. Any changes that you make are applied to the selected value.

   Note: You can also delete the selected value by clicking ✕.

3. In the **Graph Options** section, specify how you want the graph to be drawn:

   a. In the **Graph type** drop-down list, select the type of graph that you want to display the trend analysis. Available selections are line, band, bar, and scatter.

   b. Select the applicable options for the chosen graph type. Options vary depending on the selected graph type.

Graph Type	Available Options
All types	• Click the Color icon to select the color of the selected graph type. • If you want each data value labeled in the graph, click **Show data labels**.
Line	• In the **Style** drop-down list, select the style of line that you want to use. • In the **Dash type** drop-down list, select the type of dash that you want to draw the line. • If you want the line drawn in the graph to break each time a data value is missing, click **Break line drawing for missing data values in line graphs**. • In the **Weight** drop-down list, select the thickness to use when drawing the line graph. • If you want data tips to appear in the line graph, click **Show data tips**. • If you want markers to appear in the graph, click **Show markers**. When selected, you can select the type of marker that you want the graph to use from the **Marker** drop-down list.
Band	If you want markers to appear in the graph, click **Show markers**. When selected, you can select the type of marker that you want the graph to use from the **Marker** drop-down list.
Scatter	In the **Marker** drop-down 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, click **Grid lines**.
   - If you want to the labels on the axis to appear in the trend analysis, click **Show axis labels**.
   - If you want to display the legend in the trend analysis, click **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 running the height of the tile. In the **Location** drop-down list, select the location in the tile to display the legend.

5. Click **Apply** to save and apply the new settings.

   Note: If you do not click **Apply**, the settings are not saved.

6. You can edit the properties for another value or you can click **Close** to exit.

Chapter 30

Navigating and Viewing Classic-Style Portlets

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.

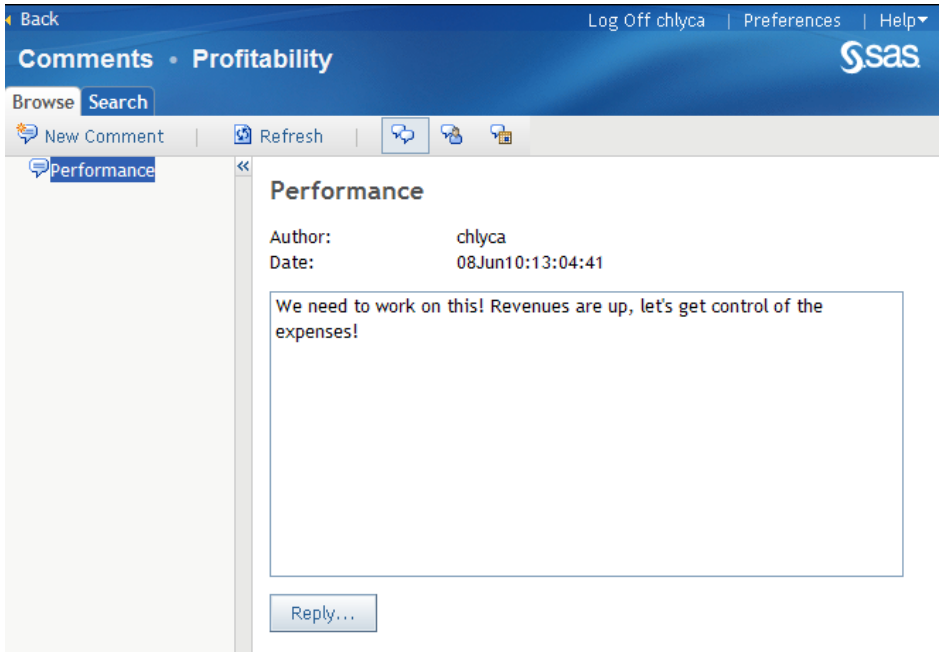
View a Trend Analysis

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 21, “Creating and Editing Trend Analysis Views,” on page 203.

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

Chapter 31

Overview of Data Entry Methods

Data Entry Methods

SAS Strategy Management provides different ways to enter data depending on the quantity of data that you want to enter.

- For small amounts of data, use the data entry form in Strategy Management Builder or the data entry portlet. For information about creating these forms, see Chapter 32, "Creating Data Entry Forms," on page 285. For information about entering data using these forms, see Chapter 33, "Entering Data Manually," on page 293. For information about processing the data, see Chapter 34, "Processing Manually Entered Data," on page 297.
- To create large amounts of data in SAS Strategy Management, consider using the Batch Maintenance Facility. For more information, see "Entering Data by Batch" on page 301.
- To enter an existing project and its data, export and import the project 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, Chapter 36, "Exporting and Importing Strategy Management Data," on page 303.

Chapter 32

Creating Data Entry Forms

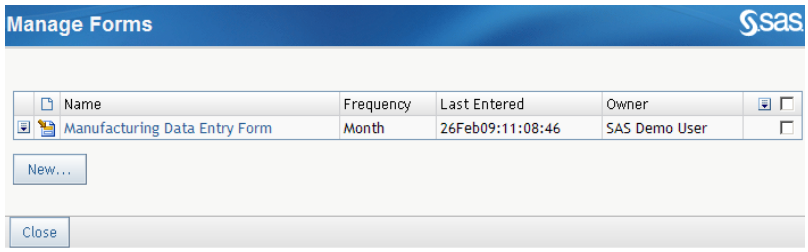
Overview

You can create a data entry form that business users or data entry users can use to enter data into a Strategy Management project. Users can enter data into a data entry form in the following ways:

- In Strategy Management Builder by accessing the data entry form from the Manage Forms page.
- In Strategy Management Builder by clicking a link in a portlet.
- On a portal page by using a data entry portlet.

List the Data Entry Forms

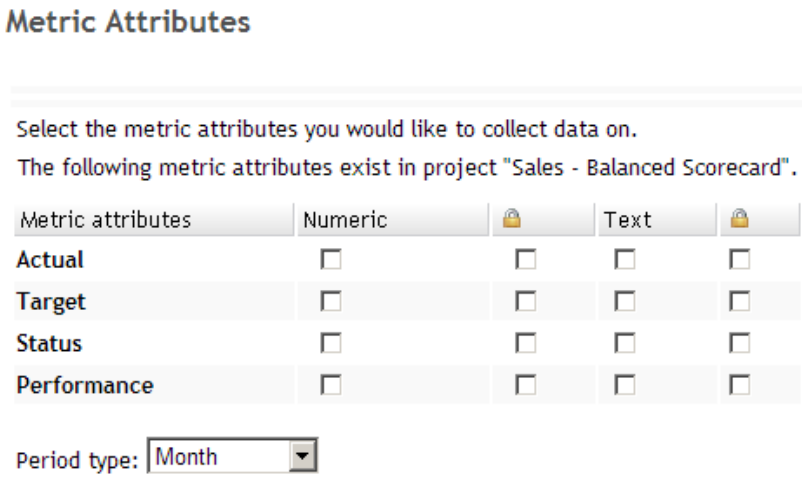
To list the data entry forms, in an open project, click **Project** ⇨ **Data Entry Forms**. The Manage Forms page appears.



Create a Data Entry Form

To create a data entry form, complete the following steps:

1. List the data entry forms. For more information, see "List the Data Entry Forms" on page 285.
2. Click **New**. The New Form Wizard appears and the Metric Attributes page displays the metric attributes and period type for the project.



3. To select metric attributes for inclusion in the form, complete the following steps:
   a. Select one or more metric attributes in the **Metric Attributes** list by clicking **Numeric** or **Text** for each metric attribute.

      Note: You can create two columns per metric attribute: One for numeric values and one for text values.

   b. If you want the values to be read-only (or locked), click the check box under the lock icon for each type of metric attribute value. When you make this selection, you cannot enter values for the affected metric attribute. The icon is located next to the metric attribute name heading.

      TIP When you lock a metric attribute, manually entered data cannot overwrite the value. Locking can be useful if the value is calculated by a formula. An alternative, and perhaps safer, solution is to not display the metric attribute in the form at all.

   c. From the **Period type** drop-down list, select the period type. For example, if you select **Month** as your period type, the collected data is applied on a monthly basis.

      Note: A form can have elements of only one period type.

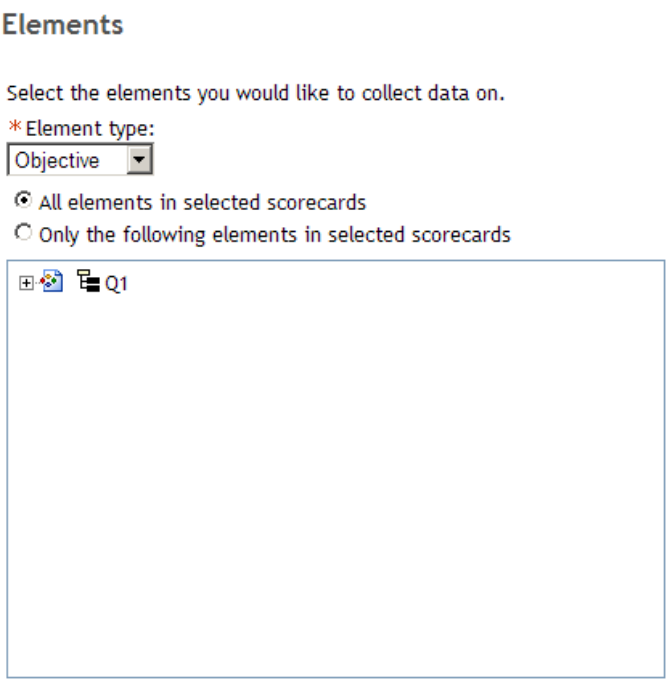
d. Click **Next**. The Scorecards page appears and lists the scorecards within the current project.

4. To select the scorecards to receive the data, complete the following steps:

   a. Click the check box that is next to one or more scorecards in the **Scorecards** tree.

      To select all child scorecards, click the hierarchy icon that is next to the parent scorecard. The icon becomes completely black.

   b. Click **Next**. The Elements page appears.



5. To select the elements for which you want to collect data, complete the following steps:

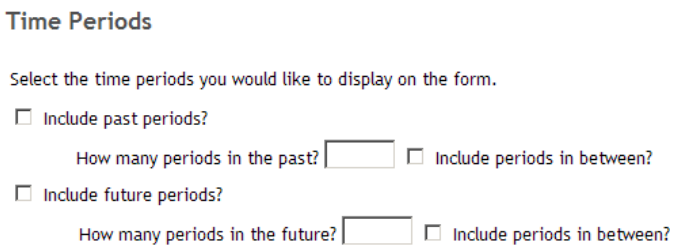
   a. From the **Element type** drop-down list, select an element type.

      Note: A form can have only one element type.

   b. To collect data for all elements of the selected type, click **All elements in selected scorecards**.

   c. To collect data for only some elements of the selected type, click **Only the following elements in selected scorecards**. Then, click the check boxes that are next to the elements in the scorecard tree. To select all elements, click the tree icon that is next to the scorecard. The icon becomes completely black.

   d. Click **Next**. The Time Periods page appears. On this page, you can select the time periods to display on the form.



6. To specify the time periods to include, complete the following steps:

   a. To include past time periods, click **Include past periods?**. Then, type a value in the **How many periods in the past?** field.

      Note: You can specify up to 52 periods.

      To include all intervening periods, click **Include periods in between?**.

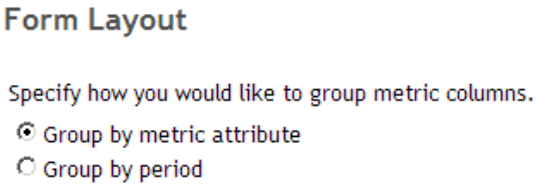
   b. To include future time periods, click **Include future periods?**. Then, type a value in the **How many periods in the future?** field.

      Note: You can specify up to 52 periods.

      TIP Specifying future periods can be useful for target values that you hope to achieve.

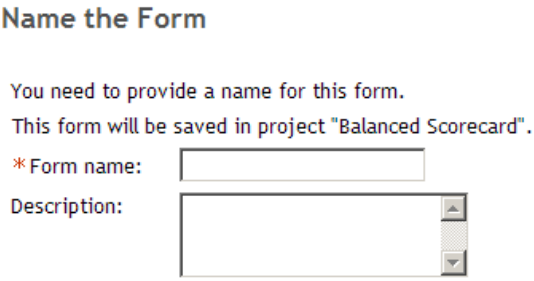
      To include all intervening periods, click **Include periods in between?**.

   c. Click **Next**. The Form Layout page appears. On this page, you can specify whether to group the data by metric attribute or by period.



7. To specify the form layout, click **Group by metric attribute** or **Group by period**.

8. Click **Next**. The Name the Form page appears. On this page, you can provide a name and a description for your form.



9. Type a form name and, optionally, a description.

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

Edit a Data Entry Form

To edit and change the properties of a form, on the Manage Forms page, click next to the form that you want to edit and click **Edit**.

Editing a form uses the same steps as creating a form. For detailed information about editing the properties of a form, see "Create a Data Entry Form" on page 286.

Copy a Data Entry Form

To copy a form, complete the following steps from the Manage Forms page:

1. Next to the form that you to copy, click , and click **Copy**. The Copy page appears.
2. Type a name for the copy of the form in the **Form name** field.

   Note: By default, the name is *form-name* Copy.
3. Click **Copy**.

Delete a Data Entry Form

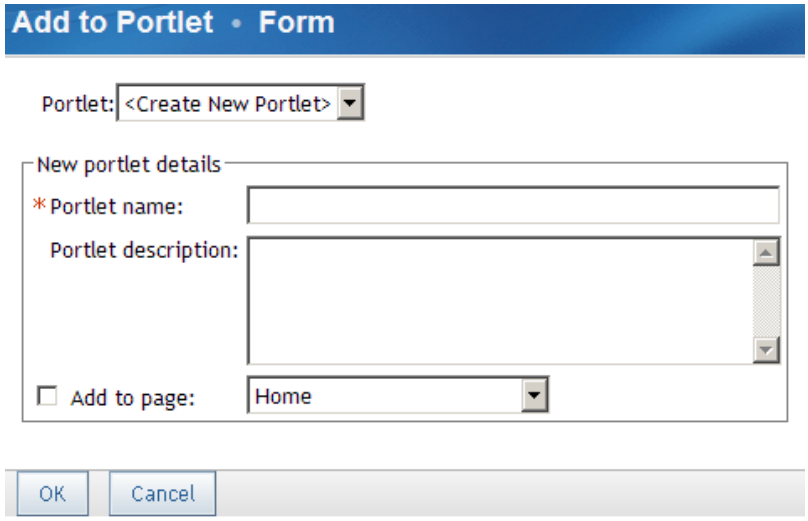
To delete a form, open the Manage Forms page. Then, next to the form that you want to delete, click and click **Delete**.

Add a Link to a Portlet That Opens a Data Entry Form

You can add a link to a portlet that opens a data entry form in Strategy Management Builder. The link makes it easy for data entry users to quickly access their data entry form from a portal page.

To add a link to a portlet, complete the following steps from the Manage Forms page:

1. Next to the data entry form that you want to add to portlet, click click **Add to Portlet**. The Add to Portlet page appears.



2. From the **Portlet** drop-down list, select a portlet.

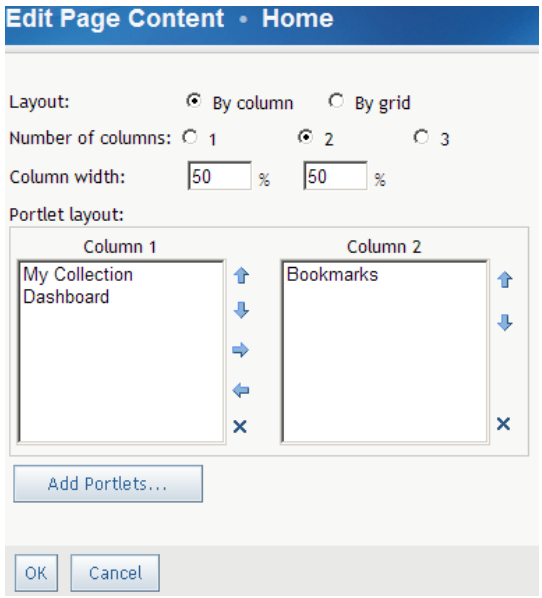
   Note: By default, the link to the form is added to the portlet under the **My Tasks** tab in the portal.

Create a Data Entry Portlet

You can create a data entry portlet and add it to a page. This option is a new in SAS Strategy Management 5.2 and is an alternative to adding a link to a portlet.

To create a data entry portlet, 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** drop-down list, select **Performance Data Entry**.

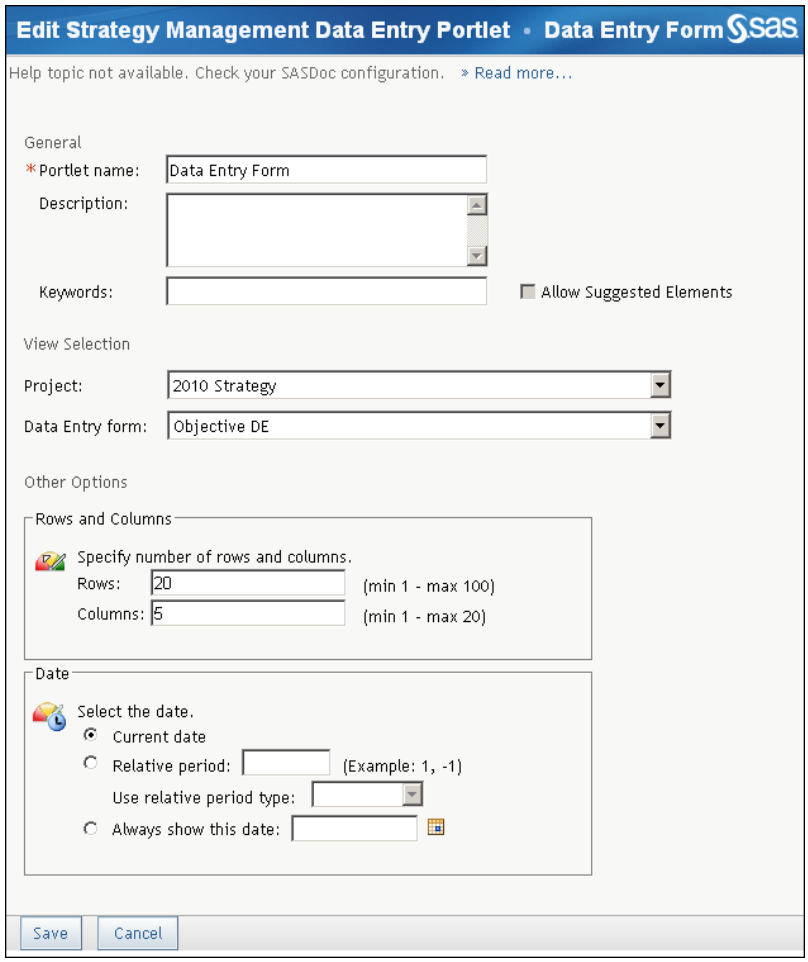
5. Type the name, description, and keywords, if any.
6. Click **Add**.
7. Click **Done**.
8. On the Edit Page Content page, click **OK**. The new portlet appears on the page.

Next, you must edit the portlet to specify the project and data entry 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 291.

Edit a Performance Data Entry Portlet

To edit the properties of a Performance Data Entry portlet, complete the following steps:

1. In the portlet, click . The Edit Performance Data Entry Portlet page appears.



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 data entry form to display in the portlet:
   a. From the **Project** drop-down list, select a project.
   b. From the **Data entry form** drop-down list, select a form.

      Note: You must first create the form in Strategy Management Builder. For more information, see "Create a Data Entry Form" on page 286.
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** drop-down 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. Click **Save** to save your changes and exit. Click **Cancel** to exit without saving any changes.

Chapter 33

Entering Data Manually

Enter Data in a Data Entry Portlet

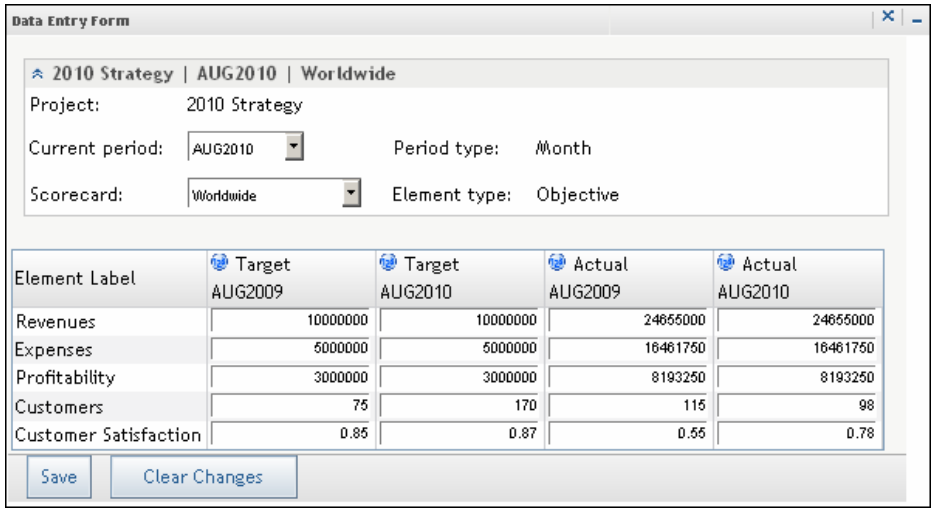
You can use the data entry portlet to enter scorecard data for a data or period of time. The data entry portlet provides similar features as the data entry form in Strategy Management Builder. However, when using a data entry portlet, remember the following considerations:

- 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.

For information about using data entry forms in the Strategy Management Builder, see "Enter Data in SAS Strategy Management Builder" on page 294.

To enter data in a data entry portlet, complete the following steps:

1. Access the portal page that includes the data entry portlet.



2. In the **Current period** drop-down list, select the period for which you want to enter data.

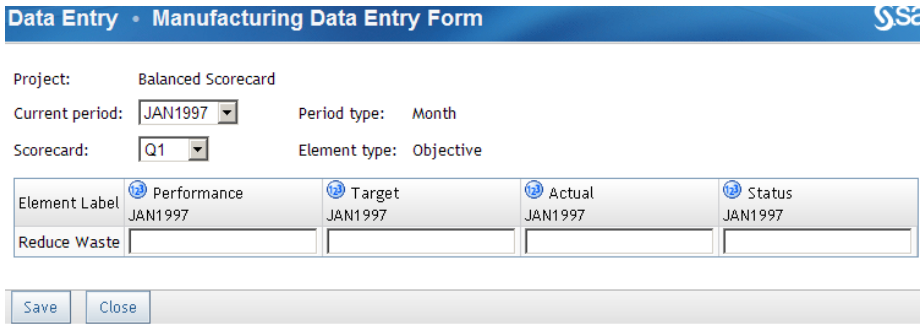
3. In the **Scorecard** drop-down list, select the scorecard for which you want to enter data.
4. Type values in the fields in the data entry table. When entering data, remember the following considerations:
   - Values that are derived from formulas are enclosed by single angle brackets (<*value*>).
   - Overridden values are enclosed by double angle brackets (<<*value* >>). You can replace these values with new values, and the override flag for the cell is displayed.
   - Percentages, commas, inline formulas, currency, or any other notation are not supported in data entry forms.
   - indicates a numeric column.
   - indicates a text column.
   - indicates a read-only column.
5. To clear the form of any unsaved changes, click **Clear Changes**.
6. To save the data entered into the form, click **Save**.

Enter Data in SAS Strategy Management Builder

You can enter data into a scorecard by using a data entry form in SAS Strategy Management Builder. You can access the data entry forms by navigating to the Manage Form page in the Builder or by clicking a link in a portlet.

To enter data, complete the following steps:

1. List the data entry forms. For more information, see "List the Data Entry Forms" on page 285.
2. Click on the name of the form. The Data Entry page appears.



3. In the **Current period** drop-down list, select the period for which you want to enter data.
4. In the **Scorecard** drop-down list, select the scorecard for which you want to enter data.
5. Type values in the fields in the data entry table. When entering data, remember the following considerations:
   - Values that are derived from formulas are enclosed by single angle brackets (<*value*>).

- Overridden values are enclosed by double angle brackets (<<*value* >>). You can replace these values with new values, and the override flag for the cell is displayed.
- Percentages, commas, inline formulas, currency, or any other notation are not supported in data entry forms.
-  indicates a numeric column.
-  indicates a text column.
-  indicates a read-only column.

Chapter 34

Processing Manually Entered Data

Overview

When data is entered manually, the data is automatically submitted to SAS Strategy Management by default. However, you can choose to hold the data submission until a later time when you make the submission manually to SAS Strategy Management. When you make this choice the data is *pending*.

You can view and delete pending data. When you are ready to manually submit the data, you *post* the data to SAS Strategy Management.

Specify the Data Submission Setting

To specify whether you want to automatically submit manually entered data to SAS Strategy Management, complete the following steps in an open project:

1. Click **Projects** ⇨ **Options**. The Project Options page appears.
2. Expand the **Web Data Entry Options** section.
3. Select one of the following options:
   - If you click **Submit data for immediate use**, data is automatically submitted to SAS Strategy Management. This is the default setting.

     Note: If there is pending data entry data, then a warning is displayed. You must either post the data or delete the data. If you post the data, it is immediately available to all users.
   - If you click **Submit data as pending for later use**, then data entry data is stored in a temporary location until it is posted. When data is temporarily stored and awaiting posting, the Post and Calculate WDE Data icon () appears on the toolbar.

4. Click **OK** to save your selection.

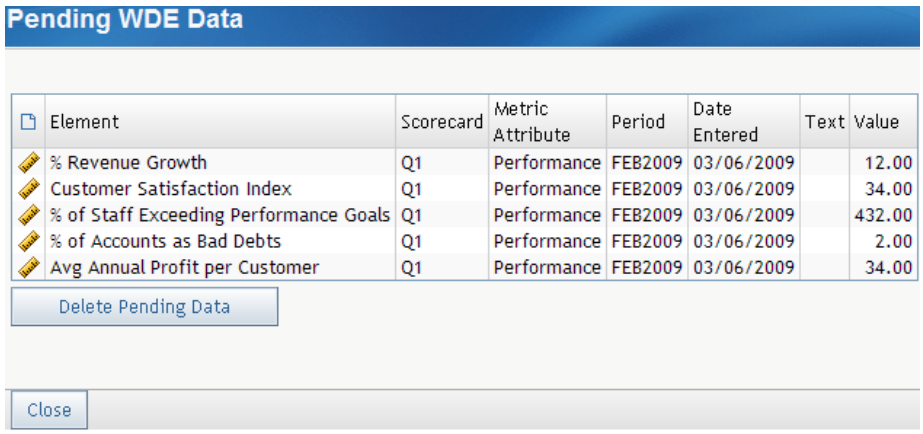
View Pending Data Entry Data

You can view or delete manually-entered data (also called Web-data-entry or WDE data) that is pending for later posting to SAS Strategy Management. This functionality is available only when you choose to submit manually-entered data as pending for later posting. For more information, see "Specify Project Options" on page 63.

To view pending manually-entered data, complete the following steps in an open table:

1. Click **Project** ⇨ **View Pending WDE Data**. The Pending WDE Data page appears.

   Note: If there is no pending data, the table is empty.



2. If you want to delete all pending manually-entered data, click **Delete Pending Data**.
3. To exit the Pending WDE Data page, click **Close**.

For information about posting data, see "Post Pending Data Entry Data" on page 298.

Post Pending Data Entry Data

Note: To perform this task, you must have the appropriate access permissions.

Before you post pending manually-entered data (also called Web-data-entry or WDE data), you can view the pending data. For more information, see "View Pending Data Entry Data" on page 298.

After you post pending data, other users who are viewing the data see the updated data.

To post pending manually-entered data, complete the following steps in an open table.

Note: If there is no pending data, the  icon is disabled.

1. Click  . The Calculate page appears.
2. Select to calculate by either the date range or a period type.
3. Click **Calculate**. All of the data is posted.

For more information, see "Calculate a Project" on page 113.

Chapter 35

Entering Data by Batch

Entering Data by Batch

The Strategy Management Batch Maintenance Facility (BMF) is a tool provided with the Strategy Management application. This tool enables you to get Strategy Management data into local files and use those files to create and maintain Strategy Management data in a batch manner. The tool consists of a SAS macro that you invoke in a SAS client. The client communicates with the server on which Strategy Management is running. Arguments that are provided to the macro pass data in comma-separated-value (CSV) files or SAS data sets as well as settings to tell the macro what to do.

BMF is primarily intended for Strategy Management scorecard modelers, that is, users of Strategy Management who create and maintain their organization's Strategy Management data. Understanding the Strategy Management data model is critical to effectively use this tool. Strategy Management data is complex in both value and relationships. Correspondingly, BMF is complex too. You must be prepared to create and edit the input files with considerable care. You also must be comfortable with basic computer network concepts, editing files with text editors, and running SAS client sessions.

For detailed information about BMF, see the *SAS Strategy Management: Batch Maintenance Facility User's Guide*.

Chapter 36

Exporting and Importing Strategy Management Data

Overview

You can import the following data from one SAS Strategy Management 5.2 installation to another:

- a template and its data
- a project and its data

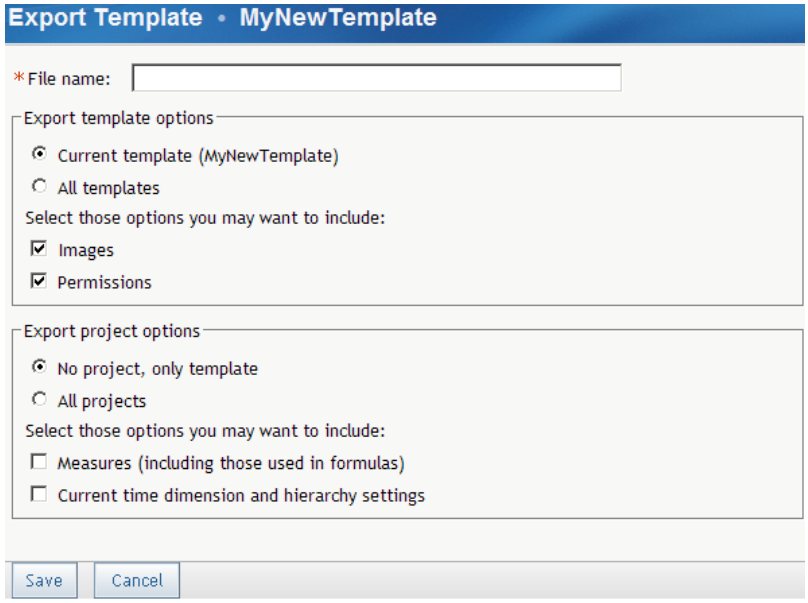
To do so, you must export a template definition or project definition as a set of SQL commands and then import the SQL commands into another database.

Note: When you are exporting Strategy Management data to an SQL database, the data requires post-processing to include the time dimension and other dimension information that the export does not include. After this information is added to the data, you can import the Strategy Management data to your target system, and your period data is loaded also. If you require data post-processing, contact SAS Technical Support for more information about how to add the data.

Export a Template to SQL Format

To export a template to SQL format, complete the following steps on the Template and Project Manager page:

1. Select a template name from the list of templates.
2. Click **Template** ⇨ **Export**. The Export Template page appears.



3. In the **File name** field, type the fully qualified pathname to the storage location for the exported file.

   Note: The pathname must identify a location that meets the following criteria:

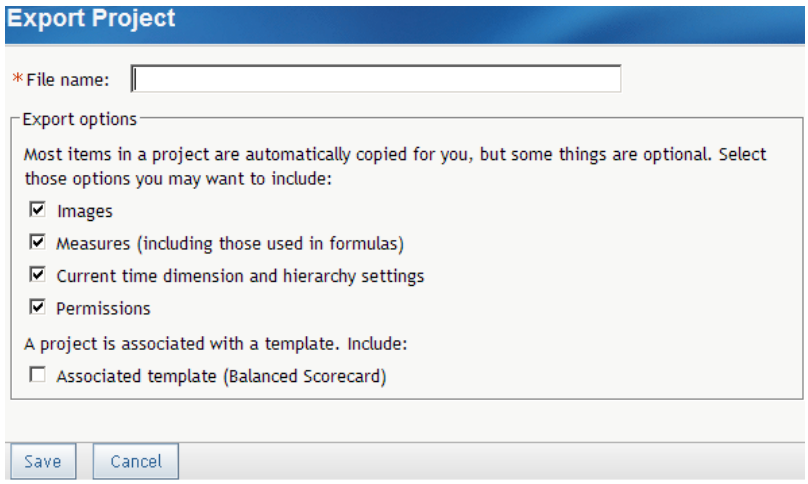
   - The location is accessible to all groups and users.
   - The location is on a system that is known to the SAS Solutions Services server.

4. Specify any optional information to include in the exported file.
5. Click **Save**.

Export a Project to SQL Format

To export a project to SQL format, complete the following steps:

1. Open a project.
2. Click **Project** ⇨ **Export**. The Export Project page appears.



3. In the **File name** field, type the fully qualified pathname to the storage location for the exported file.

   Note: The pathname must identify a location that meets the following criteria:

   - The location is accessible to all groups and users.
   - The location is on a system that is known to the SAS Solutions Services server.

4. To export all images that are associated with the project, click **Images**.
5. To export all measures that are associated with the project, including measures that are used in formulas, click **Measures**.
6. To export time dimension and hierarchy information, click **Current time dimension and hierarchy settings**.
7. To export all access permissions that are associated with the template, click **Permissions**.
8. To export the template that is associated with the project, click **Associated template**.
9. Click **Save**.

Import Data into Strategy Management

Overview

You can import template or project data using either MySQL Query Browser or MySQL command-line commands.

Note: For detailed information about MySQL, see **http://dev.mysql.com/**.

Import Data Using the MySQL Query Browser

Note: You must have the MySQL Query Browser installed. For detailed information about the MySQL Query Browser, see **http://dev.mysql.com/doc/query-browser/en/**.

To import data from SQL format, complete the following steps:

1. To start the MySQL Query Browser, click **Start** ⇨ **Programs** ⇨ **MySQL** ⇨ **Query Browser**.
2. In the Query Browser Connection dialog box, type the server host name, user name, and password in the applicable fields.
3. To process the main SQL export file, in the **Default Schema** field, type **spm**.

   Note: Providing this information makes spm the default database.

4. Click **OK**.
5. In the Query Browser, click **File** ⇨ **Open Script**. The Open Script File dialog box appears.
6. Navigate to and select the SQL file that you want to import. Click **Open**. The file contents appear in the Script Editor.
7. Click **Execute**.

Note: Observe any errors that occur. Typically you can ignore some errors. For example, you can ignore duplicate record errors that occur when you load a template that already exists.

TIP To force script execution to continue, instead of stopping after every error, click **Tools ⇨ Options**. In the Options dialog box, on the Browser page, click **Force query execution after error**.

8. To process the permissions SQL export file, repeat steps 5 through 7 using that SQL file.

Import Data Using MySQL Command-Line Commands

Note: You must have the MySQL client executable in the system execution path. Otherwise, a full path specification to the client is required.

To import data from SQL format, complete the following steps in a command-prompt window:

1. Change to the directory where the SQL file is located by typing the following command:

   cd *C:\pathname*

   C:\pathname is the location of the SQL file on your system.

2. To create a batch file called cmdfilein.txt, type the following command:

   echo use spm; >cmdfilein.txt

3. To add to the batch file, type the following command:

   echo source *proj1.sql* >>cmdfilein.txt

   proj1.sql indicates the SQL file that you want to import.

4. To run the batch file and log the output, type the following command:

   mysql –f -u *sqladmin* -p*Password* <cmdfilein.txt >logit.txt 2>&1

   sqladmin is the SQL administrator user name and *Password* is the SQL administrator password.

Part 7

Creating Reports

Chapter 37

Creating Reports Using SAS Information Maps

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 73.

Chapter 38

Creating Reports Using Microsoft Excel and Microsoft Word

Overview: SAS Solutions Services Add-In for Microsoft Office

The SAS Solutions Services Add-In for Microsoft Office enables you to insert either of the following elements into a Microsoft Excel spreadsheet or Microsoft Word document:

- the output of a stored process
- SAS Strategy Management project data from a SAS Solutions Services server

If the SAS Solutions Services Add-In for Microsoft Office is installed, you can access it from the **SAS** menu in Microsoft Excel or Microsoft Word.

Log On to the SAS Solutions Services Server

To log on to the SAS Solutions Services server, complete the following steps:

1. Open Microsoft Word or Microsoft Excel.
2. Perform one of the following steps:

Version 2003	Click **SAS** ⇨ **Tools** ⇨ **Strategy Management** ⇨ **Log On**.
Version 2007 Version 2010	On the **SAS** tab, in the **Tools** group, click **Strategy Management** ⇨ **Log On**.

The SAS Log On dialog box appears.

3. From the **Environment** drop-down list, select a server.

   Note: The default value is the server that was specified when the SAS Solutions Services Add-In for Microsoft Office was installed.

4. Type your user name in the **User name** field.

5. Type your password in the **Password** field.

Insert a Document

Overview

You can insert a document from the Document Manager into a Microsoft Word or Microsoft Excel document.

You can insert a stored process. If you have installed SAS Strategy Management, you can also insert the following SAS Strategy Management project views:

- Dashboard
- Diagram
- Association
- Table

To insert a document, complete the following steps:

1. Start Microsoft Word or Microsoft Excel.

2. Perform the following applicable step:

Version 2003	Click **SAS** ⇨ **Tools** ⇨ **Strategy Management** ⇨ **Insert Document**.
Version 2007 Version 2010	On the **SAS** tab, in the **Tools** group, click **Strategy Management** ⇨ **Insert Document**.

   The Insert Document dialog box appears, showing a list of the documents in the Document Manager.

   Note: A document inherits the access permissions of the folder that contains it. If you do not have access rights to the document, you cannot insert the document.

3. From the list on the left, select a folder.

4. Select a document from the list on the right.

   - If you insert a stored process, the stored process is inserted immediately.
   - If you insert a SAS Strategy Management view, the View page appears. To specify information about the view, perform the following applicable steps:

Association	Click **Association** and click **Next**.

Dashboard	Click **Dashboard** and click **Next**.
Diagram	Click **Diagram** and click **Next**.
Table	Click **Table** and click **Next**.

5. (Dashboard view only) On the Dashboard page, complete the following steps:
   a. Select **Dial**, **Slider**, or **Stoplight** as the dashboard type.
   b. If you want to include range values in a dial or slider, click **Display range values**.
   c. Click **Next**.
6. On the Scorecard page, complete the following steps:
   a. Select the scorecard to insert. Your selected scorecard contains the dashboard, diagram, association, or table view that you want to insert.
   b. Click **Next**.
7. Complete the following applicable steps:

Association view	On the Association page, select an association to insert and click **Next**. On the Column Selection and Period page, specify a column selection in one of the following ways: • To apply no column selection, click **None**. • To apply a column selection, click **Selected column selection** and select a column selection from the list.
Dashboard view	On the Element Type page, select an element type on which to base the report and click **Next**. On the Metric Value and Period page, select a metric value to display.
Diagram view	On the Diagram and Period page, select a diagram to insert.
Table view	On the Element Type page, select an element type on which to base the report and click **Next**. On the Column Selection and Period page, specify a column selection in one of the following ways: • To apply no column selection, click **None**. • To apply a column selection, click **Selected column selection** and select a column selection from the list.

8. Specify a date in one of the following ways:

To refresh the data with the most recent data for the current period	Click **Always use the current date**.
To display data from a particular date	Click **Use a specified date** and select a date from the drop-down list.

9. Click **Next**. The Summary page appears.

10. Verify that the summary information is correct. To make changes, click **Back**. Otherwise, click **Finish**.

Note: Documents and the output of stored processes are inserted into Microsoft Excel in read-only mode. To edit the spreadsheet in Microsoft Excel, click **Tools** ⇨ **Protection** ⇨ **Unprotect Sheet**.

Refresh the Contents of a Report

If you selected **Always use the current date** when you inserted the document, you can refresh the contents of the report to insert the most recent data for the current period. You can refresh only those documents for which the **Allow refresh of embedded data** check box has been selected.

To refresh the contents of a report, complete the following steps in Microsoft Excel or Microsoft Word:

1. To refresh only the current Excel spreadsheet or only a portion of a Word document, click on the area of the report that you want to update.
2. Perform one of the following steps:

Version 2003	Click **SAS** ⇨ **Report** ⇨ **Refresh**.
Version 2007 Version 2010	On the **SAS** tab, in the **Report** group, click **Refresh**.

3. To refresh all of the open spreadsheets or documents, perform one of the following steps:

Version 2003	Click **SAS** ⇨ **Report** ⇨ **Refresh All**.
Version 2007 Version 2010	On the **SAS** tab, in the **Report** group, click **Refresh All**.

4. In the dialog box, select the date for which you want the data to be refreshed.

Note: When data is refreshed, stored processes are not prompted for parameters.

Share a Report

To post the report that is currently displayed in Microsoft Word or Microsoft Excel to the Document Manager, so that other users can view it, complete the following steps:

1. Perform one of the following steps:

Version 2003	Click **SAS** ⇨ **Tools** ⇨ **Strategy Management** ⇨ **Publish**.

Version 2007 Version 2010	On the **SAS** tab, in the **Tools** group, click **Strategy Management** ⇨ **Publish**.

The Share Report dialog box appears.

2. In the **Name** field, type the report name to use in the Document Manager.
3. In the **Description** field, describe the content of the report.
4. To create a new Document Manager folder in the repository, complete the following steps:
   a. Click  . The Create New Folder dialog box appears.
   b. Type the name of the folder.
   c. (Optional) Type the description of the folder.
5. From the **Save in** list, select the Document Manager folder that you want to place the report in.
6. If you want the report to be automatically updated with the most recent data for the current period each time a user opens it, click **Allow refresh of embedded data**.

   Note: If you do not click **Allow refresh of embedded data**, the report always shows the values that it showed when it was saved.

Log Off from SAS Solutions Services Server

To log off from the SAS Solutions Services server, perform one of the following steps:

Version 2003	Click **SAS** ⇨ **Tools** ⇨ **Strategy Management** ⇨ **Log Off**.
Version 2007 Version 2010	On the **SAS** tab, in the **Tools** group, click **Strategy Management** ⇨ **Log Off**.

Chapter 39

Accessing Strategy Management Data from Microsoft Excel

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

Appendix

Appendix 1

Strategy Management Function Dictionary

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.

Function	Description	Example
ABS	Returns the absolute value of its only argument. **Syntax:** ABS(*value*) *value* is a numeric value.	**ABS(-20)** returns **20**.
ACOS	Returns the arccosine, in radians, of its only argument. **Syntax:** ACOS(*value*) *value* is a numeric value between –1 and +1, inclusive.	**ACOS(-0.5)** returns **2.094395**.
ASIN	Returns the arcsine, in radians, of its only argument. **Syntax:** ASIN(*value*) *value* is a numeric value between –1 and +1, inclusive.	**ASIN(-0.5)** returns **-0.52360**.
ATAN	Returns the arctangent, in radians, of its only argument. **Syntax:** ATAN(*value*) *value* is a numeric value.	**ATAN(1)** returns **0.78540**.
attribute	Returns the string representation of the value of an attribute. **Syntax:** attribute([*element*] [*attribute*] [*period*]) • *element* is an element. • *attribute* is a metric attribute associated with the element. • *period* is an optional argument that indicates the period of time associated with the element and its attribute. The combination of these arguments identifies the string value of an attribute. The value must be one of the following types: • Text • E-mail address • Date • Web address (URL) • Element type	• **attribute([ELE=current("ELE")][ATTR="Status"])** returns the text value of the attribute Status for the current element. • **attribute([ELE=current("ELE")][ATTR="End Date"])** returns the attribute value of the attribute End Data 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. • **attribute([ELE=current("ELE")] [COL=current("COL")][PER=current("PER")])** returns the metric text values of the column and period for the current element.

Function	Description	Example
attributeIsMe	Selects the elements that are associated to the current element. Typically this function is used to provide input to another function. **Syntax:** ATTRIBUTEISME([*element*] [*attribute*] [*period*]) • *element* is an element. • *attribute* is a metric attribute associated with the element. • *period* is the period of time associated with the element and its attribute. The combination of these arguments identifies the value of the current element.	`SUM( ATTRIBUTEISME( [ATTR="Initiative RelatedObjective(s)"] [COL="Actual"] [PER=current("PER")] ) )`
CEIL	Returns the smallest integer that is greater than or equal to its only argument. **Syntax:** CEIL(*value*) *value* is a numeric value.	• `CEIL(5.3)` returns `6` • `CEIL(5.0)` returns `5`
CHILDREN	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). **Syntax:** CHILDREN([*element*] [*column*] [*period*]) • *element* is an element. • *column* is a metric attribute associated with the element. • *period* is the period of time associated with the element and its attribute. The combination of these arguments identifies an attribute value.	`SUM( CHILDREN( [ ELE=CURRENT( "ELE" ) ] [ COL=CURRENT( "COL" ) ] [ PER = CURRENT( "PER" ) ] ) )`
COMPRESS	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. **Syntax:** COMPRESS('*string1*', '*string2*') *string1* and *string2* are strings. *string2* is optional. If you specify only *string1*, the function removes all spaces from *string1*. When you specify *string2*, the function removes all characters specified in *string2* from *string1*.	• `COMPRESS('A  B C  D ')` returns the string **ABCD** • `COMPRESS('A+B-C=D','+-=')` returns the string **ABCD** .

Function	Description	Example
COS	Returns the cosine of its only argument. **Syntax:** COS(*value*) *value* 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. **Syntax:** Current(*value*) *value* 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. **Syntax:** DATE() *Note:* The DATE and TODAY functions are equivalent.	• On January 1, 1960, **DATE()** returns **1**. • On January 2, 1960, **DATE()** returns **2**. • On February 1, 1960, **DATE()** returns **32**.
DATETIME	Returns the number of seconds that have elapsed since the beginning of January 1, 1960. **Syntax:** DATETIME()	You can use the PUTN function to convert the value returned by the DATETIME function to a readable exact time, as follows: **PUTN(DATETIME(),"DATETIME.")**
DAYOFMONTH	Returns the sequence number of the day on which it is evaluated within the month in which it is evaluated. **Syntax:** DAYOFMONTH()	On the twelfth day of any month **DAYOFMONTH()** 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. **Syntax:** DAYOFWEEK()	On any Thursday **DAYOFWEEK()** 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. **Syntax:** DAYOFYEAR()	On February 10 of any year **DAYOFYEAR()** 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. **Syntax:** EXP(*value*) *value* is a numeric value. *Note:* The EXP function is the inverse of the LOG function.	**EXP(LOG(2.65))** returns **2.65**.
FLOOR	Returns the largest integer that is less than or equal to its only argument. **Syntax:** FLOOR(*value*) *value* is a numeric value.	• **FLOOR(5.3)** returns **5**. • **FLOOR(5.0)** returns **5**.
ForAll	Returns Boolean true when all values in an array of values satisfy a logical condition. **Syntax:** ForAll(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are numeric values in an array of values.	**ForAll(children([ELE="Revenue"][COL="Actual"][PER=current("PER")) > 0.5** returns true when all of the children of element Revenue have a value greater that 0.5.
ForAny	Returns Boolean true when any value in an array of values satisfy a logical condition. **Syntax:** ForAny(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are numeric values in an array of values.	**ForAny(children([ELE="Revenue"][COL="Actual"][PER=current("PER")) > 0.5** returns true when any of the children of element Revenue have a value greater that 0.5.
ForNone	Returns Boolean true when no values in an array of values satisfy a logical condition. **Syntax:** ForNone(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are numeric values in an array of values.	**ForNone(children([ELE="Revenue"][COL="Actual"][PER=current("PER")) > 0.5** returns true when none of the children of element Revenue have a value greater that 0.5.

Function	Description	Example
IF	Returns a value that depends on the truth value of a Boolean expression. **Syntax:** IF(*boolean*, *expression1*, *expression2*) where: • *boolean* is a Boolean expression. If *boolean* is true, the IF function returns the value of *expression1*. If *boolean* is false, the IF function returns the value of *expression2*. 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. • *expression1* and *expression2* 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.	• `IF("A"="B","right","wrong")` • `IF(1=2,"right","wrong")` • `IF("A"="B",1,0)` • `IF(1=2,1,0)`
INDEX	Returns an integer that indicates the starting position of a specified substring within a longer string. **Syntax:** INDEX(*string1*, *string2*) where: • *string1* is a string and is a longer string than *string2*. • *string2* is a potential substring in *string1*. If *string2* occurs more than once in *string1*, then the INDEX function returns the starting position of the first occurrence of *string2*. If *string2* does not occur in *string1*, then the INDEX function returns 0.	• `INDEX("herewego","we")` returns `5`. • `INDEX("nono","no")` returns `1`. • `INDEX("yesyes","no")` returns `0`.

Function	Description	Example
INDEXC	Returns an integer that indicates the first position in an input string that contains any character in a specified set of characters. **Syntax:** INDEXC(*string1*, *string2*) where: • *string1* is a string to search. • *string2* is a set of characters to search for in *string1*. If any of the characters specified in *string2* occur in *string1*, then the INDEX function returns the first position of the occurrence in *string1*. If none of the characters specified in *string2* occur in *string1*, then the INDEX function returns 0.	• **`INDEXC("education","aeiou")`** returns **`1`**. • **`INDEXC("school","aeiou")`** returns **`4`**. • **`INDEXC("jklmn","aeiou")`** returns **`0`**.
LEFT	Returns a string that is formed by removing all the leading spaces from an input string. **Syntax:** LEFT(*string*) *string* is a character string.	**`LEFT("  abc")`** returns the string **`abc`**.
LENGTH	Returns the length of an input string. It takes one argument, which must have a character value. **Syntax:** LENGTH(*string*) *string* is a character string.	**`LENGTH("January")`** returns **`7`**.
LOG	Computes the natural logarithm of a number. **Syntax:** LOG(*value*) *value* is a numeric value greater than zero. *Note:* The LOG function is the inverse of the EXP function.	**`LOG(EXP(2.65))`** returns **`2.65`**.
LOWCASE	Returns a character string that is formed from an input character string by converting each uppercase letter to the corresponding lowercase letter. **Syntax:** LOWCASE(*string*) *string* is a character string.	**`LOWCASE("HIGH5")`** returns **`high5`**.

Function	Description	Example
MAX	Returns the value of the argument that has the largest value. **Syntax:** MAX(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are numeric values in an array of values. This function can have any number of arguments. You can also specify ranges of values in this function. See "Specify a Range in a Function" on page 335.	**MAX(-5, -2.1, 0.3, 1.1, 1.3)** returns **1.3**.
MEAN	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. **Syntax:** MEAN(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are numeric values in an array of values. This function can have any number of arguments. You can also specify ranges of values in this function. See "Specify a Range in a Function" on page 335.	**MEAN(1, 2, 3, 3, 16)** returns **5**.
MIN	Returns the value of the argument that has the smallest value. **Syntax:** MIN(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are numeric values in an array of values. This function can have any number of arguments. You can also specify ranges of values in this function. See "Specify a Range in a Function" on page 335.	**MIN(-5, -2.1, 0.3, 1.1, 1.3)** returns **-5**.
MOD	Returns the remainder after dividing *value1* by *value2*. **Syntax:** MOD(*value1*, *value2*) *value1* and *value2* are numeric values.	**MOD(5,2)** returns **1**.

Function	Description	Example
myAttribute	Selects the elements that are associated from the current element. **Syntax:** myAttribute([*element*][*attribute*][*period*]) • *element* is an element. • *attribute* is a metric attribute associated with the element. • *period* is the period of time associated with the element and its attribute. The combination of these arguments identifies an attribute of the element to which the formula is assigned.	`SUM( MYATTRIBUTE( [ ATTR="MeasureSupported" ] [ COL="Actual" ] [ PER=current( "PER" ) ] ) )`
NESTIF	Returns the value of the first even-numbered argument that is associated with a true Boolean expression. *Note:* 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. **Syntax:** NESTIF(*boolean_expression*, *expression*) • *boolean_expression* is a Boolean expression that is associated with *expression*. 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. • *expression* is an expression whose value might be returned. It is the second argument of each pair (the even-numbered arguments of the function). For even-numbered arguments (*expression*), 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. For odd-numbered arguments (*boolean_expression*), 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: • Numeric data type — SAS missing value • Character-string data type — zero-length empty string • Boolean data type — Boolean FALSE.	• `NESTIF(1=2, "first", 1=1, "second")` returns `second`. • `NESTIF(1=1, "first", 1=1, "second")` returns `first`.

Function	Description	Example
POW	Returns the result of raising its first argument to the power that is given by its second argument. **Syntax:** POW(*value1*, *value2*) • *value1* is a numeric value. • *value2* is a numeric value that specifies a power by which to raise *value1*.	• `POW(2,4)` returns `16`. • `POW(9,0.5)` returns `3`. • `POW(3,-2)` returns `1/9` or `0.11111...`.
PUTC	Returns the result of applying a specified SAS character format to a specified character value. **Syntax:** PUTC(*value*, *format*) • *value* is the character value to format. • *format* is the SAS character format to apply to *value*.	`PUTC(LOWCASE("HELLO"),"$QUOTE.")` returns `"hello"`.
PUTN	Returns the result of applying a specified SAS numeric format to a specified numeric value. **Syntax:** PUTN(*value*, *format*) • *value* is the numeric value to format. • *format* is the SAS numeric format to apply to *value*.	You can use the PUTN function to convert the value returned by the DATETIME function to a readable exact time by using the following syntax: `PUTN(DATETIME(),"DATETIME.")`
Range	Returns the normalized value for an element. The normalized value is set in the range for each interval. If a range does not exist on the metric attribute, RANGE returns the value of the metric attribute. **Syntax:** RANGE([*element*][*attribute*][*period*]) • *element* is an element. • *attribute* is a metric attribute associated with the element. • *period* is the period of time associated with the element and its attribute. The combination of these arguments identifies a specific attribute value of the element in the project.	If the value of element M2's Actual attribute is 99.85, `range([ELE="M2"][COL="Actual"][PER=current("PER")])` returns `3.75`.

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. **Syntax:** REPEAT(*string*, *repetition*) • *string* is the input string. • *repetition* is the number of times to append *string* to itself, beyond the first occurrence.	• **REPEAT(no,1)** returns **nono**. • **REPEAT(ha,2)** returns **hahaha**.
REVERSE	Returns a string that is formed by reversing the character sequence of an input string. **Syntax:** REVERSE(*string*) *string* is a character string.	**REVERSE("nuts")** returns **stun**.
RIGHT	Returns a string that is formed by removing all the trailing spaces from an input string. **Syntax:** RIGHT(*string*) *string* is a character string.	**RIGHT("abc ")** returns the character string **abc**.
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. **Syntax:** ROUND(*value*) *value* is a numeric value.	• **ROUND(2.4)** returns **2**. • **ROUND(2.5)** returns **3**. • **ROUND(2.6)** returns **3**. • **ROUND(-2.5)** returns **-2**.
SCAN	Returns a segment of an input string that is selected by a standard set of delimiters and a specified numeric position. **Syntax:** SCAN(*string*, *position*) • *string* is the input string. • *position* is the numeric position of the desired substring. Positions are counted from the beginning of *string* if *position* is positive, and from the end of *string* if *position* is negative. The following characters are treated as delimiters that divide *string* into countable segments: **< (+ & ! $ *) ; ^ - / , % |**	• **SCAN("12+34-56+78",4)** returns **78**. • **SCAN("The%quick%brown%fox%jumped",-2)** returns **fox**.

Function	Description	Example
SIN	Returns the sine of its only argument. **Syntax:** SIN(*value*) *value* 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.. **Syntax:** SQRT(*value*) *value* is a nonnegative numeric value.	**SQRT(81)** returns **9**.
SUBSTR	Returns a substring of an input string. **Syntax:** SUBSTR(*string*, *position*) • *string* is an input string. • *position* is the numeric position in *string* of the first character of the returned substring. • *length* is an optional argument that specifies the length of the returned substring. If *length* is not specified, then the returned substring runs to the end of the input string.	• **SUBSTR("reiterate",3,2)** returns **it**. • **SUBSTR("reiterate",3)** returns **iterate**.
SUM	Returns the sum of its arguments. **Syntax:** SUM(*value1*, *value2*, ..., *value_n*) *value1*, *value2*, and *value_n* are all numeric values. SUM can accept any number of arguments. You can also specify ranges of values in this function. See"Specify a Range in a Function" on page 335.	**SUM(1, 2, 3, 3, 16)** returns **25**.
TABLEC	Returns a character value that it retrieves from a specified table. Ask your SAS consultant for details.	Not applicable
TABLEN	Returns a numeric value that it retrieves from a specified table. Ask your SAS consultant for details.	Not applicable
TAN	Returns the tangent of its only argument. **Syntax:** TAN(*value*) *value* is a numeric value, which represents an angle measured in radians.	**TAN(0)** returns **0.0000**.

Function	Description	Example
TIME	Returns the current clock time in military format, to the nearest second. **Syntax:** TIME()	If TIME is executed at exactly noon, the function returns **12:00:00**.
TODAY	Returns the SAS integer representation of the current date. **Syntax:** TODAY() *Note:* The DATE function and the TODAY function are equivalent.	• January 1, 1960 is **1**. • January 2, 1960 is **2**. • February 1, 1960 is **32**.
TRANSLATE	Returns a character string that is formed by replacing certain characters in an input string with designated substitution characters. **Syntax:** TRANSLATE(*string*, *substitutes*, *replace*) • *string* is an input string to translate. • *substitutes* lists one or more substitution characters. • *replace* lists the characters to replace, in a sequence that corresponds to the sequence of substitution characters.	**TRANSLATE("bone", "iw", "ob")** returns **wine**. If required, you can spread the translation instructions over additional pairs of arguments. For example, **TRANSLATE("bone", "i", "o", "w", "b")** also returns **wine**.
TRIM	Returns a character string that is formed by removing all the leading spaces and all the trailing spaces from an input character string. **Syntax:** TRIM(*string*) *value* is a character string.	**TRIM(" abc ")** returns the character string **abc**.
UPCASE	Returns a character string that is formed from an input character string by converting each lowercase letter to the corresponding uppercase letter. **Syntax:** UPCASE(*string*) *value* is a character string.	**UPCASE("they8it")** returns **THEY8IT**.

Function	Description	Example
VERIFY	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. *Note:* This function can accept any number of arguments. **Syntax:** VERIFY(*characters*, *string*, ..., *string_n*) • *characters* is a list of characters to check for in the other arguments. • *string* and *string_n* are strings to check for *characters*.	• **VERIFY("aeiou", "state","union")** returns **0** because each vowel is found in at least one of the words. • **VERIFY("aeiou", "state","onion")** returns **5** because neither word contains **u**.

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. To specify this value in a function, use the following syntax:

[ELEMENT=CURRENT("*element*")][COLUMN=CURRENT("*column*")]
[PERIOD=CURRENT("*period*")]

- *element* is an element.
- *column* is a metric attribute associated with the element.
- *period* indicates the specific period of time associated with the element and its attribute. For more information, see "Specify a Current or Relative Period in a Function" on page 335.

The combination of these arguments identifies a specific value of an element.

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)`**.

Appendix 2

Configuring Java

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 Run-time Environment (JRE) version 1.5 or later. The configuration steps vary depending on your installation:

For version 1.5 or later	1. "Delete the Java Plug-In Cache" on page 338 2. "Delete Temporary Internet Files" on page 338
Any earlier versions or no JRE installed	1. "Install the Java 2 Run-time Environment" on page 337 2. "Delete the Java Plug-In Cache" on page 338 3. "Delete Temporary Internet Files" on page 338

Install the Java 2 Run-time Environment

SAS Strategy Management requires the Java 2 Run-time Environment (JRE) 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	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 **Yes**. *Note:* The following security message might appear:**`Java has discovered application components that could indicate a security concern.`** Click **No** to continue.
For versions earlier than JRE 1.5 or no JRE installed	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.

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 dialog box appears.
4. Click **Delete Files**. The Delete Temporary Files dialog box appears.
5. Click **Applications and Applets** and **Trace and Log Files**.
6. Click **OK**. Then click **OK** to exit the Temporary Files Settings dialog box. 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 dialog box appears.
2. Click **Preserve Favorites website data**.
3. Click **Temporary Internet files**.
4. Click **Delete**.

Appendix 3

View SAS Strategy Management Data in SAS BI Dashboard

You can view Strategy Management data by creating and using a dashboard in SAS BI Dashboard. For detailed information about using BI Dashboard, see the *SAS BI Dashboard 4.3 User's Guide*.

To create new Strategy Management indicator data in BI Dashboard, complete the following steps:

1. Open the Dashboard Design Window in BI Dashboard.
2. Select **Manage Dashboards**.
3. From the **What would you like to create?** pane, click **New Indicator Data**.
4. In the Create Indicator Data dialog box, type a name for the indicator in the **Name** field and click **OK**.
5. From the **Data source** list, click **SAS Strategy Management 5.x**.
6. In the **Scorecard Server URL** field, type the host name and port name for the server running the Strategy Management Web application.

   Note: The resulting Web address points to the location of the Strategy Management Web application.
7. Click **Set Server**.
8. 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.
9. 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.
10. 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  .

Date Option	Description
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 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: Strategy Management keywords are used to define the format. When displayed, these keywords are replaced with actual values from the strategy ensuring 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.

11. Click **Submit**. In the **Preview Design** pane, the specified Strategy Management data appears.
12. To save, 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 4.3 User's Guide*.

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Your Turn

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